ROUTLEDGE

Adaptation & Well-Being

Meeting the Challenges of Life

KNUD S. LARSEN

"According to Leo Tolstoy's famous statement, 'all happy families are alike, each unhappy family is unhappy in its own way'. Knud Larsen in his book on human happiness proves the opposite. Summarizing the classical and recent research in successful human adaptation, adjustment and well-being of the soul and body, he shows the many faces of individual human happiness. Moreover, the book opens the perspective into the directions of social, cultural and biological evolution. What I like most in the book is its usefulness. Knud has many practical pieces of advices suggesting that we can improve our well-being if we try. I wish Anna Karenina could have read this well-conceived, well-written text."

Gyorgy Csepeli, Professor of Social Psychology, Chair of the Interdisciplinary Social Research Program of the Doctoral School of the Faculty of Social Science at ELTE, Senior Research Fellow of the Institute of Advanced Studies at Koszeg (iASK)

"This unique, reader-friendly volume covers psychological aspects of successful living with such diversity and depth that I have not encountered hitherto. It is essential reading for psychology undergraduates as well as more seasoned academics and practitioners."

Howie Giles, Distinguished Professor of Communication, University of California, Santa Barbara, USA and Honorary Professor of Psychology, University of Queensland, Australia

"This book by Professor Larsen is very enjoyable reading and covers the many challenges humans face across the lifespan. The focus is on positive psychology as supportive solutions are offered for the many challenges of living. This is also a relatively rare book that evaluates adaptation from a socio-cultural perspective, since most books today emphasize cognitive aspects of coping and development. I especially appreciated how Professor Larsen weaved his salient knowledge of cross-cultural psychology into this important work on human adaptation. In the book the author discusses the issue of adaptation in its varying aspects of human life and through the prism of cultural influence on personality and behiavor."

Askar Jumageldinov, PhD, Assistant Professor at Catholic University in Lyon

This book uniquely ties together the author's personal experiences with in-depth research on human adaptation. What strikes the reader is the very personal narrative that illustrates the many points of struggling with the challenges of being human. The book combines the best of classical literature along with very current and meaningful research. The whole human journey is evaluated from identity and finding meaning, through optimizing health in midlife to facing the final existential questions related to both death and longevity. A very thoughtful book."

Sven Morch, PhD, Professor, University of Copenhagen

"An enlightened and enlightening story of the challenges we meet through our life course. Although the general reader may find useful information for the journey of life, it is also a volume packed with research-based information from the psychological and social sciences, with implications for how we can grow as human beings and live satisfying lives together."

Reidar Ommundsen, Professor Emeritus, University of Oslo

"I have found the work of Knud Larsen to dovetail with my own work on behalf of indigenous and third-world peoples since I first became acquainted with him in the context of supporting the People of Cuba. Dr. Larsen, as is manifest in this career-capping work, has the ability – rare among non-ethnologist academics – to be engaged in the inner cognitive world of people inside other cultures while viewing their society in his own unique perspective. This broad and deep treatment will deepen and broaden my own view of the peoples that I have engaged with on the cognitive level. It also broadens my view of the challenges of my own life and how to live a happy life."

John Allison, Cognitive Ethnologist and Author

Adaptation and Well-Being

Knowing how to live a long, happy and healthy life is a universal desire of humankind. *Adaptation and Well-Being* is a narrative of the human journey, from the formation of identity to the end of life, which explores several key issues related to well-being and the challenges we face. Combining positive psychology and a social psychological evolutionary perspective with colourful, anecdotal evidence from his full and varied experiences, the author interprets research from various stages of human development in order to meet the challenges of life and achieve optimal health and well-being.

The book examines how an integrated identity and a healthy self-concept are key to successful adaptation and living. The author also discusses how emotional intelligence and communication are essentially linked to issues of culture and gender. The importance of understanding gender differences is a central theme that runs through chapters on sexuality, gender and intimacy. The book also looks at the relationship of stress to well-being, the challenges of midlife and the end of life, as well as the search for meaning and purpose.

Integrating classical and recent research and including cross-cultural perspectives, *Adaptation and Well-Being* will provide valuable reading for students in lifespan courses in counselling and therapy, developmental psychology and social gerontology. Those in tertiary courses, such as social work, welfare and nursing, will also find this useful, along with practitioners in these fields.

Knud S. Larsen is Professor Emeritus at Oregon State University and academician of the Bulgarian Academy of Sciences and Arts. He taught widely at universities across the world and is the recipient of senior Fulbright awards in both Vietnam and Bulgaria. The author received the St. Kliment Blue Ribbon Medal for contributions to social science at Sofia. On Research Gate, the author is ranked higher than 90% of scholars listed.

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Meeting the challenges of life

Knud S. Larsen

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To my daughter Debbie:

For your cheer, for the bonding of our work and warm memories.

In memory of the unforgettable courage of the White Rose Society:

Lighting the candle and proclaiming, "long live freedom" in the darkest night.

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Contents

Vignettes

Chapter 11

Chapter 12

To live life to the end is no child's play.

Pasternak

Introduction

This book is a narrative of the human journey from the initial chapter on the formation of identity and developing a healthy self-concept to end of life issues of death and dying and maintaining a healthy lifestyle. The author utilizes a social psychological evolutionary perspective as a valuable tool in interpreting research from various stages of human development and adaptation. The focus of the book is on how to meet the challenges of life and achieve optimal health and well-being.

Adaptation refers to changes in behavior required by environmental demands with outcomes that enhance fitness to survive and be successful. From an evolutionary perspective, all organisms face the same adaptive challenges. However, humans have complex adaptations transmitted socially and culturally that, in turn, enhance well-being. Genetic adaptations occur through natural selection and are retained because the alterations are linked to evolutionary success. Other adaptations occur during childhood through learning as taught by parents and the cultural environment. Traumatic experiences can lead to a breakdown in adaptation reflected in serious illness or fringe living. Of great importance to successful living are cultural adaptations in response to the unique physical and social environmental demands.

An integrated identity and a healthy self-concept are keys to adaptation and successful living as discussed in Chapter 1. Living life to the fullest also requires emotional maturity and a utilization of the more recently developed psychological concept of emotional intelligence that is discussed in Chapter 2. An emotionally mature person who has developed higher levels of emotional intelligence is better able to adapt to varying demands with a broader understanding that life is not just about the self. Enhanced decision making is an outcome of reading emotional signals correctly, and therefore being a better partner in communication. An understanding of what goes on in communication is necessary for successful adaptation. In Chapter 3, communication is discussed as an essential cultural trait and an adaptation central to individual as well as cultural understandings.

Normal heterosexual relationships are based on a biological platform of complementary differences. Understanding gender differences as related to human happiness is a central theme in several chapters. Sexuality, gender and

intimacy are the basic human adaptations that ensure both individual and social survival. In Chapter 4, sexuality is evaluated as the center of human life and as the point of interaction of all psychological and physiological dimensions. Recent years have seen a sea change in sexual norms in the West, which today leaves few or no limitations on the expression of sexuality. The chapter also discusses varying sexual understandings including transgender identity and related topics. Homosexual orientation is evaluated with recent research informing on physiological evidence, causes and ideological factors. Sexual motivation is based on both cognitive and socio-cultural factors. Concomitant with the sexual revolution, the world has also observed the rise in sexually transmitted diseases including AIDS. The chapter concludes with an examination of hostility toward women as expressed in sexual harassment, pornography and rape.

The relationship of gender to human happiness is discussed in Chapter 5. The meaning of gender refers to the psychological and socio-cultural dimensions of being raised as a boy or girl. Gender roles are ubiquitous and probably emerged in human culture since they contributed to human survival. Different requirements of men and women in reproduction, different physiological platforms, hormonal distribution and communication styles all contributed to gendered aspects of human life. Gender-related happiness is partly the outcome of secure attachment styles learned as children and overcoming the misunderstandings derived from different gender-based communication styles.

Chapter 6 evaluates the search for deeper intimacy as found in friendships, becoming lovers and seeking a permanent partner in marriage. The most important factor as a basis of attraction and interpersonal comfort is similarity of background characteristics. Physical attraction is thought to be related to the perception of fertility and is perhaps hardwired. Both genders, however, value emotional maturity and dependability. Cohabitation has accompanied the sexual revolution to the point where 30% of all children are born into these unions. However, many of these trial marriages fail for the same reasons that legal marriages fail. An important contributor to marital success is the perspective of each gender toward egalitarian or traditional gender roles.

The relationship of stress to well-being is ubiquitous. Chapter 7, however, demonstrates that it is not the stressor that creates the actual strain in life, but the appraisal of the situation. Furthermore, Chapter 8 includes a discussion on post-traumatic stress disorder. Acute or chronic trauma can lead to a breakdown in adaptations with negative consequences for health and well-being. Recent years have seen more information and research on post-traumatic disorders, supporting the conclusion that they occur more frequently than formerly thought.

A key adaptation involves the successful search for meaning and purpose in life, which is discussed in Chapter 9. Research shows that stable mental health and the desire to meet challenges are essential in successful adulthood. Good or excellent decision-making skills optimize the chances for a happy life. Aging is a normal and inevitable process, and like most things in life, has both negative and positive outcomes. For example, some cognitive skills improve in midlife

along with a decrease in perceptual speed. Life satisfaction is related to a conscious value system to guide important decisions. In midlife, mortality becomes more salient and raises the issue of the meaning of life for many people. The positive solution to the terror of mortality is generativity or, in other words, leaving something behind that is lasting and meaningful.

All stages of human development require adaptation and that is also true for midlife, which is evaluated in Chapter 10. This is a time in life where challenges increase along with an enhanced awareness of the temporality of existence. Life is change and living life to the fullest requires that we face up to all the changes and trials of being an adult. In the chapter on midlife, the author rejects the concept of crisis, but focuses on the need to find balance in life and meet common challenges.

The end of life forms special challenges that most people do not wish to face or at least would like to delay into the distant future. However, Chapter 11 suggests that it is possible to find a good death when we face the reality of the end with courage. A perspective on death and dying is presented in detail with suggestions on how to die successfully. Many people live with death denial and obfuscation throughout their lives. However, acceptance of what is real in biological death brings on a more serene end.

The book ends on an optimistic note in Chapter 12, where health and the possibilities of a long life are discussed. The final chapter emphasizes the optimism bias that marks the book. How to live a long, happy and healthy life is the universal desire of humankind and the final chapter shows that such outcomes are modified by socio-economic status and personality. In all the chapters, the major issues of human adaptation are related to well-being. Solving the challenges of adulthood and the common developmental tasks that involve relationships are essential keys to longevity and living life to the fullest.

1 Identity and meaning

Moving toward a healthy self-concept

The journey that leads to adult adaptation starts with the formation of personal identity. In this introductory chapter, we will discuss the self and the self-concept. What we conceive of as "the self" is the deposit of all that we associate with ourselves: our knowledge, strengths, shortcomings and the nature of our relationships. Before exploring the many facets related to individual good health and adaptation, it is important to examine the self-concept. Research on the self-concept seeks to answer general questions about self-knowledge and to what degree we are self-aware. Although all people have some elementary awareness of their unique distinctive traits (how they differ from others), there is a great deal of variation between people in self-awareness and self-understanding.

Ego defenses are constantly at play to help people ignore personal deficits and present a more acceptable image of the self to others, but indeed also a better self-image. The self-concept includes perceptions of individual personality and traits like a person's relative efficacy and how other people feel about these traits. We do not develop in a cultural vacuum, so the self-concept also reflects the social and cultural context of life and how cultural values are mediated by relationships with families and among friends (Larsen & Le Van, 2013; Leary, 2003).

As all people are subject to the socializing forces of family and society, people develop several selves that respond to what is considered important in a given social group or community. Most people have some awareness of how closely their self-accepted ideals in behavior and achievements are matched to social norms or, conversely, how incongruent their real selves are compared to what is believed to be the ideal self. It is easy to understand that if the actual self is not consistent with the ideal or "ought" self (the latter reflecting duties and responsibilities), this discrepancy is a source of unhappy emotions and dejection. However, the self-concept is often distorted in a positive direction in the interest of better mental health (Baumeister, 1998; Taylor & Brown, 1988).

Another important component of the self-concept is the concept of "possible selves" referring to what an individual might achieve in the future. A healthy person has positive views of what he or she can achieve over time and some self-knowledge about how to reach treasured goals and desired

accomplishments. A more tortured soul worries about the dreaded aspects of his or her future life. Many people live with little hope, given their socio-economic conditions and social oppression. For people imprisoned in hopelessness, this vision of the possible self is negative and not a motivator, since life is anticipated with apprehension. However, within the context of the environment, people can actively avoid the fate they dread and create a better future.

Any aspect of the self can only be understood within the socio-cultural context in which a person is embedded. Some researchers argue that the self is simply an adaptation to the cultural environment, helping a person survive and prosper through conformity to social rules. In individualistic cultures, society approves of personality traits that reflect personal distinction in achievement and that demonstrate individualism and self-assertion. In contrast, in collectivistic cultures, the group and relationships to others is valued higher than enhancement of the self. Despite the long history of these cultural differences, it is also clear that cultural values are in a flux and the global village influence requires flexibility for all who aim to be successful and achieve important personal goals (Larsen & Le Van, 2013).

Who are you? Discovery through self-disclosure

It is only through relationships in the family and among friends that we get to know ourselves. Although self-knowledge is a gradual process, it is a precondition that we first know ourselves at some depth before we can understand others and their reactions, fears and aspirations. Maladaptation often occurs from social isolation where the individual has not made himself or herself known to other people and therefore has no basis for understanding either themselves or their impact on others. To grow in relationships by moving from friendship to greater intimacy requires self-disclosure where a person is willing to reveal feelings, fears and doubts to another person.

For good mental health, it is not necessary to be popular or have a large number of friends, but all people need at least one person to whom they can be known and who will accept them despite shortcomings. Self-disclosure is the key to any meaningful relationship, and it is especially important in intimate and long-lasting relationships. If a person is unwilling to self-disclose there is no basis for others to predict feelings or behavior except non-verbal cues that, in turn, can easily be misunderstood. A lack of self-disclosure creates an atmosphere of discomfort, and it is only human to avoid secretive people in favor of those who want to share the journey of life.

People, however, are only willing to self-disclose in an atmosphere of warmth and trust. A person could make some initial steps by telling others about the desire to build more trust and gradually share more intimate thoughts. Self-disclosure is about personal information that most people think is private and generally would not share publicly, but only discuss with those who are trusted. A person thinking about self-disclosure must ask themselves important questions like could the information shared be used against them in

some negative way or be misunderstood? Another consideration is whether the situation is right for this type of personal exchange; for example, is there sufficient time for feelings to be shared and feedback obtained?

The level of self-disclosure should be appropriate to the importance of the relationship. Some people reveal private information too early in a relationship, which can be overwhelming and frightening to another person. Interpersonal sensitivity is a guide to what is acceptable to disclose and how much information is appropriate to each stage of a relationship as people move gradually from acquaintance to friendship and then to intimate relationships. However, without two-way self-disclosure, it is likely that others will misunderstand behavior since they have to rely on interpretations of the situation that form the context of behavior or what gossip they may hear from others. On the positive side, as the process of self-disclosure exchanges move forward and people mutually reveal deeper private thoughts, a gradual trust develops based on mutual understanding that also encourages feelings of closeness.

Since people live in a globalized world today, it is important to be attuned to intercultural differences in types and amounts of self-disclosure and the acceptable parameters about private thoughts. For example, what might be considered healthy self-disclosure in Western societies could be experienced as intrusive and offensive in Asian countries. Gender differences in self-disclosure are supported by research, as women tend to value relationships more than men and are more willing to share personal information with female friends. As a result, women tend to have more friends and more intimate relationships than men (Kilmartin, 2007; Larsen & Le Van, 2013).

An influential concept called the Johari window explains that as a person becomes more aware, he or she will both give and receive personal information. The *"open self"* represents what a person knows about the self and what others also know. Within the open self, communication is free and nondefensive. However, there are things that we don't know about ourselves, but that are still communicated to others in the *"blind self"*. Ego defenses often prevent awareness of salient and perhaps negative aspects of our self-concept that nevertheless are expressed in behavior for others to observe.

Then there are aspects of the self that the person knows, for example, salient beliefs, feelings and behaviors that people, because of social sanctions, don't want others to know. For example, an atheist in a rigidly dogmatic and punitive religious country would find it wise to keep silent. The only way others can know this hidden self is if the individual decides to self-disclose to a significant other or therapist. Finally, there is the component of the self that is unknown to the individual and also unknown to others. Perhaps a person has a special talent but has no self-knowledge of this gift, since he or she was never in a situation that allowed it to develop. This area of the self is outside of communication (Pearson, Nelson, Titsworth & Harter, 2003).

The Johari window concept suggests that relationships are essential to learn about the self since it is by means of communication with others that people form their self-concept. Relationships develop when based on transparency

where authentic feelings and thoughts are revealed through self-disclosure. Self-disclosure is essential for mental health. Stress and unhappiness follow when people are defensive and withhold salient information. Mental health is promoted by talking about feelings and sharing information, whether in successful relationships or in counseling. Moving toward important goals in life requires a well-integrated self that largely develops in relationship with others (Santrock, 2006).

Vignette: My self-concept

There is an old Jewish saying, "may you live in interesting times"—a subtle curse, I think. I certainly lived in interesting times, being born in 1938 when the world was in crisis, coping with Nazi oppression and war. I grew up in a loving family. As a small child, I fondly remember my father visiting the baker in the morning to bring back Sunday breakfast, which my mother, father, older brother Peter and I would eat in bed. It was a loving home. My grandparents owned a small garden with a summer house outside the city where we would gather often to celebrate family returning from Copenhagen or other places. My father and mother were each blessed with 12 brothers and sisters, so there was always some happy activity, especially in the summer. Our city was idyllic (from a child's perspective) and was called Silkeborg (Silk Castle) by Gudenaa (River of the Gods) near our colossal (a couple of hundred feet high) mountain called the Mountain of Heaven. We would often sail to the Mountain of Heaven to pick blueberries and picnic, and if we were good we would get a red soda.

In the fall, my brother and I would become saintly and attend Sunday school at the Salvation Army, where we had to be present for some weeks to get the goodie bag at Christmas that contained cookies, apples and perhaps a piece of candy. My brother was holier than I. One time he came home and complained loudly to our parents that during the service I had fallen asleep and rolled off the bench.

On 9 April 1940, the Nazis rolled over the border and the German occupation began. At first the rules were mild, as Hitler and his representatives wanted to win the Danes for the Nazi cause. But after the attack on the Soviet Union, the gloves came off on both sides and many Danes entered some form of resistance. For example, our mothers would knit woolen hats in the colors of the RAF that we would boldly wear until the Germans caught on to what they meant. For my brother and me, life changed. I don't remember sitting around in circles singing, but somehow we learned the anti-Nazi liberation songs. To this day, it is the only one I remember from my childhood.

"A winter long and dark
For five damned years

Hunger, desperation and longing
Have embraced the country
Despite the terror and violence
A people's will has been unleashed.
Go to resistance, all men as one and make Denmark free."

It became a point of bravery for my brother and me to sing the song while walking as close as we dared to the Nazi soldiers.

One day in early childhood, I sat in the kitchen sink as my mother bathed me. We heard a horrifying noise getting closer, and soon we saw war planes at tree level crossing the city to bomb Nazi targets. My family was now in the resistance; I learned early that I was a Dane and not a German, and what was right and wrong. Several sabotage units operated in Silkeborg with the mid-Jutland region resistance taking out train tracks and bridges. My father was a lookout for some of these operations.

> These early experiences informed my self-knowledge and my ethnicity. I greatly admired my father and his willingness to take risks on behalf of a good and great cause. Where most people in the world, at least in the West, go for activities that enhance the self, he had found a broader meaning in helping others. Although it was a low intensity war in Silkeborg, it was real for the 18 or so young men who were killed resisting in the city. As the war came to an end, refugees from Hungary and displaced Germans began to flood over the border. My parents came to the aid of those who had been our enemies and brought soup to the hundreds who were dying as they approached Silkeborg. These early experiences formed the basis of my values and self-identity that still frame my understanding of life and meaning.

What is your self-worth?

A great deal of research on self-esteem and self-worth has been carried out in Western individualistic societies. Self-esteem is considered an important component of the self-image in individualistic societies. On the other hand, people in collectivistic cultures obsess less about the self since relationships with others are more salient. Culture creates boundaries for both self-esteem and self-enhancement. Many studies show how motivations, emotions and behaviors are shaped by cultural conceptions of the self (Heine, 2005; Larsen & Le Van, 2013; Markus & Kitayama, 1991).

It is important to remember that self-esteem is a subjective estimate, that people who report high self-esteem may also be narcissistic and grandiose and people with low self-esteem may express some unjustified fundamental insecurity and feelings of inferiority. Real self-esteem is based on social efficacies, like athletic or scholastic achievement or interpersonal competence. Since physical attractiveness is socially appreciated in all cultures, that trait may also impact a person's self-esteem. The level of self-esteem can be

consistent and reliable for extended periods of time, but it can also fluctuate, especially in response to life-changing events, like loss of a job or trouble in a relationship. The impact of lifespan struggles can be seen, since self-esteem is high during the childhood period, decreases somewhat during adolescence when all young people are trying to find a place in the world and increases in adulthood when people find solutions to career and relationship problems, until by late adulthood, self-esteem decreases again at a time when people feel less relevant.

Girls and women report lower self-esteem compared to boys and men throughout life. Perhaps girls and women have higher self-expectations of moral and ethical behavior compared to men and boys, and these higher self-expectations are more difficult to reach, creating a larger difference between the real and ideal self. The gender difference in self-esteem can also be a reaction to the lower social evaluation of females compared to men, since many societies place a higher value on boys and men. Girls in adolescence also experience more preoccupation with body image, and self-esteem decline is greater among females than comparative adolescent boys. Self-esteem is a basic trait that correlates with indices of happiness. Although these studies are correlational, it seems likely that self-esteem, when shored up by efficacy, contributes to well-being and happiness. Likewise, low self-esteem is correlated to negative and self-destructive behaviors including anorexia nervosa, depression and suicidal behaviour (Osvath, Voros & Fekete, 2004; Robins, Trzesniewski, Tracey, Potter & Gosling, 2002; Robins & Trzesniewski, 2005).

Life is a struggle, and there is no permanent security unless a person submits to and agrees with dogmatic answers about life. However, dogmatic solutions often create more questions and insecurities, which can be manifested in low self-esteem. Therefore, it is much better to face up to a problem than to try to escape or avoid dealing with the issue. Coping honestly with life creates self-respect, and as problems are solved, coping also produces an increased feeling of self-efficacy. The question is: what can we accomplish today to improve our lives despite objective limitations? We are not alone on the human journey, and seeking emotional support is a healthy response to the problems of life, including those that occur in relationships. Some relationships become toxic, and if it is not possible to change deplorable behaviors and feelings, then separation becomes essential for emotional health. However, having a deep friendship is important and can often compensate for the disappointments experienced in families.

Identity development

Self-identity is built on integrated conceptualizations where the self is experienced consistently over time. The components of life that are reflected in identity include occupations, political and religious values and beliefs, cultural membership and broad social interests. In understanding identity, people seek

an answer to the question of *who am I*? How am I going to organize my life and what choices do I need to make? The issues of identity are confronted throughout life, but are especially salient and disturbing during youth. Many adolescents and young adults do not have a firm grasp of their identity and suffer from what Erikson called identity confusion.

Many young adults from the age of 18 to 25 experience an *identity crisis* as they question what they believe, who and what they are and the direction of their lives. Young people unable to answer questions about personal identity experience an identity crisis. Adolescents often suffer from identity confusion manifested by withdrawal and isolation from family and friends. Other young people seek to lose themselves in escapist culture or merge themselves into crowd behavior in music concerts, dancing or large sporting events. Becoming one with the crowd temporarily diverts attention away from the identity crisis, but sooner rather than later people again have to take up identity questions or seek escape in alcohol, drugs or other addictions.

Erikson believed that youth was also a time of experimentation, and society shows some degree of benevolence while young people try out different roles, occupations and personality traits. From this experimentation, young adults gradually find their place in society as they are rewarded or punished for their efforts and behavior. Finding rewarding employment is a special task in identity formation. Being well-trained to enter and succeed in the workforce is an important achievement of adolescence and early adulthood. Different values come into play in occupational choices as some people may value economic rewards and seek employment with high remuneration, while others engage in work that focuses on helping others, often with less pay but higher in satisfaction. Making choices consistent with personal values is central to meaningful identity and development.

Identity crisis

As noted above identity development occurs throughout life. Answers to basic questions about the self begin in early interactions with childhood caregivers. As we gain information about ourselves from their love or neglect, that knowledge begins to answer many questions about selfhood. In adolescence and young adulthood, choices are made that are later reflected in political beliefs and ideology. Over time, many salient decisions form the core of identity that is carried forward in life. A crisis occurs when the individual feels compelled to make a choice between meaningful goals. By making a commitment to one or the other of competing choices, the individual can escape from the crisis and the decision will contribute to identity formation. Some individuals do not experience an identity crisis, since their early decisions in life were influenced by dogma or the absence of opportunities, and these frames have foreclosed the possibility of choice. For example, this happens when children are guided by dogmatic religion or when parents otherwise influence their

children's ideologies or vocational choices prior to any exploration (Erikson, 1968).

There are people who have not experienced an identity crisis and have not made religious, ideological or scientific commitments. The best way to describe such vacillating individuals is to say that they are treading water in life and will potentially be swept along by any ideological wave that becomes popular. Other people are not conscious of moral alternatives, since their identity and path in life is defined by their submission to the admonition of parents and other authority figures. It is hard to imagine that citizens of North Korea have many choices except those dedicated to the worship of the authoritarian (dear and great) leader. But even in that closed-minded society, there are some moral choices that can be individualized and contribute to identity by the more conscious members of the community.

In more open societies, while the environment is always a framework and a determining factor in behavior individuals can still experience an identity crisis, and in response make a commitment that reflects deep-seated values. Probably the most important identity formation takes place in young adulthood when young people are no longer swayed by the peer pressure of adolescence. Still, there are many young people who drop out of universities or trades and never make an occupational commitment, and their identity remains diffused. Young people may remain diffused on other important issues of religion and ideology when they conform to dominant opinions and values of family or significant others (Moshman, 2005).

Ethnic identity

Ethnic identity is an important component of the self for many people. It is an enduring and permanent aspect of selfhood that produces corresponding attitudes and behaviors. Even in the melting pot that is the United States, people hang on to the identity of their country of origin and gather to celebrate occasions that support their ethnic identity. In Africa, we can see how countries that are formed politically are not the primary identity for many people, as self-identity is found in tribal, religious and ethnic origin. Ethnic identities have created many perplexing wars and continuous conflict. Erikson in particular believed that ethnic identity was the major motivational force in the development of nations and individuals.

The need for an exclusive ethnic identity has been the driving force behind many social upheavals reaching into the current era. In particular, ethnic identity is a strong force among minorities in countries composed of several or many ethnicities, since the majority often try to dilute and eliminate minority aspirations. For Black people in the United States, ethnic identity was largely diluted and eliminated from their culture in the aftermath of slavery. However, these ethnic feelings re-emerged in the "Black is beautiful" movement, when pride in ethnic origin was on the agenda and a source of positive self-evaluations in the 1960s.

Gender identity

Division of labor between the sexes probably has a hardwired genetic basis, and was central to gender identity until recent times. Division of labor influenced men to follow career paths and make ideological commitments, whereas women were more interested in marriage and family life. However, gender identity has undergone significant changes over the past few decades in the aftermath of the feminist revolution, to the point where today there is no career path blocked for women in the United States or western Europe. However, the trade-off is that women have lost ground in enjoying secure, stable and happy families, as can be observed in the high rates of divorce and other dysfunctional statistics throughout the world. The world is still in the midst of gender-related changes, and whether more functional gender compromises will be made is yet to be determined. How to find personal satisfaction, and how to balance that goal with family security and well-being, remains an important issue for many men and women.

Values and the meaning of life

Values are internalized standards that people use to determine the worth of ideas, political paths or behavior challenges that they face across their lifespan. Values motivate career paths, choices of friends, marriage partners and things that matter most in life. Human beings attach values to many things and ideas. For some people, money is the highest value, and they will obsess about creating ever-increasing wealth. Other people value education and science higher, and what they study corresponds to their curiosity about the world and eventually to the selection of a career path or scientific discipline.

Not all people have sufficient self-awareness to know their values. At times, self-relevant values become known and salient because of some conflict requiring choices and action. In social conflict, values determine which side of the social barricades people find themselves on, and what they are willing to sacrifice to reach goals. Life is complex, and different values can be personally conflicting at times. The stronger value will generally win out in value conflicts and the competing value or values rationalized to be of less significance and disappear.

In large parts of the globalized world, students are increasingly concerned with the bottom line of making money. Education in the service of science and truth is devalued as students seek education as a practical means of securing a career and wealth. At the same time, despite increasing needs manifested in society, college students are less concerned about the deprivation and suffering of others and are more motivated by the quest to strive individually and become financially dominant. Recent research revealed that achieving wealth was thought to be very important by 74% of students in one study, although the survey also yielded some hopeful signs of increasing interest in helping others through service. Students who volunteer for service in the community

have different values from the mainstream student body and tend to be more self-aware and conscious of their social responsibility. Women as a group have a higher sensitivity to the plight of those in need and are more likely to commit to community service (Eisenberg & Morris, 2004; Sax, Astin, Lindholm, Korn, Saenz & Mahoney, 2003).

The meaning the individual attaches to life is expressed by self-relevant values. For Frankl (1984), the search for meaning was motivated by the finiteness of our existence and the certainty of our mortality. The knowledge that death is inevitable causes people to ask basic questions like why we exist, what we want to accomplish and the meaning of life. Some authors have suggested that meaning is found in having a purpose connected to future events. For example, significant individuals in history have dreamed of an ideal society and spend their lives trying to get closer to that ideal.

Human happiness is a future-connected goal for most people. Our conscience, a small inner voice telling us what is right or wrong, is also based on salient values. These central values provide meaning by justifying behavior or calling on us to change and repent. Meaning in life is also acquired by achieved competence and efficacy and the thought that, in the end, we made a positive difference in our families and communities. Having a sense of efficacy is the belief that we can change what matters in life and is related to positive mental health. In the final analysis, meaning is expressed in salient feelings of self-worth, that despite all opposing and debilitating forces we encounter over the years, our lives have meaning in self-development and in creating a better society.

Western society has been characterized as being obsessed with the self and self-fulfillment. Since individual achievement is paramount in these societies, many people are stressed and seek escape from the drive toward self-fulfillment. Some people escape from stress by finding identity in television soaps that seem more attractive than their own daily, boring lives. Others find relief from self-preoccupation by listening to music or dancing the night away. Unfortunately, escape can come at a high cost, as many people drink too much or seek escape in drugs. It is a real loss to both the individual and society when the urge to escape is so great that the integrity of the individual is compromised and the abuse of drugs is a means of relief from self-criticism and stress.

Although Westerners are preoccupied with self-enhancement, and therefore too self-critical, other cultures have developed different ideas. For example, Buddhism has a negative view of the obsession with individuality, which it considers the source of human unhappiness. What is important from the Buddhist cultural perspective is to live and enjoy more of the moment rather than live in the past or in the future. The goal of Zen Buddhist therapy is to live in the present moment and concentrate all behavior and thinking on current work. To commit oneself to constructive work, and thereby reduce egocentrism, is an important goal of Buddhist thinking. Religion can be a powerful force for good or evil in a person's life. In some cases, religion promotes a healthier lifestyle, and thereby contributes to better overall health of

individuals and longevity in society. In some societies, religion also offers social connections and support that are not present in the community as a whole. Likewise, traditional societies, although often poor in material things, offer solidarity through many social connections expressed in cultural dance and music, in which the entire community participates.

In modern societies, these connections have largely been lost, and people dance almost anonymously in a crowd or get lost in mega-concerts that both reflect alienation and desperation for connections. Escape is a poor solution to the search for meaning, since it does not manage the terror that derives from the ubiquitous awareness of our mortality and the certainty of death. Of course, for some people, religion provides hope for the continuation of life and serves as a means of coping with despair. On the other hand, people with a more scientific outlook seek to make creative contributions that can serve as a means of managing mortality terror. Gender differences show that females are more likely to believe in a higher power and feel that religion serves an important function in life (Wink & Dillon, 2002).

Finding meaning in life in a transient world

Recently, the burial ground of a forgotten dynasty of pharaohs was found in Egypt. If these mighty rulers of their day can be completely lost to history except for some grave-robbed tombs, then perhaps being famous or well recognized has no lasting value. What values do you think meets the test of time? To find meaning in life, it is important to understand what we value and then pursue goals that are consistent with these objectives. Our family and social experiences lead to different evaluations of what matters. For some individuals, good family relationships are important, whereas others value peace of mind. Yet other people are motivated by being wealthy or finding personal pleasure in life. Self-efficacy is important in the struggle to achieve and is an essential value in order to succeed in the modern world. Other people place a high value on being educated and developing knowledge about the world and universe in which we live. Many people consider happiness an important value, yet, they are without a clear path toward reaching that goal. In recent years, a healthy lifestyle has attained greater importance in the West, as can be observed by the numerous health clubs founded in recent years. If you were to rank values in importance what rank order would you produce for family, loyalty, pleasure, peace of mind, wealth, spirituality, competence, education, happiness, helping others, being physically fit or gaining recognition? Which value is of greatest importance and what do you value least?

We don't have unlimited time in this life. To make life meaningful requires that we think about and clarify what is valued, and understand the reasons why values are or are not important. A meaningful life comes from self-understanding and by pursuing goals and making efforts that express important values. Perhaps lasting meaning is found in being of service to others and volunteering to help in the community. Research shows that service volunteers

tend to be more extraverted and feel more responsibility for other people, and at the same time possess greater self-awareness and self-understanding. Consistent with their greater appreciation of relationships, women also tend to volunteer more than men. The personality traits mentioned above can contribute to a life of helping others. Furthermore, a service orientation in life can also produce positive outcomes for the volunteers, as students who serve in the community often see their grades improve, feel less alienated and have a desire to make a difference. Community volunteers are more reflective about ethics, morality and the political organization of society, and they seek improvements through practical work and objectives. In the process of service, volunteers meet their basic human needs for having a purpose in life with explicit goals that satisfy personal end-states and enhance happiness (Eisenberg & Morris, 2004).

Finding meaning and identity through relationships

People who are socially isolated feel lonely, since the very core of human existence is rooted in our relationships with others. Loneliness is traumatic and a serious mental health issue in modern society. The lack of meaningful emotional attachments causes a deep feeling of emptiness and a longing for intimacy. More than 25% of Americans claim to be lonely, and these feelings are especially acute after the breakup of a relationship, which can create feelings of isolation and a loss of trust. It is well known that isolation in solitary confinement is a form of mental torture and the greatest punishment that can be inflicted on a prisoner. Human beings need to be with others, and those needs are hardwired deep in our genetic code.

There is a salient difference between being alone and being lonely. Some people are fine with being alone, and all people vary in the desire for relationships and interactions with others. It is mentally healthy to seek out solitude at times, as it allows helpful space for reflection and work. On the other hand, being lonely is a psychological trauma that produces strong desires to find an emotional confidant. Can people be lonely and still be in a relationship? Is it possible to be married and still feel acute loneliness? Sadly, that is often the case when people live with someone who is indifferent or does not know how to communicate emotions. Many college students who have not solved their needs for emotional attachment also suffer from loneliness, yet spend their time being around many people.

The fundamental need for emotional attachment is supported by the presence of so many socially organized ways for people to meet and the collateral universal desire for marriage. The presence of various dating services and advertisements seeking relationships also point to loneliness in society and the almost ubiquitous effort made to meet someone who can respond to the need for an emotional confidant.

Acute loneliness creates depression and contributes to psychosomatic illness. Lonely people are at greater risk of heart attacks and experience shorter lifespans. Some illnesses are the outcome of the loss of self-worth that lonely

people experience that also leads to poor health habits. As noted, loneliness is not the same as the absence of relationships. An individual can have many relationships, yet still miss that essential emotional attachment of a confidant. If a person lacks social ties, that need can be met by joining groups and meeting people via the internet or other sources. Overcoming loneliness is more difficult than circulating socially, since it is a longing that is not satisfied by superficial relationships (Larsen & Le Van, 2013; Wiseman, Mayseless & Sharabany, 2006).

Most people are lucky and have experienced emotional attachment from parents and close relatives during childhood. The fundamental role of parents as an emotional support can be easily seen when breakups of marriages occur, since parents of the divorced are usually sought out as a source of support. Our blood ties run deep, and at the end of the day, if a marriage or relationship fails, the parties will seek comfort where they are never turned away, which is with their parents and blood relatives. Relationships also satisfy identity needs found by belonging to social units or groups. In adolescence, peer groups are of special importance in defining identity. Membership in organizations like churches, scouts, neighborhood gangs and athletic teams also contribute to identity formation. These groups help answer the question "who am I?". Later in life, a chosen career path also contributes to the development of identity by finding work that is satisfying and consistent with values. However, large segments of the world's population do not have the luxury of choosing careers, since work is primarily framed by the struggle for survival and lack of opportunities. During adolescence, music and clothing fads come and go responding to conformity in identity formation of the young. By supporting these fads, youths will often think they are in rebellion against a conformist society, forgetting that they are equally conformist within their own age group. As people age, emotional attachment is no less important, but, sadly, people gradually lose many important relationships due to death or end of career paths. Loneliness is also physiologically dysfunctional, and seniors who feel disconnected are significantly more likely to suffer from dementia or Alzheimer's disease (Wilson, 2007; Wilson *et al.*, 2007).

Vignette: A father and son relationship

> Toothaches were common for me in my early childhood. I remember getting them often as early as two or three years old. One of the most loving memories I have of my father is when he carried me back and forth in our small apartment in order to comfort me during a toothache. It seemed like he carried me for hours as he tried to calm and distract me. My father and I were on very good terms. In those days, we went to the countryside to cut the peat that was dried in the summer and used for fuel in the winter. At this point in life, I called him by his first name. This continued until I really needed him as a father. One summer, I had called my father by his first name all day long as he dug the peat some meters deep. All at once

I lost my balance and began falling into the hole. As I was hanging on to the edge for dear life we were no longer first name buddies as I shouted "Dad, help!" These early experiences anchored my self-concept within a positive frame.

Shyness and social dysfunction

Some people find it difficult to meet others and seek to withdraw from social contacts. More than half of all people surveyed claim to be shy, experiencing anxiety, stress and tension at the presence of others. The autonomic nervous system produces collateral reactions in the body such as a pounding heart, sweating and blushing. Shy people often think they are unworthy at some level, that people will not be interested in what they have to say or that they will be disliked for their lack of communication skills. Contributing to shyness is the new technological culture where many social transactions occur in cyberspace behind the protective walls of internet anonymity rather than physically meeting other people. For some people, certain situations bring out more shyness, like the presence of the opposite sex and/or being in the presence of people in authority.

Shyness increases preoccupation with the self, and the shy person often thinks that other people are acutely aware of their personal flaws or blemishes. Since assertiveness is essential to secure fair play from others, shyness blocks many people from advancing in relationships and careers. A higher degree of self-preoccupation is the major difference between shy people and those who have a normal level of self-awareness.

Contributors to shyness

Stereotyping is fundamental to prejudice and discrimination. When a person feels shyness in the presence of the opposite sex, these feelings may be the outcome of inaccurate gender stereotypes. For example, a person might have had a bad experience with a member of the opposite sex, and that memory becomes the basis of gender perceptions in the future. The solution to gender-related shyness is to develop an open mind and to engage in actual encounters with the opposite gender, since such interactions will disprove many stereotyped beliefs and start a new appreciation for the complementary values of both men and women.

First impressions are important, since early perceptions often influence selective attention and future interactions. The first impression is potentially lasting and can have a large impact not easily overcome by later information. Within seconds of meeting another person, first impressions are formed, often by superficial appearance or mannerisms. For example, when a date shows up late, it is likely to give a first impression of unreliability. Women often develop their first impressions of men based on what clothes a man wears, whereas men are more impressed by the physical attractiveness of women. These differences

reflect hardwired gender dispositions related to reproduction. For example, what a man wears may yield clues to his stability and wealth and a woman's attractiveness may suggest fertility.

Attribution errors can be caused by first impressions. Because of the power of first impressions to influence subsequent selective perceptions and information, inaccurate attributions are difficult to change. Selective perceptions occur when a person attends only to information or behavior that confirms the initial impressions and ignores contradictory information. Today, many first impressions are made on the internet by what is posted. Since a person will never have a second chance to make a first impression, careful thought should go into internet postings that may rest in the cyberworld forever. The online world is available not only to strangers but also to governments; for example, in the United States, massive mega-data is collected from computer and phone communications (Myers, 2007).

Attribution theory explains important distortions of perception and behavior. People tend to be influenced more by the other person's personality and put greater weight on that component than the situation in which the behavior occurs. Having made an estimate of another person's personality by first impressions, expectations are rapidly formed about behavior. However, in actuality the situation and context of interaction is frequently the more powerful influence contributing to behavior. Attributions that people develop about the behavior of others enable them to predict behavioral interaction and reduce uncertainty. However, these mental processes based on attributions are often totally inaccurate. To make good decisions with respect to people we meet in life we must not be overcome by first impressions, but gradually, over time and in many situations, obtain estimates and expectations of the other person's personality and behavior.

Attributions of other people's behavior can produce self-fulfilling prophecies. Research has shown that if teachers are told a particular student is bright, then that expectation has powerful influences on the child and can produce significant improvements in intelligence scores. The expectations of teachers and parents become incorporated in children's self-concept that, in turn, influences behavior like becoming a better student. How have expectations of significant others (family and teachers) influenced your self-concept and limited or improved your development? However, it is equally important to remember that people can change self-limiting expectations and perceptions.

In fact, it is possible to change first impression images through effective impression management. For example, research shows that reliable eye contact and body language matters when meeting others in Western societies. When a person leans forward during a conversation, it shows focus and interest in the other person. Smiles are always engaging, and can promote a friendly image. Also, genuine self-disclosure within some limits disarms the other person and may help in the development of friendships. However, whether impression management is effective depends on the cultural setting.

Overcoming shyness

An important initial step in overcoming shyness is to understand the specific situations where it occurs and build an improvement program to confront these fears by gradual desensitization. If shyness is brought on by the opposite sex, it is necessary to find situations where a person can comfortably interact with the other gender. Even if the situation is initially difficult, the shyness will gradually subside when confronting these fears consistently over time. It is important for shy people to accept the basic idea that a person has control in life. While it is not possible to always control factors in the social world, a person is autonomous in feelings and reactions. A successful strategy to overcome shyness requires the setting of limited and realistic goals. For example, a person could start desensitization by setting some time limits on the initial efforts to speak with members of the opposite sex. Social interaction involves risk, and we must accept that there are people in this world who are rejecting and cruel.

Summary reflections

This chapter starts with a consideration of personal identity. What does it mean to build a personal identity and a healthy self-concept? The chapter initially discussed the self-concept and how self-knowledge is difficult to achieve in the presence of dominating ego defenses that distort reality. The real versus ideal self were discussed as related to self-esteem. Possible selves and beliefs about what people can become in the future are a motivating force that, to some extent, determines goal-directed efforts and behavior. In all arenas, culture plays a role, since the self is defined by some researchers as an adaptation to the cultural environment.

Self-direction is important to the process of forming identity and developing self-knowledge. Identity is gradually formed by feedback from relationships that inform us about important personal psychological characteristics. The Johari window reveals four possible selves demonstrating that self-knowledge is limited. Only in the open self is self-knowledge completely congruent with what others know about us, but there are many aspects of selfhood of which people remain unaware. Relationships are essential for self-knowledge, where transparency is valued and authentic feelings are shared.

The chapter also discusses the differences between self-worth and narcissistic self-esteem. Real self-esteem is based on the confidence built on social efficacies and interpersonal competence. Girls tend to have lower self-esteem, since they have higher standards for themselves and experience social devaluation in many societies. Families play a unique role in fostering self-esteem and are fundamental to human happiness.

Identity development is a process from which an organic conceptualization of the self emerges, the core of which remains stable throughout life despite changing times and situations. Identity grows from meeting the essential challenges of life that requires choices and decisions based on unconscious or

conscious values. An adult also must find an acceptable occupation and make a healthy adjustment to culture. Identity crisis occurs when the individual cannot make a commitment between competing choices and values, but seeks to withdraw through the abuse of drugs and other forms of escapist behavior. Membership in ethnic and gender groups also has a profound influence on identity.

Since people experience life as transitory, it is important to develop anchoring values and find meaning in life. Conflicts of all types require solutions, and most decisions are based on internalized values. The finiteness of life motivates people to decide what is important to accomplish and what is of lesser importance. The broad divisions between individualistic and collectivistic cultures also play a role in forming values and making decisions. Identity is formed by feedback in relationships that develop components of the self-concept. Culture contributes additional values and restrictions about proper gender interactions and friendships. The experience of life shows that humans have hardwired needs for relationships deeply coded in our common genetic inheritance that promote survival. The universal desire for marriage reflects these hardwired desires for intimacy that are not satisfied by superficial encounters.

Finally, the chapter discussed social dysfunction associated with shyness. Meeting other people is more difficult in the new technological culture where there are fewer opportunities for face-to-face encounters. The major difference between shy and more normal interactions with others is the higher degree of self-preoccupation in the former. Shyness is prolonged by the common belief in society that first impressions are deciding factors in a relationship. However, first impressions can be changed by impression management using appropriate body posture, gestures and a consistent positive attitude.

2 Developing emotional maturity and emotional intelligence

Emotions are central to the experience of life and they are connected to specific reactions in the autonomic and central nervous systems (Ekman, Levenson & Friesen, 1983). In all cultures, people demonstrate the ability to recognize facial expressions of human emotions, supporting a hardwired basis for sending and receiving emotional signals (Masmoto, Keltner, Shiota, Frank & O'Sullivan, 2008). Emotional reactions are learned by observing significant others in the primary family and in other social interactions. Broadly speaking, emotional responses are related to social behaviors, including approval seeking and personal identity frustration (Larsen, 1974). Unfortunately, learned emotional behavior is often maladaptive and self-defeating. However, emotions that are learned can also be changed. For example, it is possible for an individual to learn to become more emotionally expressive and to develop better skills in reading the emotions of other people.

This chapter is devoted to helping the reader understand why certain emotional reactions are experienced and why the expressions of feelings can, at times, produce problems in living with oneself, with significant others and can create dysfunction in the workplace and in love relationships. While loving relationships can bring pleasant and happy emotions, life at times also leaves burdens that create sadness and pain. Emotions are what colors human life, since without feelings we would be like robots going through the motions of existence with little meaning or value. For example, people know from their emotions that they have loved when they experience the pain of loss that occurs in death. Without emotions, people would feel no joy in relationships and experience no grief that gives meaning to the separation from those we love.

A person feels the presence of emotions when encountering butterflies in their stomach brought on by an upcoming important job interview, or an impending surgery or when meeting a person on the first date. Emotions produce physiological changes that create awareness that a situation is important and mobilize the individual to take some action, such as preparing for the interview. People have little control over the autonomic physiological changes that are identified as emotions. For example, when a person feels fearful, their body releases adrenaline to prepare for action, enabling the individual to react

with speed and to stay mobilized for as long as necessary. In other words, the physiological changes that occur with emotions are the body's way of preparing to flee or fight.

Are emotions all about feelings? In truth, it is not possible to separate feelings from the thinking processes that provide meaning to what is felt. Placing cognitive labels on the emotions experienced provides meaning to events since the same physiological reactions occur in both joy and sadness. It is the thoughtful cognitive evaluation that creates interpretations of emotional happenings and determines the label attached to feelings. Thinking also colors overall dispositions toward others, specifically in relationships. A pessimistic person always believes that the glass is half empty whereas the optimist thinks of the glass as half full and has an ample bottle placed nearby.

Emotions have motivational properties. Humans in all societies prefer pleasant circumstances in life and emotions help guide people toward situations that are pleasurable or pleasant and away from conditions that cause anxiety and are unsatisfying. The desire to approach certain people or relationships is motivated by the belief that they bring pleasure and interest. Culture determines what is considered pleasant and whether happiness is to be found in contributing to social harmony or in more self-defined well-being of the individual (Haller & Hadler, 2006; Larsen & Le Van, 2013). On the other hand, anxiety encourages a person to move away from situations or people that appear threatening. The emotion of anger motivates aggressive behavior as people tend to strike back at those who are frustrating. Finally, sadness is an emotion related to loss that produces withdrawal from situations or people who remind us of loss or represent threat. People who have experienced a loss in a love relationship are less likely to trust another person in the future.

Emotions are also more broadly influenced by moods. Moods are diffuse feelings that in some cases create more specific emotions. Some people have a joyful demeanor and tend to color the world in light and positive tones. Other people are perpetually grouchy and weary of making contact. Moods, however, can change, and a bad mood today can change tomorrow when the sun shines again (Kagan, 2009).

Emotions that create trouble in our lives

The vocabulary for emotions is very rich, suggesting the importance of emotions to human life and behavior. Some research suggests that people have a few primary emotions from which more complex mixed emotions derive. For example, Emery (2000) suggested the presence of four basic emotions of being mad, sad, glad and scared. Complex emotions derive from these primary feelings; for example, depression is a result of too much sadness, fear in the more extreme cases becomes panic and anger when the person is sufficiently frustrated creates rage. Mixed emotions are combinations of feelings created in particular situations. For example, is it possible to both hate and love the same person?

Some negative emotions reflect the darker side of the human experience, and it is understandable that people like to escape, avoid or disguise these integral parts of being human. Nevertheless, emotions have helped us survive through millions of years of evolution. Our health would be better served by overcoming escapist behavior going directly to the source of negative emotions and deal with what is causing distress (David, 2016).

Whether emotions become a problem for the self and others depends on the type, intensity and duration of feelings. It is normal to feel grief from the loss of a loved one, but if grief is sustained over excessively long periods of time, it interferes with normal life and relating to others in a healthy way. With the loss of loved ones, there is some sadness that never goes away completely, but the aim of good mental health is to limit grief and not create permanent scars that affect a person's ability to experience joy again. Issues related to death and dying will be discussed in Chapter 11.

Students often experience test anxiety prior to an important exam. At low or moderate levels, test anxiety can facilitate learning as it motivates the student to study. At more extreme levels, test anxiety interferes with the ability to think and causes students to forget important information for the test. To be effective, students need a mild state of anxiety to motivate them to make their best effort, but not so much that it disrupts the ability to perform. Some emotions, however, prevent a person from living life to the fullest and are debilitating and disruptive to personal adaptation and happiness.

Fears

It is important to distinguish between anxiety, which is not related to specific situations, people or objects, and fears that always refer to a specific situation or object. In anxiety, people experience a general apprehension that something bad is about to happen, not knowing what or why. However, in a different but more specific situation, some people experience the fear of flying. It is also common and adaptable to have fears of physical dangers like being hit by lightning in a thunderstorm or being run over by a car. People also experience psychological fears like losing face in front of others or failing in important life objectives. Many people share the common fear of being rejected. That fear makes it difficult for a person to take steps toward normal relationships. However, "risk not want a lot"; those who do not accept the risk of rejection spend much of their lives wishing for something more, and they yearn for better relationships or exciting adventures.

Anxiety

Anxiety is common to all people. It is understood as an apprehension that something bad will happen and some danger not fully understood is present in life. As noted, a mild form of test anxiety can motivate study and preparation. However, for some people, anxiety is an ever-present disabling emotion that

is unwarranted by reality. In that case, anxiety is neurotic and may severely disrupt functioning. For example, some students are so anxious that they flunk tests even when they know all the material and may be better students than others who pass the course. Whether anxiety is normal or neurotic largely depends on individual beliefs in self-efficacy. To what degree does an individual feel in control and therefore able to manage anxiety by taking realistic steps toward goals by, for example, working harder? Or to what degree is the person feeling out of control and subject to powerful events or people?

It is important to acknowledge fears and the role they play in life. However, in overcoming fears, it is necessary to evaluate what is real, since many fears are not based on a tangible threat. For example, people's fear of rejection prevents many from taking the risk of starting a conversation with someone attractive. Taking that risk might actually lead to a satisfying relationship. Only by sensible risk-taking is it possible to accomplish anything and improve self-esteem and self-efficacy. Many people dwell on the negative rather than focus on the positive in their lives. For example, anxious people tend to dwell on failures rather than think of possible positive and rewarding outcomes in the past and possible futures. Severely anxious people practice catastrophic thinking by believing that the worst outcomes are likely when actually the worst rarely happens. A great deal of anxiety comes from obsessing about the future where a person has little control.

Anger

Anger is an emotion produced by frustration. People have common and individual needs and wants, and when these are blocked, the outcome is often displeasure and anger. The intensity of anger increases with the perception and belief that the blocking and frustration is done intentionally. Anger is also produced by feelings of injustice in personal outcomes and when loved ones are treated unfairly. If an injustice is of long standing, it causes resentment, a feeling difficult to change as it often turns into chronic anger. Prejudice learned during socialization leads, at times, to unearned hostility aimed at a specific person or group. It is difficult to hide signals of hostility since these feelings can be conveyed non-verbally in ways that exist below the surface of individual awareness. In severe cases, people learn to hate.

Typically, anger begins with the threat of some loss. Anger is a normal response to the loss of a valued relationship and the thwarted hope for a common future that occurs in divorce. In other cases, an employee may experience a loss of position; for example, many millions of workers lost jobs in the recent recession. In Asian societies, the loss of face is a serious issue of status. Anger follows social humiliation as people want to maintain their image in society. The world also continuously suffers serious and frustrating material losses due to wars and violence in nature. These large scale social frustrations diffuse anger toward substitute targets because it is hard to affix blame for natural disasters. Anger is, in many cases, the outcome of feeling discounted and powerless. The

jihadist wars feed on feelings of being discounted and disrespected believed by many people in the Muslim world.

It is important to remember that anger is a normal response to frustration. Whether it contributes to dysfunction depends on how it is handled. If expressed in inappropriate ways, anger is destructive in relationships. This is especially true when people displace anger derived from social frustrations toward loved ones. Displacement occurs because it is safer to direct anger toward those who love us, whereas most people would think twice about expressing anger toward a person in authority with the power to terminate. Anger can be self-reinforcing and yield increased rage and, in some cases, result in murder or other assaults. How people resolve their anger therefore matters greatly (Simon, 2005).

Many people feel that it is necessary to ventilate anger in order to remove bad feelings and experience catharsis or emotional relief. A common belief is that when people fail to express anger directly, they will continue to brood about the frustration. Some people also believe that if anger can be expressed, people would re-establish an honest relationship and develop better communication. Unfortunately, expressing anger without also communicating support does not result in better communication since the receiving party often feels aggrieved, and they might withdraw and communicate less. Angry families cannot solve conflicts, since the discourse often becomes a shouting match (Tavris, 1989). Anger is a strong emotional response that frequently removes rational control from participants in interactions. In a moment of reflection, one could ask whether the anger is justified. Parties interested in conflict resolution should look for rational alternatives and some common agreement. However, there are situations that are important enough in life and to one's deeply held values that require the expression of personal angry feelings.

Guilt

Guilt is one of the most difficult emotions to resolve, and many people go through life being guilt-ridden and unable to achieve a joyful existence. Guilt is experienced when people violate their own code of conduct and can be thought of as anger directed at the self. Except for sociopaths, all people feel guilt from having transgressed self-imposed moral law or having failed to live in accordance with self-accepted ethical behavior. Feelings of sadness are at times mixed with self-directed anger when people acknowledge they have missed out on important life experiences because of moral code transgressions. However, many feelings of guilt are unjustified by objective standards since guilt-ridden people often create impossibly high standards of ethics. When the difference between the sought for ideal and real behavior is large, people live with excessive guilt. Since guilt is, at times, brought on by unjustified self-expectation, many people live their lives with tragic feelings of self-blame that prevent their enjoyment of life to the fullest (Duffy & Atwater, 2008).

However, when guilt is the result of real transgression of conscience, it can serve an important function as a regulator of behavior and as a motivator for needed changes in life. If people did not at times feel guilt for violations of ethics, they would not grow to face important decisions required by life. Modest guilt helps promote good environments based on ethical work habits, supportive relationships in families and strong work responsibilities. Guilt is not only a personal regulator, but is also needed to create a harmonious society. From what is known, human beings are not born with an active conscience. Ethics are learned in the primary family, in social circles and through the educational system of the community.

How does a person know if the guilt that is experienced is realistic and based on actual transgression of conscience and important values? It takes a serious and conscious examination of behavior to evaluate this question. Guilt-ridden people experience maladaptive reactions where powerful feelings of guilt are repressed and the victim often remains unaware of the origin of the transgression. However, to resolve fact-based guilt requires a willingness to face past unethical behavior at its worst. If the guilt is real, it is possible to engage in a gradual process of restitution and then forgive oneself. In severe and burdensome cases that produce traumatic feelings of guilt, a person may need the professional help of a counselor or psychologist.

It is possible to overcome feelings of guilt by a careful and rational examination that identifies the guilt derived from violations of a personal code as separate from the guilt felt when transgressing parental or social standards. If guilt originates from the violation of social standards, it is important to ask whether these social codes actually represent personal valuable ethics that should be supported. In the final analysis, it is the codes and standards that are personally salient that matter when overcoming guilt. While guilt is a common human experience, there comes a time when these feelings have no utility and it is time to reach for self-forgiveness. When warranted, it is important to make amends and apologise to others or make restitution where possible. When a person has done all that is possible to redress past wrongs, it is time to forget the guilt and put these feelings aside.

Vignette: The guilty feeling I remember

> Looking back on my life, the most incurable feelings of guilt occurred because of my disinterest in those I deeply loved. My brother died at a very young age from cancer when I was only ten. As a family, we would visit him at the hospital in the neighboring major city. As it turned out, he was diagnosed with brain cancer and surgery was the only option. The day before the surgery, I accompanied my parents when we visited. I didn't realize it then, but later I learned that this was the last time I saw him alive. During our visit, I spent nearly the entire time on the floor reading magazines and books, rather than talking with him as I should have. Later after he died, that indifference was one of the most painful feelings

of guilt I've had in my life. Even today, I feel the pangs of guilt and wish I could have gone back and changed those moments. Of course, he would have forgiven me and likely had not given it much thought, as neither of us could imagine the changes yet to come in our lives. I think part of my desire to work for hospice came from the feelings of compassion his death brought into my life.

Grieving

Grieving is a normal human experience since all people are mortal and will experience loss; this will be discussed in greater detail in Chapter 11. Whether death occurs from an accident, lingering disease or old age, the end of life is inevitable. Coping with death is among the most difficult emotional problems people face in life. Some years ago, Kubler-Ross (1997) promoted a stage theory of grief from her experience with dying patients. Initially, when faced with a terminal diagnosis, the patient is in a stage of denial that is then followed by stages of anger, bargaining, depression and finally acceptance. However, today, researchers think that there are mainly individual patterns of grieving, where some people experience the Kubler-Ross stages sequentially, some dying patients are simultaneously in all stages and yet others experience variations of these reactions.

In response to the death of a loved one, some people feel intense grief over long periods of time, whereas others feel less distress. The intensity of grief depends largely on the relationship between the dead person and the survivor. Therefore, the level of grief can be thought of as an index of intimacy and satisfaction in the relationship and therefore the extent of the loss felt. Grief corresponds to the value of a relationship and that it was worth mourning. However, grief becomes morbid when it debilitates individual functioning and prevents normal activities over an extended period of time. It is perhaps time to seek professional help if the mourner thinks obsessively about the dead person and cannot function normally in family or society.

It is normal when grieving to have feelings of regret and depression. Feelings of regret may arise over what was not said, and in particular, the failure to express and communicate loving feelings. Feelings of guilt may also be felt during the mourning period over what could and should have been done differently in the relationship. The best response to guilt is to learn from the experience what is useful to improve other relationships. It is clear that some feelings of sadness never go away, especially when the loss is a person who was loved deeply.

Healthy approaches to loss

It is not a weakness to seek support during the grieving process. Given time and resolution, those who have experienced grief can often become better people and increase their empathy for the sufferings of others. Perhaps the

most important lesson that life offers from inevitable grief is that death comes to all and it is best not to delay living. Whatever is important in life, to say or to do, we should act before it is too late. There are no guarantees to human existence, and no superstition can protect us from loss or offer protection from death. Nevertheless, the loss of loved ones can help us develop more empathy and connectedness to other people. The feelings of support for others often develop from the despair of mortality and the recognition that we all are in the same boat.

When trying to help others grieve, it is important to remember that each person's journey is different and one should not force personal mortality-related beliefs on others. Helping people on the grieving journey requires patience. In offering support, one should learn to be a good listener and find ways to convey empathy with a person's loss. In time, some healing takes place for most people. However, professional help should be sought when the grief is prolonged over years and when it debilitates the person to a point where it is not possible to function in a normal way. Sometimes, group therapy can be very helpful where survivors of grief can come together for mutual support.

Love

People are often attracted to others because of important similarities. However, liking someone is different from loving a person. Love involves the desire to be close to someone and often includes feelings of dependency, selflessness and a desire for the relationship to be exclusive. Romantic love is characterized by infatuation along with strong feelings of sexuality. This is especially true in the early phases of a relationship when sexual desire is the strongest component. At that stage, relationships are often insecure, producing feelings of depression along with other complex emotions including joy, jealousy, fear and anger. However, passionate love over time eventually gives way to companionate love when the dominant feelings are a strong desire to be near another person, and it is characterized by persuasive feelings of care and concern. Over time, sexual attraction between partners wanes somewhat, and along with that also the mixed emotions. Companionate love occurs when partners feel secure in a caring relationship. Consummate love includes all three dimensions of love: intimacy, passion, but also commitment. Intimacy is based on feelings of warmth and closeness and a commitment that the relationship will endure despite all the obstacles of life (Hendrick & Hendrick, 2004; Sternberg, 1988).

Most people cherish love for the comfort and support that it brings. Affectionate love is important to human health and adjustment. It may therefore seem strange to place it among the problem emotions. Nevertheless, love can also have a dark side. Some of the darker issues in love relationships derive from gender differences between men and women. Men, at least initially, think of love more in terms of passion, whereas women include a strong component of friendship and affection. Communication about love and feelings of affection also differ between the genders with women being more affectionate. It

is a common complaint of wives that men don't care about their feelings and such statements often bewilder men. As passion subsides over time, women will look more closely at the communication of feelings and what is missing in emotional warmth in the relationship.

Some relationships become destructive when obsession replaces love. Being obsessed with another person who does not know how to reciprocate creates a situation that can lead to depression and impact other areas of life, including work. Incongruent cross-gender communications also typically suffer from sexual dysfunction and frustration. At times, gender maladaptation grows out of male needs to dominate. The dark side of love can bring on mutual stress and mental anguish requiring substantial counseling or an end to the relationship (Cupach & Spitzberg, 2004).

Both men and women are subject to jealousy; however, insecure people with low self-esteem are more likely to experience these dark feelings. Increasing a partner's confidence and self-esteem makes the relationship less vulnerable to the dark thoughts associated with the suspicion that a partner is not faithful to promises made. Many attitudes toward love grow out of early relationships in the family where children learn that love is associated with consequences. Children who see parents express warmth emotionally and hug their children frequently are likely to associate physical closeness with love. In the same way, physical abuse can also be associated with love, since the child may come to think that aggression is part of a loving relationship. In turn, such attachment attitudes can be transferred into adult relationships when men, for example, think it is normal to be physically abusive to their wives. If parents displayed rewarding warmth only when children comply with their wishes, the child can also come to believe that love is best understood as a form of compliance to the wishes of others. When compliance is confused for love, the result is a disregard of one's own needs that nevertheless causes anger and frustration. Research supports an interesting gender difference in jealousy, as men are more obsessed by the partner's potential sexual infidelity, whereas women are more concerned with their partner's emotional fidelity (Buss, 2004).

Love and well-being of partner

Authentic love leads men and women to support their partners in ways that further growth and fulfillment in the relationship. Caring about the person's well-being is the essential meaning of love. People who find themselves in an unrewarding situation on the dark side of love need to initiate change in the relationship or consider living life without the partner or spouse. A circle of close friends can help evaluate the destructive nature of the relationship. Each person has an inherent need to develop a sense of identity and independence. In the ideal relationship, each partner would support the other's quest for identity and self-esteem. Domestic violence is too often a part of the life of dysfunctional couples in all societies. The growth of women's shelters and laws to prosecute violent partners demonstrates the ubiquity of the problem.

Many women accept domestic violence as a normal form of male behavior and believe men are unable to control their aggression. Others in society seek to justify male violence by suggesting that women provoke aggressive behavior and are therefore the responsible party. Male violence is associated with increased alcohol and drug use that lower impulse control in the abuser. However, violence between partners is a learned behavior and therefore can and must be unlearned.

Men use violence to reinforce their dominance and women's submissiveness creating dysfunctional relationships and families. Are women masochistic if they stay in such terrible relationships? No, it is far more likely that women see the alternative of leaving as a worse outcome, both for reasons of psychological dependence and for making an already difficult situation worse for their children. Some women rightly fear more male violence or being killed if they leave. However, the only solution at that point is to involve law enforcement and encourage a physical distance between the victim and perpetrator.

In a healthy relationship, partners learn to express feelings. Telling the partner sincere feelings of affection is rewarding and brings happiness. Since all couples are individuals with contrasting perspectives, successful relationships are also built on tolerance. It is not necessary to agree on everything in order to love another. People who demand agreement and dominance are on the road of relationship maladaptation. Relationships can bring many challenges, and there is always the possibility of being hurt by a partner. But as a Greek philosopher said, "risk not, want a lot" (Loseke, Gelles & Cavanaugh, 2004).

Being alone or loneliness

The desire for love and closeness to another human being is a feeling that is ubiquitous in the world. When the basic human desire for intimacy is not met, people feel lonely. While all people experience loneliness at times, not being part of an intimate relationship for extended periods can have serious health consequences. Chronic loneliness produces mental and physical health problems and can lead to an untimely death (Valeri, 2003). While modern individualistic societies emphasize personal achievement and self-fulfillment, the collateral damage is a decline in stable relationships and an increase in divorce. The ideology that stresses self-fulfillment often results in relationships taking second place in time and devotion. The outcome of the focus on the self at the expense of family and relationships is increased loneliness in nearly all cultures affected by modernization. Married couples are not surprisingly found to be less lonely when compared to singles in studies of twenty countries (Perlman & Peplau, 1998). Since society encourages men to take the initiative in relationships, men often blame themselves for loneliness. Men propose and women dispose, so women blame other factors, such as men not making contact with them, for the loneliness they experience, since they are socialized to wait and respond to male interest.

Over the past few decades, many societies have experienced great disruptions and change. It is today common to move away from familiar locations that provided security during early life, into cities or places where there is little social support. Even college students moving away from the familiar community may experience loneliness after the transition. A profound cause of loneliness is the ubiquitous use of technology. In the past, personal interaction was the norm in all societies. Today, modern technology gets in the way of making personal contacts, since many hours are spent in front of the television with imaginary personalities and situations or on smartphones. The internet may also be a cause of increased loneliness because family members spend less time together communicating and more time in the cyberworld. That is not to say that the internet cannot promote intimacy. If used the right way, it can help a person find intimate and satisfying relationships. However, unfortunately for many people, the internet is a means of escape from serious human encounters (Wood & Smith, 2005).

Some loneliness comes from not knowing how to approach, interact and respond to other people. If a person suffers from moodiness or has a negative or pessimistic outlook about life, other people can read these non-verbal signals that warn them to stay away from a potential negative emotional encounter. However, it is possible to act in more positive ways, even when people have suffered losses or are otherwise unhappy. Emotions often follow behavior, and when people act in consistent positive ways, personal feelings also become more positive. Having a positive outlook and extending support to others is an effective way to overcome isolation. People who make genuine positive comments about other people serve like a magnet of attraction.

When attending organizational meetings, participants encounter other people and can start making social contacts that may help the lonely break out from isolation. From contacts among the like-minded, it is possible to develop a more satisfying intimate relationship. A network of social contacts is needed to overcome social isolation, and intimate relationships are required to remove emotional loneliness. Lack of contacts in the past should not be a barrier in the present. It is possible to learn and practice social skills over time, like introductions, and polishing these skills is an important first step in overcoming loneliness.

How to develop emotional intelligence

Emotionality is hardwired in our genes, but the expressions of emotions are learned in the family and community. Children can be observed responding emotionally from the very beginning of life, displaying both distress and delight. Babies will express distress by crying when not given timely food or provided hygiene and signal pleasure by smiling at an adoring mother. However, eventually, babies must recognize the larger social world that surrounds them and gradually learn emotional responses including fear, love, frustration and anger.

It is very likely that gender differences, although hardwired to some degree, are also learned. For example, in all cultures, girls and women are more open and expressive in their feelings, and all societies think it alright that women cry, whereas if men cry, they are seen as weak. Men are more likely to mask their emotions from a desire to be seen as strong, whereas women are more likely to own up to feelings of vulnerability, including loneliness and sadness.

Culture affects the display of emotions (Larsen & Le Van, 2013). Although humans experience the same emotions everywhere throughout the world, cultures have varying display rules that define when and where emotions can be expressed. It is important to understand these display rules, as otherwise, miscommunications are the likely outcome. That is especially true today when so many people try to develop intimate relationships with partners from different cultures.

Some people prefer to deny their emotions either by means of repression or suppression. In repression, the self refuses to recognize certain emotions, thereby excluding from awareness painful or threatening thoughts and feelings. When people repress threatening emotions, these feelings are often manifested in other stressful outcomes like insomnia and other psychosomatic symptoms. There are, of course, times when it is better to suppress emotions than express negativity toward those who have power. However, the suppression of feelings over long time periods produces harmful emotional reactions that might eventually explode in the chronically over-controlled person (Duffy & Atwater, 2008).

Emotional intelligence is knowing how and when to express emotions

Knowing when and how to express emotions is an important first step in developing emotional intelligence. Emotional intelligence is distinct from intellect and cannot be predicted from either IQ scores or personality. It is, however, a powerful predictor of success in work performance and life outcomes (Bradberry, 2014). Emotional intelligence allows a person to size up a situation and quickly adapt as needed and can be learned over time. Learning to be aware of personal emotions requires that people listen to their own bodies since emotions, whether conscious or not, create changes in the autonomic nervous system and corresponding physiological responses. Many varied situations can create the same physiological responses so it is an important task to learn to attach the appropriate descriptive label to feelings in order to take some cognitive control.

There is a time and place for everything. For example, it is counterproductive to try to solve serious emotional issues late at night when all participants are tired. Children have few cognitive controls, but adults know that if they express emotions of distress loudly they are likely to be seen as unstable and emotionally unhealthy. Likewise, in a close friendship it is not healthy to vent anger, but rather, it is important to take time to carefully explain what is

annoying in the relationship. Before expressing negative emotions, it is possible to remove the sting if fondness for the friend is first expressed by words or by non-verbal gestures. Being emotionally mature means taking control of feelings in order to find the right way to express what is felt.

Display rules for emotions vary across cultures and families

Although the basic emotions are a common human genetic inheritance and experienced everywhere, different cultures have varying rules about how to express the emotions of happiness, sadness, surprise, anger, disgust and fear. Cultures and to some extent families determine when and where it is appropriate to express these emotions, and what intensity is appropriate for each situation. When traveling to different regions of the world, it is important to know the rules for displaying emotion, as otherwise communication problems might follow. For example, some research shows that Japanese suppress negative emotions in public. In other cultures (e.g. Russia), the people rarely smile in public. In Native American groups, the public display of many emotions, including positive affection, occurs much less frequently than in Anglo-American cultures (Ekman & Friesen, 1986; Larsen & Le Van, 2013).

Nevertheless, the expression of emotions has a significant impact on a sense of well-being. Many emotions are self-rewarding including feelings of love and good humor. People can truly experience life only when emotions are experienced and shared with others. The emotionally intelligent person will choose when, to whom and with what degree feelings should be expressed. An important goal of emotional expression is to promote well-being by finding the right balance. It is never healthy to bottle up feelings, but problems are also created if friends are offended. Expressing authentic feelings in appropriate ways can go a long way toward reducing stress in life so people feel better about themselves and others.

Emotional intelligence and adaptation: A new concept in psychology

Cognitive and emotional intelligence are different concepts. It is not uncommon to meet people who have high IQs, and yet have very little understanding of how to get along with others. The recent economic crisis saw many bright people lose all their assets or go to prison for lack of ethical behavior. Very bright people at times make terrible choices in their private lives and end up divorced and bitter. Being cognitively intelligent is a trait that is independent from the ability to understand and express appropriate emotions. Emotional intelligence is required for a successful personal life and for making an impact in the world. An emotionally intelligent person is able to monitor, express and also regulate their own emotions. Perhaps of even greater importance is that emotionally intelligent people are able to identify and understand the emotions

that occur in other people and can use that knowledge as a guide for their behavior (Goleman, 2006).

An important first step is to be able to accurately perceive and label the emotions they experience themselves and what they perceive in others. Emotions do not occur in a vacuum, but affect so many aspects of life. People need to know and understand how emotions affect thinking processes and shape decisions. Emotionally intelligent people can regulate their emotions to ensure that they don't miscommunicate. Obviously, it is desirable to have a balance in life between rational and emotional intelligence. However, it could be argued that emotional intelligence is at least of equal and perhaps of greater importance than rational intelligence.

Some gender research suggests that women possess a higher level of emotional intelligence. They are generally more likely to express positive emotions that are good for mental well-being. Women are also more willing than men to express feelings of vulnerability, whereas many men fear being vulnerable and often mask or repress their true feelings. Some research also finds that women are more empathetic than men and are more able to understand the feelings communicated by others. Miscommunication can often occur between the genders because of these gender-based emotional differences related to the greater emotional intelligence of females.

Positive psychology and emotional expression

The expressions and regulations of emotions are essential tools for adaptation and essential to a healthy and happy life. There are many positive outcomes when people learn to express feelings in thoughtful ways. The expression of feelings of affection can produce a sense of joy in a partner and promotes personal well-being. Of course, it is always somewhat risky to express feelings, since a person might be misunderstood. However, dealing openly and honestly with feelings contributes to higher self-esteem. The suppression and repression of emotions negatively impacts physiological well-being and contributes to stress and related diseases. Expressions of feelings lead to increased trust between people since vulnerability is disarming and improves relationships. The outcome of emotional candor is better and stronger relationships with those we care about. What about negative feelings? Here people should evaluate the right time and place. Emotionally intelligent people also acknowledge that people don't necessarily see the world the same way and we must be open to our own misperceptions. Since that is the case forgiveness often plays an important role in promoting one's own health and living with better relationships.

A final perspective on emotions and injustice: Forgive where it is possible

All human beings experience frustrations and at times psychological pain from relationships, particularly if it involves someone highly esteemed. It is not

easy to overcome resentful feelings as these typically arise from beliefs about chronic mistreatment. It is also not uncommon to wish for revenge or some equalizing events to redress the perceived injustice, since it is difficult to forgive and with painful memories resentment builds over time. It is a very large challenge in life to forgive those who have wronged us and many people carry a heavy luggage of resentment and bitterness throughout life. People often feel self-righteously that those who wronged them should be punished for their past behavior.

However, the resentment felt does not hurt the offending person. If resentment festers long enough, then no amount of pain inflicted on the other person will make the feelings go away. In families and other relationships, people are often prisoners of resentment. Forgiveness must be seen as an adaptive and healthy way of liberating ourselves from the resentment felt toward the past wrongs of others. The objective of forgiving another is to help ourselves and is not a free gift to those who behaved badly. Forgiveness is a process that people engage in for their own health and happiness, and in forgiveness, a person gets rid of the heavy luggage of resentment.

In Vietnam, many people suffered unjustly from a terrible war, and there is no simple solution to the aftermath of such grievous losses. Nevertheless, research shows that many physiological symptoms that are related to psychic pain are reduced or disappear when forgiveness becomes a genuine resolution of past hurts (Luskin, 2007).

Summary reflections

Emotional maturity and emotional intelligence are discussed in Chapter 2. Emotional expression can cause serious problems in a person's life. However, when regulated and accurately understood, emotions provide color and meaning to relationships. Emotions produce the immediate physiological reactions thought to be the underpinnings of the basic fight-or-flight response that is part of the human genetic code. Cognition is important in order to label emotions accurately since the same physiological reactions occur in response to many emotions. In a positive and adaptive way, emotions help guide people away from unpleasant events and find more pleasant interactions.

Some emotions are a source of trouble and difficulties in human life. Anxiety is useful when related to achievement for ambitious individuals who are thereby encouraged to make a greater effort. However, general anxiety is a diffused feeling or apprehension that something bad is about to occur and not related to a specific threat. For neurotic people, the apprehensions and threats are unrelated to any real threat and form a barrier to living a normal life. Unfortunately, in response to the uncertainty of life, neurotics think in catastrophic terms that the worst outcome is always the most likely.

Anger can be problematic when expressed inappropriately. People become angry when they are frustrated and believe that they are blocked from important goals. These common social frustrations are difficult to solve since it is not easy for the average person to assign responsibility for economic frustrations like unemployment and other social disasters. It is important to remember that when anger is strongly expressed, the emotion removes the possibility for a rational dialogue. Solutions to anger are found in changing the situation that produced the frustration.

Guilt is a heavy burden that many people carry throughout life. A person feels guilty when conscious of violating self-accepted codes of conduct. Such dark feelings are often not justified, since some people have impossibly high ethical standards. If people violate personal codes, an effort could be made to change the behavior responsible, and in some cases, make restitution. Grief is briefly discussed. From a positive perspective, grief reminds each person of the value of the relationship. The lesson taught by grief is never to delay living or saying what should be said.

Genuine love involves feelings of dependency, selflessness and the desire for an exclusive relationship. Initially love is experienced as an infatuation and sexual attraction. Companionate love follows later from a strong desire by the couple to be together and help each other. Consummate love is defined by emotional warmth, a desire for closeness and abiding commitment.

Love has a dark side principally derived from gender differences. Men tend to think of love in terms of passion, whereas for women friendship and affection rates higher. Love becomes destructive when it becomes obsessive and when men desire to dominate. Jealousy is a ubiquitous dark element in many relationships. Men worry about sexual infidelity of women and women worry about emotional infidelity in men. The main motivation for jealousy is the fear that the exclusive relationship will be, or is, lost.

The chapter notes the difference between being alone and loneliness. Being alone is healthy for many people as it provides time for thinking and personal growth. Loneliness results from the absence of a trusted partner and an intimate relationship and it can be disabling. The modern world has increased the focus on the self and on personal achievement, reducing the importance of relationships. However, the cyberworld is a poor substitute for genuine human contact.

The chapter concludes with a discussion of emotional intelligence, a relatively new concept in psychology. Repression of emotions has negative consequences to health. Conscious suppression can lead to over-control and an eventual explosion of anger. Emotional intelligence is an important adaptive tool that helps us understand when and how to regulate emotional expression. For example, finding the right place and time to express emotions is an important skill. It is well to keep in mind that cultures determine the appropriateness of emotional expressions and that varies widely between countries.

Understanding and regulating emotions are essential for well-being and a happy life. Emotionally intelligent people are able to understand the emotions of others and respond appropriately. Research supports the idea that women possess higher levels of emotional intelligence, probably because it helps their survival to be able to read the emotions of others. In resolving bad feelings and resentment, it is well to remember that forgiveness for the transgression and wrongdoings of others liberates the victim from resentment.

3 Communication

The key to effective living

Communication is central to all human life and interaction. It is impossible not to communicate as even silence is pregnant with meaning. Interpersonal communication is essentially transactional and complex. An effective communicator possesses both listening and speaking skills and understands the difference between being assertive and being aggressive. Self-disclosure and the self-concept establish the parameters of communication in relationships. In the new, computer-driven world, another important issue is how the absence of face-to-face encounters affects communication and creates misunderstandings. The chapter will discuss the barriers to effective communication and how people might overcome these by empathetic listening.

Non-verbal communication is powerful and can send signals very different from what we say. Facial expressions, vocal intonation, bodily gestures, touching, the clothing people wear and even silence may reinforce or contradict the verbal message. In all communication, gender matters and men and women often have different objectives when communicating. Likewise, the role of culture in communication must be understood as the understanding of bodily gestures is not universal and some expressions that are common in one culture may have a different meaning in another, which can cause conflict. As we can see, there are many barriers to effective communication. However, understanding these obstacles makes it more likely that people will understand each other and will contribute to more happy and complete relationships.

Communication is the basis of all relationships. It is the means by which people convey feelings, beliefs and ideas to other people. Communication is the most decisive factor in whether a person will live a life of happy fulfillment or will engage in perpetual conflict and misunderstandings. Humans cannot survive, much less prosper, in any society unless they learn to communicate effectively. Communication skills determine the quality of relationships and they are the means by which they are established in the first place. Whether relationships become satisfying and are maintained over the long run is determined by the skills and understandings established through communication. Intimacy and love are dependent on effective communication and the clear and unambiguous messages sent and understood by both parties.

Many problems that occur between people result from misunderstandings and failures in communication. At times, people get frustrated and may say with anger that "we just can't communicate". One reason is that people have mental sets that determine the meaning of messages and the recipient may hear something different from what was intended by the sender. Yet communication is central to everything people do, and it is essential to adapt to changing circumstances. For example, it is not possible to get a job unless a person knows how to communicate interest and aptitudes. Likewise, relationships are found, developed and maintained by communication. It is through the sharing of information that people gradually come to know one another. It is also by means of communication that a person can share feelings with another and form a lasting bond.

Communication is a very complex topic that includes both verbal and nonverbal messages. However, talking to another person is not done in isolation from many other relevant contextual and psychological factors. All people possess mental filters, including attitudes and beliefs that create selective sensitivity to certain information that can easily produce misunderstandings. The environment in which communication takes place may also influence and diminish understanding. In addition, habitual ways of thinking formed by cultural exposure may influence the understanding of a message. Likewise membership in an ethnic group produces special meanings in language because of a shared history that is not fully understood in other groups. Gender identity is another source of miscommunication derived from different socialization practices experienced by girls and boys. Gender identity produces different cultural exposures and values that lead to varying interests, motivations and meanings. The mutual understanding of gender-based differences determine, to some degree, satisfaction in relationships.

Communication is a two-way process whereby we clarify over time the meaning and intent of the message. Most people modify what they say and do depending on status factors, including age and gender and culture. The reason we accommodate others is the hope for better outcomes from communication, although enhancement efforts may be at low levels of consciousness. Therefore, different outcomes and the significance of these results vary depending whether the communicator is texting the boss or trying to influence a grandchild. In short, communicators adjust gestures and speech to either emphasize or minimize the differences between themselves and the target for the communication. Such accommodation occurs at both the intergroup level and also at the level of interpersonal communication. Communicators use two processes to minimize or accentuate social difference. Convergence happens when individuals adapt to the other's communicative behavior. On the other hand, in divergence the communicator wishes to accentuate differences in speech or non-verbally. Communication accommodation theory explains significant differences and other barriers in communication (Giles, 2016).

Relationships are fostered over the long run by effective mutual understanding, and unfortunately destructive communication can bring a relationship to

a premature end. We all need to send unambiguous messages and be heard on important matters. Without such transactions of give and take, couples can at best develop flawed relations. Is it easy to communicate? In a circle of friends or family who easily forgive misunderstandings, a high skill level is less needed. However, communication is not easy in other relationships because there are so many ways to miscommunicate. For example, there may be differences between what a person means and what is communicated. People catch themselves saying "that did not come out the way I meant". The other person responds to what is heard, which may not at all be what was intended. Over time, memory is also a factor. For example, only 20% of people in one study remembered what they heard and 30% remembered what they saw. However, after a week, 96% of the respondents had forgotten all about the communication (Vandeveer & Menefee, 2006). These facts, among others, make it likely that the other person will respond to a totally different narrative from what was intended. When people don't respond to the intentions of communications, it causes bewilderment and is upsetting to the sender. That scenario suggests the perpetual need to check and recheck the intent of any messages so the receiver hears the communication the way the sender intended (Johnson, 1993).

The communication process

What are the components of the communication process? The basic model presented here involves a sender of a message, the actual message sent and the intended receiver. However, there are other significant components that may distract or obstruct the message and make it difficult for the receiver to understand. For example, what is the method of communication? Is the communication by speech, the written word or by non-verbal signals? Ambiguity enters when we say one thing but signal the opposite or something different non-verbally. Confusion about what is meant occurs, for example, when a person conveys hearty greetings and warm feelings verbally, but with a raised eyebrow or when at the same time maintaining a large physical distance.

The process of constructing the message is called encoding. Decoding is the recipient's understanding of the message. Clear communication is difficult because there are many factors that potentially interfere with both encoding and decoding. Noise is the general term that describes factors that interfere with communication. Real noise like that experienced in an airport often makes it impossible to hear vital information about departures and arrivals. The inability to physically hear and the progressive deafness that comes with aging create challenges in receiving messages for older people. Furthermore, as noted, non-verbal signals are also important to the understanding of messages. However, as people get older, they experience progressively poorer vision that interferes with the ability to read non-verbal signals. Psychological factors may also block the receipt of messages. A very defensive person may see constructive comments aimed at improving performance as a threat and not hear the intended message.

The nature of the relationship is a key factor that may distort the intended message. There are status implications in communication; for example, a student will take evaluative comments coming from a teacher more seriously than critical comments coming from fellow students. People don't like orders or messages that convey what we ought to do from like-ranked peers, but will often listen if the same message is communicated by a parent or teacher. Communications are an ongoing transactional process between the sender and listener, where in the search for mutual understanding, the receiver gives feedback and the sender repeatedly clarifies so the receiver might receive the massage the way it was intended. It is not possible to have effective communication unless both parties practice this process in the spirit of understanding and cooperation (Hamilton, 2010).

To communicate effectively requires that the recipient listen for the understanding and intent of the message and remain open and vigilant to both verbal and non-verbal signals. The transactional nature of communication refers to the process of feedback by both sender and receiver. Words that have been misunderstood initially can be corrected if the receiver rephrases what was heard. Feedback to participants about what is heard and sent is the means by which misunderstandings can over time be reduced. In the transactional process, clarification continues over time in a context of both verbal and non-verbal responses. What is communicated is partly determined by the relationship and the socio-cultural context. However, personality traits like cognitive complexity and dogmatism also play a role in judging communications (Larsen, 1971). In other cases, the situational context is more important than personality (Larsen, 1972). Different ethnic groups have varying rules for communication that can lead to inaccurate perceptions and miscommunication by members of other groups.

An additional contextual factor is the varying level of skill between the sender and receiver. When more abstract words are employed, there are also more chances for miscommunication. Further, the communicators may possess very different skill levels in speaking, listening and understanding. It is good advice when initially speaking to another person to not use abstractions that are difficult to understand. Further, a good communicator is aware and creates symmetry between verbal communications and non-verbal expressions. For example, looking away (non-verbal signal) while speaking to someone might indicate insincerity and a lack of interest in some cultures.

It is also important to remember that listening is a salient dimension in interpersonal communication, and as such being hearing impaired can lead to misunderstandings. However, another barrier to clear communication are problems in the psychological process of listening that involve both interpretation and understanding of the message. For example, the same exact words said with different intonation can produce very different meanings.

Since good communication is a transactional process, it is important that no participant is allowed to dominate to the point that the conversation becomes one-sided. People need to cultivate better listening habits and learn to listen

more and talk less when trying to understand a message. Reflective listening is a method that promotes understanding by which the listener restates what was said by the other party. To produce the best understanding listening requires an open mind and a willingness to empathize with the other person. It is of value to paraphrase the essence of conversations to clarify what has been stated and understood. By paraphrasing the conversation, people can better understand the main ideas and feelings being communicated and it also gives the participants an opportunity to clarify and overcome miscommunications.

Barriers to communication include common stereotyping of gender, ideas or culture. Often feelings and emotions are not clear, even to the speaker, and they are not understood when people listen only to the words. Being self-centered is also a barrier to effective communication, since such individuals will not seek clarification but come to snap judgments. Differential status in power may intimidate a person of lower status and prevent honest talk. Clear communication reduces the confusion produced by incongruent verbal and non-verbal messages. A word to live by is "always say what you mean and mean what you say", both verbally and non-verbally.

Verbal communication

Spoken and written languages are the dominant means of communication in human culture. In a business organization, language can convey strategy and emphasize the culture of the organization. However, the way words are used may carry different meanings. When conversing with other people, it is important to understand that the same word or words can convey different meanings. If someone says, "I like movies a lot", what does "a lot" mean? For some people, going to the movies once a month is "liking" movies a lot, whereas to others, liking a lot means attending shows several times a week. The meaning of words resides in the receiver and is dependent on his or her history and grasp of verbal language. It is a common misunderstanding to believe that the sender's message has the same meaning for the receiver as intended. Misunderstandings are a problem in all verbal communications.

Although words have supposedly objective denotative meanings that can be found in a dictionary, the subjective connotative meaning of language is what counts in communication. The word love, for example, does not mean the same to all people. For some, it means the willingness to be unselfish and sacrifice time and effort in the relationship. For others, it may refer to obsessive attention to the partner. Death does not mean the same to all people. To some people, death means lights out and the end of all personal existence. For others, it means reincarnation in some other form of life, and yet other believers think that death is waiting in purgatory until the end times. The perspective a person takes and communicates on any subject may be very different from the viewpoint of the receiver. The more complex the topic being discussed, the more likely it is for a misunderstanding to occur. To convey a message the way it was intended requires knowledge of the other person and the ability to speak

in concrete ways rather than abstractions. Since people also communicate non-verbally, it is important to pay attention to symmetry, that is, how consistent the message is signaled by both types of language.

Emotion can affect the meaning of words. The speaker and the listener are not always at the same mood or emotional level. The person who is happy may hear something different compared to what a chronically depressed person hears in the same message. Emotions bring color into our lives, but when elevated can also create misunderstandings. It takes a mature person to listen for the intent of a message and not be distracted by emotion. When the other person is emotionally charged, it is wise to choose words more carefully in response. Some people are emotionally insecure and have a low self-concept. Having a negative self-concept may twist both the speaking and listening parts of communication and cause misunderstandings. Effective communication requires good speaking skills by the sender, but also listening skills by the recipient. To communicate effectively, speakers should be in tune with their word selection and also with their body language. Understanding is facilitated if the verbal and non-verbal messages are consistent and convey the same message.

Do you hear what I say?

Listening is the most important channel of communication. Research shows that we spend half of our time listening compared to about 20% talking. But are we hearing what the other person is saying? All people have cognitive filters that selectively block or admit communications. Depending on life experiences, many people also possess cultural and gender filters that facilitate prejudging and effectively tune out the meaning of parts of the communication. Yet other people have been traumatized in life and these experiences add more filters that make it difficult to hear and understand the intent of related messages. For example, a message conveyed with good intent might be perceived as hurtful by people who have experienced past rejection.

A good listener will not give unsolicited advice or try to explain what the other person is feeling. Empathetic listening requires us to listen completely even if the message is bizarre or irrational. It is important to have good listening skills, which is a learned trait based on life experiences. Good listening is a process of interpreting and understanding what is said. People who have lived narrow or dogmatic lives lack the basis for empathetic listening and are likely to misunderstand what another person is saying. To be a good listener requires a willingness to integrate all aspects of communication in the search for meaning and understanding (Janusik & Wolvia, 2006).

Some research suggests that many people just pretend to listen or hear only selective parts of a communication. Unconscious defense mechanisms filter out many aspects of a message so people hear only that which is consistent with what they already believe and value. To really listen to others requires energy and interest. It is not surprising that most of us are not good listeners,

since the vast amount of oral communications are both misunderstood and quickly forgotten. Yet the quality of relationships and total functioning in life, whether in the family or at work, depends on the ability to listen with empathy to others in order to really understand what is said (O'Neill & Chapman, 2008).

Transactional obstacles to effective communication

In addition to the factors discussed above there are also specific transactional obstacles that prevent meaningful communication. Criticizing, although the intent may be good, is often interpreted as devaluing the other person's ideas and values. When verbally disapproving of someone, it is not likely they will hear or understand what is said because they will be too busy arousing their ego defenses and rationalizing their conduct. Constructive criticism should only be offered within a relationship when each person is reassured of the good will and love of the other and within a relationship where each person is valued and respected. Constant fault finding strangles a relationship and is a communication barrier not easily overcome. Stereotyping behavior likewise raises defenses and ensures that no meaningful communication occurs. For example, children who fight often use negative labels, such as calling siblings immature or dumb. All negative labeling ensures that no transactional communication will take place.

Judgmental talk often leads to attempts to take command of the transactional conversation by ordering or threatening the other person. In conflict, one-sided solutions are promoted that allow for no compromise or a way out. A parent may order the child to do the assigned household chores or face punishment. The authoritarian boss may use similar language at work, allowing no room to discuss employee issues or evaluate proposed solutions. Judgmental people who don't want to hear the concern of others divert attention to other subjects, or some devalue the other person's analysis by saying they have not considered all the facts. People at times take on the armor of morality and tell the receiver the "right" thing to do, but telling another what is "right" supports one-sided communication that likely will be rejected by the listener. The communicator may believe strongly in the argument offered, but he or she has a desire to win by beating the receiver down with logic. In that case, communication becomes simply a mental contest with a winner and loser or endless arguments.

Barriers to effective communication can also be a consequence of personality traits, beliefs and attitudes, although the contextual situation is often more powerful. Some communicators are more likely to stereotype others and fail to treat and understand people as individuals. People who have found solutions to life by adopting dogmatic filters may not listen or be aware of communications that run contrary to their closed minds. Emotions as noted can also be a barrier, since if something is felt deeply or is threatening the feelings can distort what is said and heard (Larsen, Coleman, Forbes & Johnson, 1972).

Technology can be an obstacle to understanding what is communicated

Recent decades have produced a sea of change in the expansion of technological communications. Many people in modern societies are obsessively texting and communicating to others without any face-to-face encounters. At the same time, research shows that a large part of the meaning of communications derives from non-verbal signals like body posture or facial expressions that accompany a message. People all over the world communicate by email, by instant message systems and by text messaging. A virtual world has been brought into existence by the use of computers and smartphones, and it has reduced other common means of communication from the past like phone calls and face-to-face meetings. Since body language cannot be observed in virtual encounters, the possibility of misunderstandings increases greatly, as computer-based communications are not always unambiguous (Hanna, Suggett & Radtke, 2013).

The virtual world requires carefully chosen words if a person wants to clearly convey their intent. The possibility for miscommunication increases by the addition of cultural or other background context that also influences meaning. In communication, it is important to take time to read and evaluate a message and look for words that have double or complex meanings. It is important to be very specific in email and chatrooms to avoid emotion-laden words that create barriers. The more concrete the word selection, the more likely it is that the meaning intended will be understood. Although abstract words must, of necessity, be part of business or scientific communication, the context must be carefully explained in order to reduce the possibility of misunderstandings.

The goal is to hear the other person

Words are not just words. If we want to understand other people, it is necessary to check and recheck what was heard and compare that to what we think was the intent. There are so many factors that influence understanding that people need to develop both good listening and speaking skills. It is important to remember that once emotions are engaged in a conversation intense feelings cloud judgment, and it is difficult to communicate clearly. Culture and gender also affect the meaning of words since the same words may not mean the same to all people.

Prejudice is a barrier that creates different meanings from precisely the same words depending on who is speaking. While there are many barriers to understanding, skills in listening empathetically can help reduce misunderstandings. Further, when communication becomes non-judgmental, it is possible to control the filters in our minds to some extent. Today, so much communication is done in the world of computers and smartphones that it erases the division between the real and the virtual. In that regard, people must keep in mind that

the verbal text message is only partial communication since the communicators have no direct non-verbal cues to help understand intent. If the communication is very important, it is best to create an amicable atmosphere and convey messages with controlled emotion and, where possible, in face-to-face encounters.

Self-disclosure and intimacy

The willingness to communicate deeper and more intimate aspects of people's thinking, beliefs and feelings is related to both gender and culture. In self-disclosure, an individual reveals to others who are trusted and loved what matters in life, and is generally information not shared with others. It is not possible to self-disclose all information that matters in life because people are unaware of some things that influence being and behavior. The Johari window, also discussed in Chapter 1, offers a categorization of the complexity of self-knowledge (Pearson, Nelson, Titsworth & Harter, 2003).

A quality relationship requires a willingness to share self-relevant and important personal information. Most people reveal little early in a relationship, but as times passes and trust is built people will share more of even painful events from the past. When starting a friendship or when meeting someone, it is useful to share low-risk self-disclosing information in order to spark an interest. Establishing deeper and more meaningful relations requires taking more risks and being more vulnerable. It is risky and requires trust to share personal information like hopes for the future or romantic feelings of love or deep-felt beliefs about truth. It is risky because early in a relationship it is difficult to judge character and some people we encounter may misuse the information.

Too many people carry personal scars from imagined moral transgression of personal codes or tragic loss. There is a human need to express and ventilate such feelings or risk damage to well-being and health. People with post-traumatic disorders have experienced terrible things that they bury deeply within themselves, creating a long-term break with adaptation. To disclose such painful information requires trust that can only be built in a mutual relationship gradually over time. Self-disclosure requires some judgment since providing too much information may overwhelm the listener and create barriers. The best way is to initially make moderate disclosures that reveal important things in the process of developing intimacy and deeper levels of communication.

Being aggressive or assertive

A singular barrier to effective communication is the difficulty many people have in understanding the difference between being aggressive and assertive. Some individuals are hostile and aggressive because of life experiences or personality. Hostile aggression is expressed by a condescending attitude and a lack of sensitivity toward others. Aggressive people try to enhance their self-concept

by displaying hostility and seeking to dominate others. Assertive people, on the other hand, want a dialogue when speaking up in their self-interest and standing up for what they consider legitimate rights. People who are assertive express their views openly and without a hidden agenda, but it is important to understand that they seek a direct and open discussion of legitimate rights that is not motivated by hostility (Larsen, 1971, 1977).

The aim of being assertive is to reach mutual understanding by sharing feelings, beliefs and concerns. If accepted, assertive communication can be a way forward in a relationship, establishing what is valuable for both parties and reflecting mutual concerns. Although times are changing, women have generally been socialized to be less assertive in their roles in the family and in other relationships. Gender-based socialization practices make it difficult for women to stand up for their legitimate rights. Non-assertiveness also creates a wedge of dishonesty between couples since the partner may never know the true feelings that motivate a woman's behavior. Today, in most societies, gender roles are changing and legislation broadly supports gender equality. In the process, men are also learning to be more assertive rather than following the past pattern of dominating others by aggression and hostility. However, events in the world show that we have a long ways to go before assertiveness replaces aggression in communication and behavior.

Gender and communication: Are we living in different worlds?

Are there significant differences in the ways men and women communicate? As noted above, women are shown to be less assertive in all societies where this issue has been studied. There is also evidence that the genders use different communication styles as if they belong to and are socialized in different cultures. Tannen (2001) suggests that men communicate primarily around symbols of status and power. In sports, for example, men's discussions about football teams are frequently about rankings and status. The language of men is often to challenge others and to seek status and dominance or convey information. Women, on the other hand, use language skills to develop intimacy with others and to promote the value of equality and closeness in a group.

These gender differences in communication styles largely determine how people communicate, whether within gender or between men and women. Gender differences in communication has led to some extreme views like Gray's book (1992), *Men Are from Mars, Women Are from Venus*. The author argues that the communication of men and women are so different that they might as well be from different planets. Although that emphatic view is not fully supported by research, there is evidence that women communicate more verbally (for example, in one study, they made 63% of phone calls) and stay on the phone longer when talking to other women. Men are more likely to interrupt a speaker and intervene with his own ideas, whereas women are more

polite in listening. Of course, that said, there is also great variability within each gender in communication behavior (Smoreda & Licoppe, 2000).

Tannen discusses the gender difference as being centered on "building rapport" and "report facts" talk. Frequent female complaints of male communication center on their perception that men don't listen to what they have to say. Such fractured communication is often a cause for divorce in modern Western societies. However, female frustration may not be the fault of the male partner, but rather can be considered a predictable outcome of gender differences in communication. Rapport talk is about establishing connections and facilitating relationships. Women seem to enjoy this type of communication more than men, and when men don't respond in the same way, it forms the basis for the "not listening" complaint. Men, on the other hand, enjoy more "report talk" in which they primarily share or provide information. Men will often joke with each other and learn that verbal communications is a way to gain attention and status. Nevertheless, communication is too complex and transactional to be described by a simple distinction and gender equality achievements may promote changes in communication strategies in the future (Edwards & Hamilton, 2004).

Walk across the bridge of trust and self-disclosure

How can we learn to communicate better and have more satisfying relationships? We know it is not easy to share information at deeper levels, but research shows that self-disclosure is the road toward mutual understanding and more satisfying relationships. The self-disclosure process calls for building trust over time as people expose themselves to the risk of possible rejection in the search for a more meaningful relationship. To communicate effectively, people also need to understand the difference between aggression and being assertive. Standing up for legitimate rights promotes honesty, and if done with care and concern for the other person can produce more mutual empathy. Being in a state of non-assertiveness creates barriers of dishonesty that affect all aspects of life.

Finding the right time to talk is essential when discussing legitimate concerns. It is important to remove emotion as much as possible from the discussion and talk as clearly and concretely as possible. Socialization influences and gender differences often prevent empathy in listening or speech. Gender roles, however, are changing toward better mutual understanding, but both genders need to recognize the socialized differences in preferred communication for rapport or for conveying information. Being supportive facilitates communication as misunderstandings or hurt feelings are minimized. The discussion of past problems tends to increase negative feelings but can be avoided in the search for understanding. Likewise, being judgmental implies a desire to dominate that can be controlled in empathetic conversation. The best outcomes of serious talk occur when both parties are clear that they want to improve the situation and move forward.

Non-verbal communication

Since the large majority of messages are conveyed non-verbally, it is important to understand the complex components of non-verbal signals in order to communicate effectively. Non-verbal communication can emphasize a verbal message, but when ambiguity is present, it can also contradict verbal speech through facial expressions or bodily gestures. Facial expressions can convey important attitudes, for example, showing disapproval and the intensity of dislike of the communicator and message. It is also possible to convey non-verbally a total lack of interest in what the other person is saying and boredom with speech or conversations. Even manipulative and cynical communicators find it difficult to control non-verbal expressions that are largely autonomic and spontaneous. It is a barrier to clear communication when people understand non-verbal signals in other people, but, at the same time, remain largely unaware of their own expressions (Ekman, 2007).

Non-verbal behaviors can be ambiguous and difficult to comprehend. What is the meaning of a smile, is it a form of condescension or an invitation to friendship? How is silence to be understood in the respondent? Is the other person contemplating the message, waiting for more information or silently disagreeing? It is rarely possible to understand non-verbal messages in isolation from other cues. Only when there is symmetry between verbal and non-verbal messages is the communication clear and the other person can fully understand the meaning of what is said.

However, the skilled communicator can detect deception. A person's true feelings are manifested through non-verbal signals. For example, people who lie speak at a higher pitch and take more time in planning their responses. Liars also give shorter responses that are more general and evasive or speak in ways that are non-committal. When a person is nervous he may say one thing, but reveal his agitation by a higher pitched voice and by blinking more than normal. People trying to hide something might also rub their hands or scratch their noses in an effort to control their true feelings. Typically, a number of non-verbal signals are conveyed together. For example, if a person is fearful the non-verbal responses might include a faster heartbeat, a drier mouth, muscle tension and increased sweating. However, many people don't understand the meaning of these signals since they focus attention on what is being said. It takes a person trained in lie detection to know when deception is part of communication.

It is important to remember that culture adds to the ambiguity of non-verbal expressions as these differ in various societies. For example, non-verbal agreement with a message is typically indicated by moving the head up and down in most countries, but in Bulgaria the opposite head gesture indicates agreement. Different uses of facial expressions, vocal intonation and bodily gestures require caution in interpretation. Empathetic listening and checking and rechecking the message is required in order to evaluate accuracy of comprehension. Differences between cultural groups affect understanding and add

complexity to the understanding of non-verbal communication, and in addition there are reliable differences within each cultural group. Gender, as noted, is an important determinant of non-verbal language. Being able to read the intentions of men, for example, and potential threats in non-verbal expressions has survival value for females. In fact, women have superior abilities in reading the emotions of others. Women also express more emotions than men in most societies, as they tend to smile more and, on occasion, cry with empathy. Women also vary from men by looking more at their partner, sitting more passively, generally having better posture and on the whole taking up less physical space (Algoe, Bushel & DeLameter, 2000; Hajek & Giles, 2003; Larsen & Le Van 2013).

Facial expressions and eye communication

In expressing emotions, facial expressions communicate more meaning than any other form of non-verbal communication. Facial expressions of emotions are genetically hardwired and people from all cultures can reliably identify the basic feelings of sadness, disgust, surprise, anger, fear or happiness (Blum, 1998). In some ways, facial expressions complement verbal language. However, in other situations when a person can't find the proper words to express emotions, the face and eyes tell what is being felt. The mouth is very expressive of feelings and may emphasize happiness (big smile) or anger (frown) and many other complex emotions.

Eye contact is sought in order to observe the reaction of the other person to verbal communication. However, there are cultural differences in eye contact. For example, European Americans consider the failure to make eye contact to indicate deception, rudeness and disrespect. At the same time, locking eyes between two men in Western countries can be for reasons of wanting to dominate, and it is often a precursor to violence. On the other hand, in other cultures like those of many Asian or Latin American countries, looking someone straight in the eyes conveys disrespect. What to do? When visiting a different culture, it is best to observe the old adage, "when in Rome do as the Romans".

The eyes have been called the windows into the soul, and people establish eye contact to establish the truth of what is being said. Eyes also signal invitations to pursue a relationship further, or conversely might indicate anger or rejection. Between two people who are intimate, mutual interest in each other is indicated by prolonged eye contact. Eyes also help keep the flow of conversation going by signaling the end of speech and turn-taking in the conversation. People often break eye contact with those they don't like or when they want to end any interaction in order to hide their feelings.

Vocal qualities may complement verbal communication and emphasize content by higher pitch, the rate of speech and fluency of expression. The same words in a sentence may convey varying meanings when different words in the sentence are emphasized. Different meanings are produced by emphasizing

each word in multiple ways. Again, there are cultural differences. For example, European Americans tend to be loud and hearty when greeting each other. On the other hand, Asian Americans are calmer and express their greetings quietly (Santrock, 2006).

Gestures

Gestures refer to the use of hands and arms to convey a message. People living in some cultures are known to "speak" with their hands, indicating their level of enthusiasm and involvement in the conversation. Italians are generally stereotyped as using gestures excessively. People can convey specific spatial messages with hands, for example, when we tell a child how much they are loved by spreading our arms widely. To emphasize anger, people may also shake their fists in the air or point an accusing finger at someone. A strong handshake may convey reassurance and personal strength or can be an attempt at intimidation in other cases. Native Americans view a firm handshake as hostile and disrespectful. The way a person stands may be an expression of self-confidence or may also express defeat and submission. However, gestures are closely dependent on culture, and it is easy to misunderstand and be misunderstood. Some finger gestures may mean OK in some cultures, but in others express sexual understandings. For example, the finger sign used to support the popular Texas football team, the Longhorns, may mean that a man's wife has been unfaithful in Italy. Needless to say, it is best not to respond to gestures or make any of your own until you know the cultural connotations.

Vignette: Some cultural non-verbal miscommunications

Many years ago, I found myself in Bulgaria befriending people that I would come to know over a large share of my adult life. It was a beautiful day when we sat at an outdoor restaurant on the Black Sea eating a big plate of small fish. The ambiance was wonderful; the sun was shining, a lot of laughter and some beer went down easily. Some of my friends understood a little English, others some German, so we got along famously for a while. However, during our conversation, I became aware of a vague feeling of ambivalence and contradiction in our communication. We all seemed to be in agreement, but whenever that happened, my Bulgarian friends moved their heads sideways as if in disagreement. That is how I learned that in Bulgaria the gestures for yes and no are opposite to those of the rest of the world.

I had learned in past travel that non-verbal communication can take you quite far when reaching for understanding. I remember having met people in different lands and coming to some understanding with gestures alone, for example, pointing to food in cafeterias. So, one early morning during my first stay in Bulgaria, I went to a restaurant in Sofia to get breakfast. I tried to make my waitress understand my desire by making "easy

to understand" motions with my fingers to my mouth and rubbing my stomach. How could you misunderstand that? So she brought me a fine menu, in Bulgarian. Well, I didn't understand a word in Bulgarian, but how wrong could you be? I was hungry and could eat almost anything. So I pointed at some item and the waitress understood immediately. A little while later she brought to my table a glass of strong Bulgarian firewater, which was both kind and encouraging but did little to serve my hunger.

Spatial communication

People communicate at different spatial distances. In turn, the space required by an individual in personal communication says something important about the relationship between the sender and receiver. The personal space required is closely linked to the nature of the relationship and to culture. People unconsciously and automatically determine their space requirements depending on the closeness of the relationship to the other person or audience. Hall (1969) defined four distinct zones that people apply in daily interactions. The intimate range is reserved for our closest relatives or loved ones and begins with skin contact to a range of about 18 inches. This distance includes love-making or intimate person to person conversations in public places. A friendly relationship is maintained at a physical distance of 18 inches to 4 feet. People converse with friends or strangers within that personal distance. Business-like or social situations require a distance from about 4 feet to 12 feet; for example, social distance would be employed in board meetings or other impersonal situations. Finally, when speaking formally to large groups, for example, at political meetings, communication is carried out in the public distance, from 12 feet to the large distances of stadiums.

These physical space requirements refer to North Americans only, and other cultures vary. The use of space can also provide information about a person's status and power. For example, people with higher status usually have larger offices and subordinates often stand at a respectful distance. However, again culture is a major determinant of space requirements. For example Northern European people require more space and stand farther apart than people from Latin American or Middle Eastern countries. It is important to remember that violation of a person' intimate or personal distance causes discomfort to the other person who may react by backing away and seeking to re-establish what is considered proper space.

The way we dress

The clothing worn also sends strong non-verbal messages about a person's place in social situations. Wealthy people recognize status clothing as signals of success. Expensive car models perform a similar function. Gang clothing indicates what neighborhood a member calls home, which is often supplemented by information provided by tattoos. Grooming combined with clothing provides

information about a person's place and status in society. Young people try to be accepted by peers by conforming to the latest fashion and fads. Signaling status by clothing can be ambiguous since there are rich people who wear ordinary clothing and live in modest houses. There are also "reverse" messages, as some jeans with lots of holes are supposed to confer status among young people, although that attraction is difficult to understand (Knapp & Hall, 2009).

Touch someone!

There are some occasions when people cannot successfully communicate feelings verbally. When someone is bereaved, comforting words are difficult to find and a comforting touch or hug can better express the desire to offer sympathy and support. Touch conveys support in many ways, for example, by holding hands or placing arms around another person and hugging. Touching can overcome many barriers and substitute for verbal messages when there is little one can say. Touching can be risky, since doing so invades the intimate space of another person and may be incongruent with the nature of the relationship. Most people feel a sense of disquiet if a stranger touches them. People tend to explore touching gradually to confirm the acceptance of the touch and the nature of the relationship. Touch can also express sexuality in a progressive way, starting with holding hands, then embracing, and with mutual acceptance then to be followed by kissing. These progressive steps assure each partner that both are at the same level and desire for touching. Touch can also communicate dominance. The casual touch of a boss or pat on the shoulder may indicate approval, but also who is the boss. In most societies, it is more permissible for higher status people to touch those below in the hierarchy. A doctor can touch a patient to convey support and reassurance, but a patient would not initiate that process.

Culture and gender create the limits and framework for touching. For example, there are strong taboos against strangers touching in Japan and other countries. Some studies have indicated more touching in informal cultures like the United States, whereas in Japan, it would violate personal space and be rejected. Women are more likely to touch others in non-sexual ways, for example, expressing feelings for babies and little children. At the same time, women are less threatening than men and are also more likely to be touched. In dating, touching can present a dicey situation fraught with potential rejection and also with the possibility of charges of sexual harassment. However, if sexual touching is progressive, starting with holding hands, there are opportunities for each partner to convey the desired level of intimacy (Santrock, 2006).

Silence speaks loudly

Silence can convey many psychological messages including contentment with a relationship. It can also convey negative emotional states such as anger,

shyness and a lack of desire to interact. As communicators, people have to try to understand the meaning of the non-verbal signal of silence. Some people are very uncomfortable with silence. Despite the common phrase that "silence is golden", there are people who are anxious to fill every moment when interacting with others and who treat silence as a threat. Some therapeutic training groups use silence as a means of discovering the salient issues that concern participants. Silence allows each person to contemplate what has been said and not to engage in meaningless banter or chatter. Silence, if thoughtful, can help people better understand what is being said, but if overdone may also create unintended threat and anxiety in the other person.

For optimal communication

It is important to remember that the non-verbal signals discussed above should be considered as clues in understanding communication and not as a factual based framework. However, words are not just words and may mean different things to others depending on culture, gender and status. Further, the intonation and pitch can change the meaning of the same words in a sentence. In summary, it is important to be cognizant of the whole verbal and non-verbal picture. Meaning is best conveyed when there is symmetry between verbal messages and non-verbal signals. Typically, people look to the non-verbal signs for confirmation of what is verbally said. For survival reasons, females are more sensitive and better at understanding non-verbal signals. People also need to be aware that non-verbal signals are not the same all over the world and it would be good advice to observe non-verbal communication in whatever society a person visits to learn the correct signals. Yet, it is a fine line to know the predominant communication style in a society without generalizing and stereotyping. Finally, people need to understand that although culture and gender influence communication styles there are also important individual differences within all groups.

Summary reflections

Communication is a highly evolved human trait. Chapter 3 discusses communication as a fundamental key to effective living and human happiness. Without communication, there would be no basis for relationships. Human beings can convey important psychological dimensions to others including feelings, beliefs and ideas and is the decisive determinant of human happiness. Problems in communication occur because of mental sets that produce different meanings in the sender and receiver. Further, the messages are obscured by mental filters in the receiver that permit only congruent information to be selected and where other information is discarded. Adaptation is best served when communication is a transactional process where both the sender and receiver search for mutual understanding by providing feedback and the sender clarifying intent.

In verbal communication, it is important to remember that the same words can carry different meanings to the sender and receiver depending on personal history, skill in language and mental sets. It is a common misunderstanding that the receiver hears a message as it was intended. Do people really hear what is being said in conversations? Listening with empathy is the most important factor in correctly understanding what is being said. Still, the large majority of oral communications are misunderstood and quickly forgotten. In the process of communication transactions, there are important pitfalls. Criticizing the other person is usually not helpful as it elicits ego defenses. Constructive criticism can be functional if provided within a relationship of goodwill, love and mutual respect.

One party taking control of the conversation is a barrier to clear communication whether done by ordering or threatening the other person or by showing an unwillingness to compromise. Some personality traits like dogmatism or fundamentalist beliefs are barriers to clear and honest communication and make it unlikely that the conversation is mutually understood and with the same meaning. Listening with more empathy and talking less helps to overcome transactional barriers. If a message is important, it is necessary to check and recheck in order to fully understand the intent of the message. Technology can be an obstacle since in text messaging it is not possible to observe body language for confirmation of intent and that deficit can result in ambiguity.

It is difficult to build a relationship through self-disclosure since there is much about the self that is unknown both to the self and to others. Nevertheless, communication is improved by assertiveness defined as making useful statements about legitimate rights and needs. Gender roles are changing and women as well as men are learning to be more assertive. Women desire rapport and communication that promotes closeness and equality, whereas men want to convey information and are sensitive to status and power.

Culture and gender frame non-verbal communication, and women have a superior ability to read the intent of others. Some emotional facial expressions are hardwired in the genetic code and can be identified in all cultures. Cultural factors are also important, for example, eye contact is not welcomed in all societies. Gestures and spatial requirements are also dependent on culture. Grooming and clothes communicate important messages about status and power. When communicating by touching another person, culture and gender are determining factors of the type of touch and of restrictions. When associated with status, touching also sends a message of dominance. Even silence can address either contentment or negative emotional states like anger.

4 Human sexuality

Sexuality is at the center of human life and evolution. Sexual behavior ensures the perpetuation of human existence on earth in all its complex forms. All psychological and physiological dimensions of life interact in human sexuality including biology, cognition and emotion. Society and culture also plays a large role in sexual behavior by establishing norms that govern sexual expression. Happy sexual relations are important for a full and complete life; however, people vary in sexual motivation and behavior. As in all other arenas of life, sexual adaptation is an important challenge throughout lifespan development. Since cognition is involved in human sexual expression, varieties of sexual behaviors have occurred throughout history. There are many ways that sexual expression enhances mutual enjoyment, but it can also result in ego-based behaviors that are harmful. Although biology plays a major role in human sexuality, there are also habitual ways of thinking and social norms that determine the acceptability of both heterosexuality and homosexuality.

The world has experienced a sea change in sexual norms that leave few restrictions on sexual behavior in the Western world. Today, premarital sex is largely accepted in all industrialized countries. New norms have also transformed attitudes toward homosexual and transsexual lifestyles. In the United States, society has experienced fundamental changes in the status of homosexuals to the point where demand for "equal rights" to marriage is accepted widely. These normative goals are often contrary to norms codified in legislation, but the judiciary has supported homosexual claims of equal rights on constitutional grounds.

The scientific study of sexuality commenced with the studies by Kinsey (Kinsey, Pomeroy & Martin, 1948) on the sexual practices of US men and women. These early studies surprised many by reporting large percentages of extramarital affairs, results that were later supported by other surveys sponsored by men's magazines. However, it is important to note that these early studies did not rely on representative samples and that only those men or women who were motivated to take part in the surveys were included. Since the studies were not based on scientific random samples, that fact has exaggerated the reported amount of extramarital activity. A representative sample study of 3,500 respondents in the age range from 18 to 50 produced more conservative results (Michael, Gagnon, Laumann & Kolata, 1994). In that study, nearly 75%

of married men and 85% of married women claimed that they had never had extramarital affairs.

Also, despite society being bombarded in the media by the "normality" of kinky sex, nearly everyone in the Michael *et al.* (1994) study preferred vaginal sex or watching their partners undress. On the other hand, a large amount of premarital sexual behavior was reported by Michael *et al.*, with more than 75% reporting sexual intercourse by the late teen years, starting at an average of 17.4 years for males and 16.9 years for females (Alan Guttmacher Institute, 2002). These relatively conservative results for the US population are curious considering the constant promotion of sexual activity in the movies, soap operas and advertisement. Sexual activity is trivialized in the media and at the same time little information is provided on safe sexual practices, even in the aftermath of the AIDS pandemic that is still killing victims worldwide.

The human sexual response pattern

Although sex is so central to the very existence of humanity, it is strange that little factual information about the biological and sexual response patterns was known until recently. Masters and Johnson (1966) were the first researchers to actively investigate sexuality by observing the responses of human volunteers in their laboratory. Hundreds of males and females agreed to have their behavior observed during heterosexual intercourse. From this research, Masters and Johnson found that the sexual response pattern followed four distinct phases of initial excitement, plateau, orgasm and resolution. In the excitement phase, the partners become responsive to sexual imagery and touching during foreplay. This intimate activity led to an increased blood flow to the genital areas that as sex play continued produced lubrication of the vagina and erection of the penis. In the plateau phase, the partners continued to experience more intense excitement characterized by increased breathing, blood pressure and pulse rate completing the male erection and vaginal lubrication. The third phase of orgasm varied somewhat between males and females.

Orgasm in males is expressed as an explosive discharge of the built-up neuromuscular tension followed by ejaculation of semen. Females experienced a similar orgasm as males, but their sexual reactions are more complex. On the one hand, females can experience pleasure without orgasm in some situations, and at another level of motivation females are capable of multiple orgasms. It is interesting to speculate that nature endowed women with a greater capacity to feel sexual pleasure as a compensation for the much larger burden of carrying and giving birth to children. Nevertheless, in both sexes, orgasm produces an intense pleasurable feeling. Following orgasm, resolution is the final phase of the sexual response pattern, during which blood vessels return to normal. Males typically have to wait for some time before taking part in sexual activity again, varying from a few minutes when young adults to several days as a man ages. Women, however, can with the right stimulation and situation experience orgasm again without any delay.

Sexual motivation

Sexual hormones play a role in human sexual behavior although not as controlling as observed in the animal world. For example, in many animal species, sexual behavior occurs at specified times related to hormonal release. There are two sex-related hormones in humans that predominate more in one sex than in the other. The so-called sex hormones really should be called human hormones of type A and B since they are found in both males and females. However, estrogens predominate in females and are produced by the ovaries, whereas androgens predominate in males and are produced by the testes. For human males, research shows that the level of sexual motivation and the frequency of the ability to experience orgasms are related to higher androgen levels. During puberty, androgen and specifically testosterone levels increase dramatically and are correlated with increased sexual interests manifested in sexual thoughts and fantasies. The higher the blood level of testosterone, the more the male adolescent engages in sexual thoughts and activities, including masturbation. As the male grows older, the testosterone level begins to decrease along with a decline of sexual interests (Susman & Rogol, 2004).

Since cognitive and socio-cultural factors also play important roles in human sexual motivations, sexual behavior cannot be solely predicted from hormonal levels or biological platforms. For females, the ovaries begin periodically to produce estrogen during puberty, varying with the monthly cycle. It is not surprising that the largest amount of estrogen is released when the female is ovulating and releasing an egg for possible fertilization about midway in the menstrual cycle. This is the time that a woman is most likely to become pregnant. Nevertheless, a female may have sexual interests throughout the cycle. However, female motivation is not unrelated to hormone level. We know that postmenopausal women who take estrogen supplements report increased sexual activity and pleasure (Kelly, 2004).

Human senses are important modifiers of sexual motivation. That is common sense and easy to observe, considering the many perfumes and scented soaps available on the market. Touch seems particularly important to female arousal, whereas men are more initially aroused by visual stimuli. That particular sexual difference is also easy to observe, considering the number of men's magazines and other sexually explicit material primarily consumed by men. These are not absolute gender differences, as some types of visual stimuli also appeal to females. For example, there is pornographic material produced these days that is primarily directed toward female audiences. In general, however, women are more likely to be aroused sexually by tender and loving touches combined with verbal expressions of fondness and love. Women are also slower in sexual arousal, whereas men respond quickly to sexual stimuli.

Having acknowledged the importance of the senses in human sexual stimulation, sex-related thoughts and fantasies probably remain the major source of motivation. Men and women both become aroused by sexual thoughts and fantasies. Regardless of the biological contribution to sexual motivation, the

strongest source of sexual motivation is the human mind and thoughts. It is thinking processes that determine the appropriateness of the time to engage in sexual activities and with whom (Hyde & DeLamater, 2003).

Varying motivation in males and females?

Sexual activity is not viewed the same way by the two genders. In general, females tend to view sex as an expression of love and affection. If females engage in sex, they often justify participation for reasons of love. In many countries, these varying expectations are linked to the double standards that considers sexual activity for men to be acceptable, whereas women are required to guard their virtue. Women tend to have intercourse with men that they love and would eventually like to marry. Men, on the other hand, are readier to separate sexual activity from love, viewing it more hedonistically as conquest or enjoyment. The focus on sex as an act separate and independent from love and affection can lead men to be indifferent to their partner's feelings, leading to disappointment in women. Many men view sex as a form of conquest, and in peer groups status is assigned to the males who have the largest number of partners.

Men on the whole tend to be more sexually motivated than women. Their fantasies are less constrained by consideration of the partner and they focus more on their own pleasure. Men have more permissive attitudes about premarital sex, at least partially determined by the different role of the two genders in reproduction and the traditionally greater burden by women in giving birth and raising children. Men think about sex more often either daily or several times a day whereas women think about sex perhaps a few times a week. For women, the best situation for enjoyable sex is a committed relationship with a potential lifelong partner (Peplau, 2003).

Problems when communicating about sex: Mixed messages and myths

Sexual incompatibility is largely a problem of communication. However, many intimate issues occur because of the unwillingness of one or both partners to talk openly about desires and needs. However, couples who know how to communicate about sex often avoid many of the issues that cause sexual dissatisfaction. As noted in Chapter 3, it is important to remember that people communicate both verbally and non-verbally. Mixed messages cause ambivalence. For example, it is possible to say something positive to a sexual partner while the non-verbal message reveals other more conflicted feelings. Such mixed messages create serious problems in communication whether the subject is about sex or some other interpersonal issue. How much a couple is in tune with one another can be observed by their body posture. Couples who are happy and satisfied with their relationship tend to display relaxed body posture when communicating with each other (Harvey, Wenzel & Sprecher, 2004; Hyde & DeLamater, 2003).

Communicating about sex is taboo in many cultures. In the United States, the puritanical history has left a trace in the culture that makes it difficult for many couples to speak openly about their desires and needs. In turn, in the absence of real communication, many people accept common but false myths about sexuality. It is possible to criticize the partner's sexual performance if done in loving and constructive ways, and as long as emotions are not inflamed, with the focus on improvement in the relationship. However, sexual communication can easily be misunderstood because it is such a difficult subject for many people. That is especially true if mixed verbal and non-verbal messages are exchanged. For example, men are sometimes confused when a woman says no to a sexual encounter when the non-verbal posture invites exploration. In the final analysis, partners should remove myths about gender differences in sexual behavior. For example, it is a myth that women are not interested in sexual pleasure. Both genders have very similar desires for sexual satisfaction, but both may also experience dysfunctions that interfere with an optimal sexual relationship.

The impact of social and cultural norms

Western society has experienced a large change in sexual attitudes and behavior in the last few decades. As Western media and movies are ubiquitous in the entire world, there are few societies insulated from these changes. Western society is not only more permissive in heterosexual behavior compared to past societies, but it has granted extraordinary tolerance to sexual minorities. Existing traditional societies still value female virtue; however, judging from the number of children born outside of marriage, women in Western countries have largely abandoned these standards. It is entirely normal now for women to live with men outside marriage and have several children in what appears to be trial "marriages" before formalizing any union. One consequence is a great deal of confusion for children in serial monogamous relationships when the partners split up, which can occur often.

There is, however, great variability in sexual repression between cultures depending on religiosity and norms. Some cultures discourage sexual activity, whereas others encourage the active training of boys to learn sexual behavior from experienced women. How people should behave sexually is stereotyped in some cultures with norms that vary, from forbidding any sex outside marriage in traditional societies to promoting sex as natural behavior in others to the more romantic outlook that encourages sex with someone loved, whether married or not (Emmers-Sommer & Allen, 2005; Larsen & Le Van, 2013).

Varying sexual understandings

The past few decades have not only witnessed a transformation in heterosexual behavior and practices, but also a renewed interest in a variety of other sexual understandings. Evaluating when research validly reflects the conditions and

preferences of sexual minorities is especially difficult because demand for social acceptance makes the issue sensitive and confounded by ideology, emotions and values. The struggle for gay rights is today seen by many as part of the larger demand for civil rights by racial minorities. For that reason, research – what to study and how – is confounded by political motives and the results reported in the literature must be taken with the proverbial "grain of salt". It is practically impossible to evaluate what has become an alphabet soup of acronyms on gender and sexuality summarized as LGBTQQIAP+2S's, and even that is not all-inclusive (Wu, 2016). The more common LGBT acronym stands for lesbian, gay, bisexual and transgender and has been in use for some time. The other acronyms are relatively new and reflect demands for validation of other sex and gender-related experiences. Q has been added to designate those who are questioning their identity reflecting the fluidity of some sexual identities and the second Q stands for queer. I is for intersex, representing individuals possessing the genitals of both sexes and who have salient chromosomal differences. P describes persons who see themselves as pansexual or, in other words, who refuse to be pinned down on the Kinsey scale of sexuality. 2S stands for "Two spirit" or the belief in some First Nations tribes that sexual minorities have both a female and male spirit. Finally, A is for asexual, people who do not identify with any orientation. Although alphabetic designation might convey respect and importance they are not of great help, except in dedicated research textbooks on sexuality. One of many complexities involves those who do not feel they are exclusively male or female and feel a bisexual identification. To increase the complexity, we also need to remember that transgender identity is separate and independent of sexual orientation. Representing this complexity, we have chosen to evaluate the meanings associated with transgender identification and homosexuality.

Transgender identity

Gender, in contrast with the term sex, refers to the roles and behaviors that a given society or culture considers appropriate for each sex. While we all inherit similar biological platforms, gender identity may vary somewhat between cultures. In other words, heterosexual gender is a socially conditioned construct requiring socialization in societies, which varies in expectations of male and female behavior, although globalization is having an impact producing a convergence of gender roles. One consequence of the feminist revolution is that gender is now perceived as being more fluid and less binary in the egalitarian model.

Transgender people possess a gender identity that does not match the sex assigned by nature. Numerous studies have sought to understand the causes and links to behavior, and many of these studies reject the common acceptance of a binary sexual identity. The acceptance of the validity of transgender identity is unfortunately also aligned with political ideology and platforms that places researchers under a burden of suspicion and unwarranted unethical accusations. For example, in 2016, the Public Facilities Privacy and Security

Act was signed into law in North Carolina that mandated students use the restroom facilities according to the sex they had at birth. The public acceptance of transgender identity is generally lined up according to people's traditional or egalitarian sex-related beliefs (Larsen & Long, 1988). It is probably fair to say that a majority of the US public do not understand transgender identity and further do not care to know much about it.

Gender dysphoria happens in cases where individuals experience disconnection between their biological sex and assigned gender. Individuals who come to identify with the sex that is not their biological sex generally self-identify as transgender, a condition that is at times, but not always, associated with distress. If the transgender self-identity is not associated with distress, the individual is not experiencing dysphoria and does not require clinical treatment. Mayer and McHugh (2016) estimated that 0.6 per cent of the population suffer from gender dysphoria.

Vignette: Transgender children

> When children proclaim spontaneously they are not the gender they were born with, their genuineness is particularly convincing to parents and loved ones. It is possible today to see on the internet many examples of children who proclaim transgender identity as young as three or four. These children feel distress, and, in some cases, shame. Some of these children have a slight idea they should not feel that way and these feelings, in turn, cause distress. In one case, a young child born a girl said around age five that "when the family dies, I will cut my hair so I can be a boy". Transgender children will often not say anything or will perhaps change their behavior and speech to conform to the wishes of their significant others. However, as they age and get more gender-related information, as well as being told what and who to play with, some may start to rebel and speak out. The distress is felt because the child's brain gender identity does not match that of the birth sex. The solution, some parents feel, is gender identity affirmation, which involves listening to the child and affirming the child's conception. Some research has shown that affirmation has positive mental health outcomes, although longitudinal data is missing. A statistic that weighs heavily on parents is the large number of transgender people who try to commit suicide. Often, transgender children who are affirmed will say they are the happiest they have been in their young lives.

Ambiguous sex organs and chromosomes

Some children are born with ambiguous sex organs or organs that reflect both sexes, which we today call intersex. The presence of these children has influenced the debate about what gender identity is and how it is formed. The tragic case of David Reimer, a boy whose penis was severely damaged during circumcision and who was then reassigned an identity as a female is often cited as a cautionary tale. Growing up, he was provided with surgical and hormonal

intervention in an attempt to feminize his body. However, David rejected it all, insisting he was a boy. Eventually the process was reversed, but the trauma had been too intense and David ultimately took his own life. Other research suggests the harm that can be done when gender identity is assigned at an early age under conditions of sex ambiguity. While surgeons are becoming more skillful in altering the genitals, these changes do not alter the biological sex of the patients (Reiner & Gearhart, 2004).

Biological research

Research on transgender identity has focused primarily on biological factors. Zhou (1995) found a similarity between the volume and density of neurons in transsexual women as being similar to that of heterosexual women and transsexual men having brain similarity to heterosexual men, even when controlling for hormone use. Rametti *et al.* (2011) confirmed earlier findings that gender identity is influenced by brain structures. Researchers at the Boston University School of Medicine also provided evidence for a biological etiology of transgender identity (Safer, 2015). Russo (2016) provided evidence that there is something unique about transgender brains, citing imaging studies. Earlier research had demonstrated differences in brain structures between gay and heterosexual men and lesbian and heterosexual women. However, since behavior and environmental factors can influence brain structures, it is not totally clear what came first, identity or brain changes.

Twin studies and the brain: Contradictory results from studies controlling for the influence of genetics

Typically, studies of twins have been used to exclude environmental factors. The following studies discussed below, however, have very small samples and that may have skewed the results. Gooren (2006) validated previous work that accepted the concept of transsexuality as a disorder based on a sex dimorphic brain. In a summary of the research, Diamond reported a concordance rate of only 20% for monozygotic twins (Diamond, 2003). Many other studies followed a similar pattern and reported results that found subtle brain structures and patterns more similar to the self-identified gender (e.g. Rametti *et al.*, 2011). Others, however, obtained contradictory results (Savic & Arver, 2011). The studies reported above involve very small samples and do not control for experience and environmental influences. Although many dedicated hours have been invested with scientific expertise, the outcomes shed little light on the biological basis of transgenderism.

The role of hormones

Other research has been directed toward prenatal androgen exposure. For example, some support was found for prenatal androgen exposure for male

to female transsexuality. However, the complexity of brain structures and the possibility of the influence of uncontrolled environmental factors make conclusions difficult. On the whole, the correlation between brain structures and gender dysphoria is weak and does not permit us to conclude a neurobiological basis as responsible for transgender identity (Mayer & McHugh, 2016).

Recent research supports the contention that adolescent identification with gender is not assigned at birth and in particular is not a consequence of a "wrong" balance of hormones circulating in the body. The experience of being transgender is not a consequence of some hormonal imbalance researchers at the Children's Hospital in Los Angeles reported (Wanjek, 2015). Their results showed that transgender youths have sex hormone levels with a similar balance of estrogen and testosterone to others with their biological assigned sex. The research evidence that gay or transgender people are "just born that way" is scarce (Richardson, 2016). Other researchers have sought for explanations of transsexuality as the consequence of psychological or emotional disorders brought about by personality conflict or environmental influences. Stryker and Whittle (2006) provide a useful study on the complex environment of transgender people. However, the zeitgeist that surrounds research on transsexuality is largely focused on biological factors to the exclusion of other viewpoints.

Epigenetics

Recent research of the effects of biology on behavior has focused on heritable effects other than genes. Researchers have shown that possession of a gene and its allele is not sufficient for gene expression. In fact, there are significant environmental influences, and whether these influences occur during the so-called critical periods determine if the gene will be turned on or not. Environmental influences can either be internal to the individual or point to the critical effects from the physical and socio-cultural environment. During sensitive time periods, the timing as well as the intensity of experience can determine physical health. Well-being is also affected by ongoing social relationships. What a person becomes is then a construct composed of genes and gene expression within the framework of environmental effects, the general ecology and cultural inheritance. The complexity of epigenetics must also acknowledge the plasticity of human behavior as the individual adapts to environmental changes. The field of epigenetics today acknowledges that epigenetic effects that determine gene expression can persist for several generations. To that extent, psychosocial development can be affected by salient psychological issues like traumatic separation from the mother. The multiple effects of salient early experiences can together change gene expression. We have no reason to believe that such critical experiences might not also effect expression of sexuality in identity and orientation (Bohacek & Mansuy, 2012).

The relatively new field of epigenetics shows how the environment can affect and change the epigenetic code and consequently produce outcomes for

those exposed to particular environments. For example, Cloud (2010) showed that the parental environment had drastic influences on children's longevity. Poisonous substances like the spreading of Agent Orange in Vietnam left an imprint on genetic material in both eggs and sperm, creating changes in the epigenome. Epigenetic changes represent the biological reaction to significant environmental stressors that occurred in the case of Vietnam and Agent Orange. The compromised epigenetic markers may take generations to fade away, and today it is still possible to see the effects of epigenetic disorder creating mutilations of the body or the absence of body parts (Larsen and Le Van, 2010).

It is becoming increasingly clear that the assertion of biology versus socialization as sole agents in explaining human behavior is becoming outdated by research. The nature versus nurture debate is seen as inadequate in explaining the complexity of human behavior, and the role of epigenetics shows the importance of external factors. There is no support that any single psychological trait is produced solely by genetics or the environment, but rather, there are many external factors at work that interact with genetic components influencing the expression of genes. That would especially be the case for complex traits such as sexual expression. Genes can perhaps predispose an individual in one direction or another, but the actual expression depends on external stimuli, for example, family norms and/or conformity to peer groups. A simple relationship between human thought and sexual expression has not been established as it does not reflect the critical importance of the brain and related networks of thought. It seems reasonable to argue that complex behaviors like sexual orientation or transgender identification cannot be attributed solely to genes because the expression of genes depends, in part, on life experiences and associated understandings (Ebstein, 2010; Francis, 2012; Hamer, 2002).

A cautionary tale of medical intervention

Mayer and McHugh (2016), in a very large review of the literature, challenged the "they were born that way" explanation for homosexuality and also cite research that contradicts the biological basis of transgender identity. They agree that twin studies are the gold standard for the evaluation of whether biology or environment is the major contributor to transsexualism. The researchers suggest that there is little evidence that transgender identity is fixed at birth or at an early age. Their overview of neurological and biological research emphasizes that there is narrow support for the view that transgender identity has a biological basis. Perhaps even more important for human consequences is that the research shows that there is limited evidence that transgender identity in children persists into later life. Mayer and McHugh complain of a lack of longitudinal research and the very small number of affected children in research studies that prevents scientists conclusively deciding the issue.

In short, an understanding of transgender identification based on different brain structures or hormonal distribution appears inconclusive based on current

research. Nevertheless, gender dysphoria, the felt distress experienced when one's biological sex is incongruent with experienced gender, is often treated with hormones and sexual reassignment surgery. However, the research evidence shows that these therapeutic approaches have little psychological benefit. As noted, research also demonstrates conclusively that gender dysphoria in children generally does not persist into adolescence or adulthood. Therefore, medical intervention in children may not produce psychological benefits, but may make it difficult for the child to resolve the issues associated with what might actually be a temporary discomfort. Likewise, there is little evidence that therapeutic interventions that delay puberty or otherwise modify unwanted secondary sex attributes have beneficial effects.

In conclusion, research shows that the correlation between transgender identity and brain structures is small when found and that the methodology is inadequate to evaluate the relationship. More to the point, it is not possible to conclude that differences in brain structures is the cause of transgender identity since it could be the result of such identification. In evaluating therapy, it is also necessary to recognize that for most children, the dysphoria does not persist. A person's genetics, while they can inform us of part of the story, cannot explain why transgender identity is more fluid (responding to experimentation of gender roles), whereas heterosexuality is more stable.

Social support and positive solutions

When children or adults experience distress, it is important to offer support and affirm their value as human beings. Research has shown that affirming children as transgender leads to a more positive quality of life. These results can, however, be criticized on the grounds that the transgender identity might fall away of its own accord since only a minority of children retain that self-identity later in life. Also, transgender-related affirmation that creates positive outcomes at first might later be exchanged for self-doubts and unhappiness. An alternative is to affirm the children as children and lend support to their value in family and society. Children at an early age should not experience negative feedback. For example, the selection of gender-inappropriate toys by the child is really not that significant and should play no role in creating anxiety in parents or children. At the very least, it seems that any medical intervention should be undertaken with caution and after building a significant amount of valid and reliable information over time.

Researchers, like all people, suffer from selective attention, particularly when defensive emotions are engaged. The understanding of the etiology of transsexualism is particularly difficult because ideology confounds conclusions made from the same data, or worse, causes a selection of studies to review to the exclusion of the full body of research. Nevertheless, knowing the etiology is of importance since it informs the practitioner of therapeutic approaches. However, as noted above, the research discussed is limited due to the small number of participants making it difficult to draw conclusions valid for the

overall population. In evaluating the biological based research, it is also important to remember that both behavior and experience in life help shape the anatomy of the brain, making it difficult or impossible to say with any degree of certainty that subtle brain differences are or are not present at birth.

Post-surgery and therapeutic outcomes

The evaluation of outcomes for therapeutic intervention is difficult to assess due to the very small samples participating in most studies and the small fractions of the general population who report gender dysphoria. Dhejne *et al.* (2011), however, in contrast to the previous studies, utilized an impressively sized sample when comparing people who had undergone sex reassignment surgery with two matched groups: one age matched the group of the same sex at birth and the other matched the participant's self-identified sex. The results showed that the postoperative group had three times the rate of psychiatric hospitalizations controlling for previous hospitalizations. Among various negative outcomes, the suicide rate was significantly higher in the sex reassignment group. Kuhn (2009), in Switzerland, examined the post-surgery life of 53 male-to-female reassignment patients and three female-to-male reassigned patients. The post-operative group reported lower life satisfaction and quality of health, although the lack of a control group does not allow inferences about the utility of sex reassignment surgery. On the other hand, Murad *et al.* (2010) in polling the data of 28 studies reported high rates of improvement in dysphoria, psychological symptoms and quality of life. Overall, however, Mayer and McHugh (2016) suggest that with such conflicting outcomes, we must take a skeptical view of the supposed benefits of sexual reassignment outcomes. Many adults who have sex reassignment surgery continue to suffer poor mental health outcomes, and better longitudinal studies are needed to evaluate the results.

Since only a minority of gender dysphoria cases persist into adulthood, medical therapeutic intervention must be viewed with skepticism in the case of children (Steensma *et al.*, 2013). There is little evidence that therapeutic intervention in adolescence has the desired effect. While affirmation produces better current adjustment and well-being for some adolescents, there is a paucity of evidence that children should be encouraged in transgender identification. The high rate of uncertainty about outcomes after sex reassignment makes it difficult to assess the impact on patients, which can be potentially tragic in the case of children. On the other hand, there is some evidence that affirming children when they assert a self-identity as transsexual has positive contemporary outcomes.

More broadly, all people benefit in mental health and disposition from social support. Poor mental health is generally associated with the transgender experience, and groups that support transgender and gay people maintain that these negative outcomes are the result of social stigma and the experience of discrimination and rejection. A meta-analysis of individuals who received therapeutic interventions as adults reported reduced feelings of gender dysphoria and improved quality of life (Cohen-Kettenis & Delemarre-van de Waal,

2006, 2008; Murad, Elamin, Garcia, Mullan, Murad, Erwin & Montori, 2010). However, at the end of the day the biological basis of transgender identity finds little support and is mainly a mystery (Meyer-Bahlburg, 2013).

What about homosexuality?

Significant studies using the twin gold standard demonstrated the near absence of biological determinants in homosexual orientation. A large-scale twin study (Baily *et al.*, 2000) using participants from the Australian National Registry for twins, a large probability sample that permits inferences to the general population, found twin concordance rates for homosexuality to be 20% for men and 24% for women. Concordance measures twin agreement in identity. For example, if one twin reports homosexual orientation, the other likewise identifies as homosexual. In fraternal twins, concordance varied from 0% for men to 10% for women overall, lending some very small support for a genetic contributor. Långström *et al.* (2010) conducted another large-scale study on twins that concluded that the genetic component for homosexuality was not insignificant; however, it was the environment that played a more preponderant role. In another representative study on twins, Bearman and Bruckner (2002) found substantial support for a socialization model at the individual level. Further, Bearman and Bruckner did not find any support for a genetic influence for same sex attraction as the concordance levels were statistically similar and, in particular, identical twins did not have higher concordance rates. In another large-scale study on twins and non-twin siblings, Kendler *et al.* (2000) found that genetic factors may have an important impact on sexual orientation, but there were too few participants in the relevant sample to draw conclusions. Mayer and McHugh (2016), in evaluating the twin studies, concluded there is no reliable evidence that genetic factors determine sexual orientation, although there is some evidence that participants with certain genetic profiles may later engage in homosexual behavior. In general, the authors criticized the idea that sexual desires and longings derive from some fixed biological feature.

The range of homosexual behavior

The large-scale Michael *et al.* (1994) study found that 2.7% of the men and 1.3% of the women claimed to have participated in homosexual acts over the past year. Despite these small numbers, the LGBT community is widely accepted by most populations in the West, a testament to rapidly evolving social norms in recent decades. Since gay people and lesbians find each other in cities like San Francisco, their numbers often appear large, for example, when they and their supporters take part in public parades or demonstrations. In many ways, the gay community has successfully linked their goal of seeking legitimacy as a human right that is on par with the struggles of racial minorities for civil rights.

The acceptance of homosexuality as an orientation is derived from the viewpoint that attraction to sexual partners forms a continuum from the exclusively heterosexual at the one end of the continuum to a bisexual orientation in the middle, and at the other end of the continuum exclusively homosexual behavior. At the same time, the gay community and their supporters advocate the viewpoint that homosexuality is hardwired genetically, as many claim that they experienced feelings of same sex attraction from early childhood. There are also speculations that homosexuality is caused by prenatal hormone exposures or alterations in the brain. However, it is noteworthy that some gay people and lesbians do not discover their homosexuality until after they are married and have children. Such bisexual experiments with both genders is understandable from the new permissive norms and the acceptance of a tolerant society. Finally, the hedonistic perspective is the idea that homosexuality develops because of extraordinary pleasurable sexual experiences in encounters with the same sex. Despite numerous studies designed to support the hardwired inborn orthodoxy, there is little or no evidence that provides indisputable confirmation for any of the above mentioned perspectives.

Although various psychological and psychiatric associations in the West have removed homosexuality as a psychiatric disorder, these professional decisions were never unanimous and perhaps reflect more the very large change in normative sexual attitudes over the last few decades. As it stands today, attitudes toward the gay community in the West are dominated by a new social conformity. Homosexual legitimacy has largely been supported in the United States by the judiciary in opposition to past popular and legislative majority opinion. Permissive sexual attitudes are, however, not shared by traditional cultures that find homosexuality incomprehensible from the point of view of nature and physiological logic. On the other hand, same sex attractions have been part of human history from the beginning of known records, but little is understood as to why such attractions occur among otherwise heterosexual families, other than the tentative hypotheses noted above.

Causes of homosexuality

While there is little research support for the contention that homosexuality is biologically fixed, researchers have located slight differences in brain structures between hetero- and homosexual participants. Such neurobiological results do not support whether these orientations are innate or the consequence of psychological or environmental factors. It is always important to consider the plasticity of human behavior. Many who identify as homosexuals in adolescence no longer identify as such when adults, although such findings are contested. Of concern to mental health specialists is that the research reports a significantly higher rate of childhood sexual abuse among homosexuals. The non-heterosexual population also has significantly higher rates of poor mental health. Many researchers attribute this finding to stigma, a lack of acceptance and discrimination in the larger population and, in general, the lack of social affirmation.

Bearman and Bruckner (2002) found evidence in a large and representative study of twins of the efficacy of a socialization model at the individual level. These studies found no evidence of genetic influence in homosexuality because the concordance rates were about the same for identical, fraternal twins and other siblings. In other words, the results yielded no relationship between close genetic relations and the prevalence of homosexual orientation. In another study, Kendler *et al.* (2000) provided evidence for genetic etiology in a very large study of 794 twins and 1,380 non-twin siblings. However, the data did not provide the basis for an assessment since only 19 of 324 identical twins had a non-heterosexual (homosexual) member and only six were concordant. However, since other studies (depending on definitions) have found concordance from 6% to 30% in identical twin studies, these results point to a limited genetic influence on homosexuality (Mayer & McHugh, 2016).

Should biology or socialization causation ideology matter in how we treat people?

Etiology is only important if it informs transgender and gay people on how to develop a better quality of life. If research shows that either condition is fixed then discomfort might logically be treated by supportive therapy, hormones and/or surgery. If there is little or no support for a biological model, then hormone or surgical reassignment is an extreme treatment not warranted. Most likely, gender-related human behavior is the outcome of the total person, biology interacting with environment and experience. Regardless, society should accept that people do not choose distress, and, where possible, lend human support.

The political divides related to transgender identity and homosexuality line up according to egalitarian or traditional preferences for gender relationships (Larsen and Long, 1988). Overall, traditional gender attitudes are related to rigidity, to authoritarianism, religiosity and political conservatism. In another study, Larsen, Reed & Hoffman (1980) showed that negative attitudes toward homosexuality are also related to relative authoritarian attitudes. Other results showed that females were relatively more tolerant of homosexuals, whereas overall religiosity and authoritarianism were related to negative attitudes. In a study by Larsen and LeRoux (1984) on the comfort of physically touching members of the same sex, results confirmed the previous findings on the relationship of authoritarianism, cognitive rigidity and support for socially desirable conceptions of femininity by both male and female participants that all related to negative attitudes toward physically touching the same sex. Adherence to conservative perspectives and low self-esteem also correlated to discomfort in touching members of their own sex. Finally, in a study on women's liberation, Larsen *et al.* (1976) found that the younger and more politically liberal participants were more positive toward women's liberation and the associated changes. These studies generally support the idea that people who support the status quo in sexual relations are more likely to perceive threat from changes in

gender relations and view with skepticism the varying understandings of sexuality that is perceived as undermining traditional gender relations.

However, there is nothing in research or science that justifies the ill treatment of sexual minorities. Positive psychology focuses on what helps people live happy and even flourishing lives. In that concept, there is no preconception of gender identity or sexual orientation required as being healthier; the only important criterion is what the long-term outcome is. Are there only individual paths to gender contentment or must there also be a perspective defined by society? In that regard, we should be equally open to the possibility that certain behaviors might undermine mental health and block people from flourishing, without condemning varying sexual conceptions. At the end of the day any criticism should be associated with positively lending support to the value of the individual experiencing varying conceptions of sexuality and gender.

Sex education

Sexual education today is of necessity focused on the many sexually transmitted diseases associated with promiscuous and unprotected sex. To achieve more happy relationships and societies, adolescents and adults should be given good advice on sexual behavior and the prevention of disease and unwanted pregnancies. Sexual education could argue that sexual intercourse is not trivial, but basic to human happiness. A perspective on the reproductive roles of intercourse, as well as sexual pleasure, makes it less likely that teenagers will experience unwanted pregnancies or participate in unprotected sex. It is important to convey to children and adolescents some basic facts about the emotional and physical harm that can result from sexually transmitted infections (STIs), as these are increasing in number and produce serious ill health as a significant cost to individuals and society. Although the epidemic caused by the human immunodeficiency virus (HIV) started in the male homosexual community, with the development of the contraceptive pill, promiscuous sexual behavior among heterosexuals also increased the spread of HIV.

AIDS The HIV infection destroys the human immune system and has caused great suffering and millions of deaths. The virus has shown to be an equal opportunity destroyer by creating an epidemic through sexual contact among both homosexuals and heterosexuals. The HIV virus can also be passed from one drug user to the next by the sharing of unclean needles and by blood transfusion before blood samples were thoroughly tested. A cocktail of drugs can decrease the virulence of AIDS, producing the hope of longer life for the infected person, similar to victims of other chronic diseases. Sadly, these antiviral drugs are not available in many cultures or developing societies where thousands continue to die and suffer. People with the HIV virus are immunity compromised and therefore more likely to succumb from other illnesses that a normal human immune system would resist. These opportunistic illnesses continue to wreak havoc in many lives throughout the world.

It is important to remember that AIDS and other sexually transmitted diseases are all preventable by taking the necessary precautions. People who abstain from sex cannot get most STIs. However, AIDS is an exception since it can also be spread by the sharing of hypodermic needles or unscreened blood transfusions. There are also cases where AIDS is contracted by direct contact with the sexual fluids or blood of an infected person. Being monogamous and using condoms properly when sexually active also decreases the possibility of STIs. Sex education in the West along those lines, as well as the availability of new drugs, has reduced the impact of AIDS, but unfortunately, it remains a serious problem in many parts of the world. It is probably a good idea to discuss these health hazards with any potential sexual partner. Unfortunately, people for reasons of embarrassment will lie about their past sexual behavior and promiscuity.

Sexually transmitted bacterial infections

Gonorrhea is a common STI caused by a bacterium from the gonococcus family. These bacteria exist in mucous membranes in various parts of the human body, including the vagina, mouth, urethra, cervix and the anal tract. Sexual contact with the infected membrane areas spread gonorrhea. In the beginning phase, it is an easily treated illness using penicillin, but if untreated, gonorrhea can cause serious illness and infertility.

Syphilis is caused by the bacterium called *Treponema palladum*, which is a member of the spirochete family. This bacterium also needs a moist and warm environment and thrives well in the penis and vagina. Syphilis may also be transmitted by oral-genital and anal contact. There are also sad cases of mothers transmitting the disease to their fetus; however, treating expectant mothers with penicillin prevents transmission. In advanced stages, syphilis is a debilitating illness and can cause death.

Chlamydia is a very common STI spread by *Chlamydia trachomatis* through sexual contact. Although there is little publicity about this bacterium, it is more common than the other bacterial infections. Since males have symptoms, they will more often seek medical treatment compared to females who are asymptomatic. It is a very easily transmitted disease, and untreated women often develop pelvic inflammatory illnesses that are the most significant cause of female infertility.

Other sexually transmitted virus infections

Genital herpes is a very common sexually transmitted STI caused by a virus similar to those causing other non-sexual infections, such as chicken pox. The first symptom occurs a few days after sexual contact when the infected individual will experience significant genital itching. That symptom is in turn followed by an eruption of blisters in the genital area. The attacks may recur

every few weeks or perhaps with an interval of years, but there is no known cure. Some drugs have been developed for symptomatic relief. For prevention, the use of quality latex condoms is of great importance, as the virus can transmit through non-latex varieties.

HPV is caused by the human papillomavirus and produces genital warts after having sex with an infected person or having other intimate contact. The warts can be removed by freezing or the use of lasers. Again, it is the common medical opinion that the virus remains in the body. The primary known health consequence is to women, who are at increased risk for cervical cancer from HPV.

Share sexual history and protect your partner

It is a harsh reality that sexually transmitted diseases constitute a real threat to health in the world, producing in some cases debilitating illnesses, and in the case of AIDS a threat to life itself. It is not easy for many couples to discuss their previous sexual experiences. However, anyone with a sexual history has been exposed to some risk for STIs and may unknowingly carry transmittable microbes or viruses. Therefore, it is especially important to get to know your partner in order to evaluate any risk factor, and it is better if you can talk openly and non-judgmentally about the risks of STIs and other health issues. In the ideal world, we would freely discuss any illnesses that might impact a relationship, but because of embarrassment, many people will lie rather than admit to a history of STIs.

The presence of STIs is a sufficient reason not to have unprotected sex. Quality latex condoms are very effective against most STIs, although herpes is also easily transmitted by touch. The only real guarantee against contracting an STI is to abstain from sex, but that is unreasonable, as sexual attractions are powerful and compelling. However, it is wise not to have multiple partners since each new partner presents another potential risk factor and probability of exposure. Before couples married in the past, blood tests were required to detect possible syphilis infection. It is still not a bad idea to have a complete medical exam to rule out all potential transmittable diseases, and when you love someone, that would seem to be an essential and elementary protection for your partner (Cochran & Mays, 1990).

Hostile attitudes toward women: Sexual harassment, pornography and rape

Sexual harassment is caused by the desire of men to dominate women and to degrade their value as human beings. Hostility toward women occurs in many cultures and societies, in particular, in those that are dominated by traditionalist attitudes toward gender. In the modern workplace, sexual harassment can take the form of suggestive jokes and attempts at humor that degrade women. The end result is that women feel uncomfortable by the male lack of appreciation

of them as equal human beings. Harassment also occurs in educational settings where women are not welcome or appreciated in certain disciplines that were considered historically male fields of study and research. Although in the modern world, sexual harassment of men is possible, it seems less common and occurs primarily where women have leadership power in relation to male employees. In the Western world, there are now laws to prevent sexual harassment, and women have not been shy in taking issues of sexual hostility to court for punishment and compensatory damage. As women take their place in all fields, the issue of male sexual dominance is less tenable and more boys and girls grow up in cultures that value the equality of the genders (Cortina, 2004).

Pornography and the graphic depiction of sex has been part of the human experience since antiquity. In Pompeii and other ancient sites, tourists can observe very graphic depictions of sexual positions and genitals on the walls of ancient buildings. The graphic depictions respond to human curiosity and the centrality of sex to the human experience. However, the primary concern of social scientists today is the possible role of pornography in violence against women. Some types of pornography depict nudity and willing partners having consensual sexual intercourse. However, a lot of pornography depicts sexual violence where women are debased as sex slaves and as objects to be dominated. The effect of sexual violence in pornography on the victimization of women depends on the character of the man consuming pornography and the type of society he lives in. Societies that value gender equality do not take kindly to the victimization of women. Violent pornography is related to sexual violence when men have stereotyped hostile views of women and possess a hyper masculine personality combined with low intelligence. Pornography is more likely to increase violence if the perpetrator also comes from families and cultural backgrounds that reject gender equality. Women, however, have additional objections to pornography since it often insults their dignity and demeans women as sex toys and as depersonalized objects, rather than as consensual partners. Long-term exposure to such visual demeaning stimulation diminishes mature gender views essential for long-term relationships (Donnerstein, 2001).

Rape is criminal behavior where a man overpowers the woman with force and has sexual intercourse without consent. Rapists live everywhere, but rape occurs more often in large urban areas that are to some degree economically and socially dysfunctional (Krug, Dahlberg, Mercy, Zwi & Lozano, 2002). Since rape can cause embarrassment to the woman and further victimization, rape reports and statistics are likely underestimates of the real number of victims. In modern industrialized societies, rape by husbands of their wives is also criminalized. However, in many developing or traditional societies, rape between a man and his wife goes unrecognized because the woman is culturally and legally subservient and considered property. However, if we accept the simple definition of rape as forcible intercourse against the will of the victim, then husbands

can of course also be guilty of rape when they overpower their wives. Societies that encourage sexual aggressiveness toward women are likely to have high rates of rape victims. Sexual aggressiveness is often accompanied by a devaluation of women as human beings. Further, societies that promote sexual hedonism and selfish pleasure are also likely to have a high rate of victimization. Men that are angry with women and feel that masculinity is enhanced by male aggressiveness are more likely to victimize women. Other male victimizers feel a sadistic pleasure in creating fear and humiliating women. When women are considered less than human, hostile men find it easier to perpetrate sexual crimes.

In recent years, Western society has become more aware of what is called date or acquaintance rape. Some men have even used "date drugs" that render a woman unconscious in order to perpetrate sexual crimes. A large number of college women report that they have experienced unwanted sexual advances by individuals they know on a casual basis. About 10% of college women in the United States claim to have experienced actual rapes during their lifetimes, but the true rate might be higher. Unfortunately, date rapes often occur under conditions of diminished capacity by both the perpetrator and victim, as drugs and alcohol are frequently a factor. Sexual victimization is also associated with being unmarried, being inebriated frequently and having suffered previous victimization. Although women can take some protective action, it is often difficult for victims to report rape to the police as a criminal matter (Adams-Curtis & Forbes, 2004).

Rape is a trauma that has serious psychological consequences for the victims. In the immediate aftermath, the trauma may cause disorientation and interfere with the normal functioning of life. In the long run, it is common for victims to experience depression and anxiety over the course of many years. It should surprise no one that having been a rape victim may also interfere with a normal consensual sexual relationship. Women who have been raped often feel a decrease in sexual motivation and an inability to reach satisfying orgasms. Some research shows that such sexual dysfunctions occurs in about 50% of all rape victims (Sprei & Courtois, 1988). Victims often have a need for a new beginning and move away from the area in which the crime occurred. Many victims find themselves being fearful of going out during the night. Empathetic partners and family members can be a great resource as the victim recovers normality, but in many cases sexual assault leaves deep scars requiring professional counseling (Faravelli, Giugni, Salvarori & Rica, 2004).

Common sense and clear communication

Common sense can result in a healthier sexual relationship for both partners. The abuse of alcohol or other drugs that decrease inhibitions often leads to regrettable impulsive sexual behavior. Sexuality is too important to be treated trivially, and unwanted sexual encounters can have lifelong negative consequences. Therefore, it is essential for couples to have an open and early discussion about expectations for a sexual relationship, with each taking steps to

protect their partner. Neither men nor women are required to yield to pressure to be sexually active before they feel the time is right. Also, no decent person would want their partner to be saddled with an STI or an unwanted pregnancy. That issue requires a willingness to open up, discuss concerns and use latex condoms if the decision is to move forward with a sexual relationship.

It is important not to send ambiguous messages to a partner about desires and the willingness to have sex. Sexual behavior is serious and can have long-term consequences, and most men and women probably have conflicting motives for both sexual engagement and abstention. Avoiding conflicting messages and making one's intentions plain provides a platform that prevents misunderstandings. For example, men may see an invitation to a woman's lodging as a proposal to have sex. Misunderstandings could be avoided if the invitation made it clear that is does not include participation in sexual play if that is the case. A woman's willingness to engage in foreplay is also often seen by men as a desire to go all the way. Women need to make sure to know their own minds before letting go and finding themselves in a difficult situation. On the other hand, men should know that "no" is not ambiguous, and if a woman indicates refusal to a sexual proposal, it is time to pull back and not force your intentions and desires on the partner. Miscommunication often occurs in Western societies where men believe that the goal of dates is to have sex, whereas women may just want to get acquainted and have a good time. These varying expectations can cause problems, and hence there is a need to have a discussion after initially getting acquainted. In a loving relationship, the intent is always to protect the partner.

Recent research on sexuality

A recent study of sexual behavior and the health of 5,865 participants in the United States aged 14 to 94 provided an overview of common sexual behavior, same sex encounters and condom use (National Survey of Sexual Health and Behavior, 2010). Results showed that only one in three participants claimed they used a condom in the last sexual encounter, suggesting that the promotion of the use of condoms for sexually active individuals remains a public health priority. Not surprisingly, condoms are used more frequently with casual partners compared with partners who are long term.

US society is permeated with sexual messages in advertisement and the media. The study reported on a large variety of sexual behaviors following the development of the birth control pill and other useful pregnancy contraception methods collateral with the increased participation of women in all aspects of society. There is encouragement in the results since while most teens are sexually active, many are also using condoms or abstaining from sex. Another prominent finding is that many older adults continue to have active and pleasurable sex lives. However, because they are less concerned about pregnancy, there is a need to promote condom use for casual sex in that segment of the population.

Not surprisingly, there is a discrepancy between the genders in reporting sexual orgasms. For example, 85% of the men questioned reported that their female partner had an orgasm at their last sexual encounter, whereas only 64% of females reported that they experienced orgasm. This result suggests a greater complexity in female sexual behavior and the possibility of female satisfaction without orgasm. Part of the explanation is the role of foreplay in female satisfaction since the likelihood of female orgasm is related to a variety of sex acts and stimulation as well as vaginal intercourse. Men, on the other hand, are more likely to orgasm when the sexual encounter includes vaginal intercourse.

As noted above US society has experienced a change in the acceptance of homosexual behavior since the Supreme Court voted in favor of legalizing same sex contracts and now marriage. Therefore, it is not surprising that more respondents in the United States now identify as homosexual or bisexual. The results of the study showed that 7% of adult women and 8% of adult men fall into these categories. However, the number of homosexuals must be significantly lower because the results included the more ambiguous category of "bisexual". Further, if the data is mined for actual sexual activities of the past year, homosexual behavior among women was 1% in the youngest group of adolescents aged 14 to 15, peaking at 9% among women aged 20 to 24, but returning to 2% among women aged 40 to 49 and 1 or 2% in all the older age groups. For men, oral stimulation by other men was 1 or 2% for the adolescent group aged 14 to 17, and then increased to 5–8% in the groups from 20 to 59 years of age, before dropping to 3% in the higher age groups. Although decreased homosexual sexual activity over time can partly be explained by increased age, the results of the higher percentages among young adults can also be explained by the desire for sexual exploration supported by a permissive society. The lower levels later in life are perhaps the outcome of engaging in sexual behaviour that eventually was not found satisfying. As we don't know much about the long-term effects of a permissive society, it is useful to examine the most recent data. A final confirmation of the low rates of homosexuality can be found in the survey by the US Census Bureau. Only 1.6% of US adults self-identified as homosexuals, with an additional 0.7% as bisexual (Time, July 28, 2014). These numbers do not justify the assertion that homosexuality is common or ubiquitous.

The vast majority of men and women are heterosexual. Heterosexual activity is not only normal, but without it there would be no new generation. When men and women have a child together, that expresses the courage and love that is an affirmation of life. Therefore, if you wonder about your sexuality, keep in mind the plasticity of human behavior and that transient same sex attractions are not necessarily confirmed homosexuality.

For a happy sexual life, it is also important to remember the differences between the genders. For females, happy lovemaking requires foreplay and stimulation. Fortunately, most societies today recognize the importance of female sexual satisfaction. Sadly, there are cultures that still want to deprive

girls and women of sexual feelings through genital mutilation. A modern society that values both men and women must condemn such practices as inhuman and unworthy of any civilization. Finally, it is encouraging to know that sexual satisfaction can be experienced even into old age, although motivation decreases steadily in the latter stages of life.

Summary reflections

Human sexuality is discussed in this chapter. All important psychological and physiological dimensions of life interact in human sexuality. In recent decades, the Western world has experienced large changes in sexual norms and behavior. The permissive society in what has become the new norm leaves few restrictions on sexuality. The human sexual response pattern is hardwired and ubiquitous in all cultures. Four distinct phases have been observed, which include initial excitement, a plateau, orgasm and finally resolution. Female sexuality tends to be more complex and satisfaction is in some cases possible without orgasm. At the other extreme, when female motivation is high, women are capable of multiple orgasms. For men, the orgasm is an explosive release of energy followed by ejaculation.

Overall, men tend to have higher sexual motivation than women, although in both cases, behavior is related to sexual hormone releases. However, at the human level, cognitive and socio-cultural factors play important roles in sexual motivation. For women, sensory touch and smell are of particular significance, whereas men are cued into visual stimuli that are required for the initial arousal. For both sexes, thoughts and fantasies are the strongest sources of motivation.

However, emotional differences can be observed between the two genders. Women connect sex with loving feelings, whereas men tend to view sexual behavior as pleasure and conquest. Men are less constrained by consideration of the partner. Reproductive success for males is connected to having more than one partner, and therefore, a greater focus on the act, whereas survival of children for women means finding a capable and reliable spouse.

This chapter discusses in some detail the varying sexual understandings, including transgender identity, ambiguous sex organs and chromosomes, twin studies, the role of hormones, epigenetics and a cautionary tale about medical intervention. Although homosexuality is a very rare occurrence, a strong lobby has created a normative change in laws and the broad acceptance of the concept of gay or lesbian marriage. By posing gay issues as allied to broader civil rights, sexual choices are presented as a normal alternative to heterosexuality. Several theories have been advanced for explaining gay and lesbian relationships; however, there is no reliable evidence for either a hardwired or socialization basis for homosexuality that exclude a consideration of the role of epigenetics.

Chapter 4 continues an important discussion on sexual education and the non-trivial role of sex in reproduction, in addition to the pleasure of sexual intercourse. A number of sexually transmitted diseases have gained track in

recent decades because of ignorance and promiscuity. The most serious is still AIDS, which works to destroy the human immune system and has caused great sufferings and millions of deaths. It should be noted that being monogamous and using condoms properly can reduce the risk of getting these infections.

Unfortunately, it is still necessary to discuss hostility toward women expressed through sexual harassment, pornography and rape. Sexual harassment that belittles women is caused by men's desire to dominate. Pornography can vary from graphically depicting heterosexual but consensual behavior to more sadistic attempts to humiliate women. Rape occurs when men force sexual activity and overpower women against their will, and it is considered criminal behavior everywhere.

5 Gender and human happiness

The most meaningful and central experiences in human life are related to gender. In this chapter, we shall outline some salient ideas about gender and discuss why they are important. Gender is different from sexuality as it refers to the social and psychological dimensions of being female and male. In all cultures, gender-related roles have developed in remarkably similar ways based on the ubiquitous but sexually different reproductive roles and biological platforms. In general, boys and men are seen as being more independent, assertive and oriented toward dominance in relationships. Conversely, females are adjusted to culture by being dependent and nurturing in relationships and generally being uninterested in power.

It is also true that in most societies, female contributions have been devalued and women everywhere have historically experienced lower status. Even the right to vote is a relatively recent achievement won by women in most countries and social restrictions on women have declined as beliefs in equality have become more generally accepted, at least in developed economies. In many countries, lawful changes supporting the equality of women and girls have occurred over the past few decades. In the most developed societies, girls are now co-educational with boys and have, by law, equal rights to athletic and educational development. Therefore, while the fundamental biological differences have remained, the same society has experienced a great change in how it thinks men and women should behave in the gender-related dimensions of their lives.

The total psychological and socio-cultural dimensions associated with being male or female are referred to as gender. Gender roles are defined as social expectations for gender-appropriate behavior, thoughts and emotions. Nevertheless, despite the normative changes of the last few decades, gender roles have deep cultural roots that are socialized early in life and remain largely unconscious for most people. At the same time in today's world, there are considerable strains and stresses about gender roles where some sectors of society hold on to traditional beliefs that, in turn, conflict with more modern egalitarian views. Role-related conflict contributes to unease in the relationships between men and women as they each try to understand and accept the new realities of greater equality (Lippa, 2005; Zhou, Dawson, Herr & Stukas, 2004).

Gender differences

Society has, in the past, cultivated gender stereotypes, many of which go back to the beginning of human civilization. The platform that supports these beliefs is the physiological sexual differences and the distinct roles played in reproduction by men and women. However, it is society that has reified these beliefs and anchored these deep in the psyche of both genders. Perhaps the most obvious stereotype is the common belief that women are weak and men are powerful and dominant. More recently derived stereotypes suggest that men are good with numbers and mechanical arts, whereas women have greater skills in nurturing relationships and children. Also common in many societies is the belief that women are more emotional than men, more sensitive and more likely to express their feelings in both joyful occasions and in unhappiness. These gender-related beliefs are nevertheless overgeneralizations that are fostered and reinforced by social institutions from the moment a child is born. For example, in the United States a baby girl is wrapped in a pink blanket and typically, as she grows older, is given dolls or soft toys to play with, whereas boys are wrapped in blue blankets and given toys such as trucks or soldiers that reinforce masculine assertiveness. These generalized beliefs are not evaluated, but rather are largely unconscious and accepted as givens by nearly everyone in society. Even though we are unaware of the presence of gender stereotypes, many people nevertheless behave and think consistently with these stereotypes in ways that often limit life opportunities and experiences of girls and women. While differences have been found for a number of dimensions, it is important to ask if the differences are large enough to be meaningful (Hyde, 2005).

Traits thought characteristic of males and females can be summarized as being primarily instrumental for men and expressive for women. From the perspective of traditional gender stereotypes, men are seen as the breadwinners in society and are expected to be more assertive, independent and oriented toward power, status and dominance. Female stereotypes, on the other hand, describe women and girls as being more sensitive, warm and expressive in their interactions. Women have traditionally behaved consistently with these gender roles that correspond to stereotypes emphasizing their nurturing presence in the home and as emotional support for husbands and children. It should be noted that gender differences are not necessarily a negative factor in human life, but nevertheless, the female stereotypes have often been associated with powerlessness and victimization. Increasingly, society at large, and women in particular, confront female powerlessness through advocacy for equal treatment. In the quest for equality, women now demand equal roles in the military, defying the obvious physiological differences that exist (Bandura & Bussey, 2004).

One outcome of the struggle for equality today is that men and women see themselves as being more similar, especially in more developed societies where the sharp distinction between the genders is no longer functional. We can say with some assurance that women participate more in all aspects of economic life in developed countries and are now moving toward parity in

education. The outcome of greater gender equality is that negative stereotypes have receded somewhat. Gender stereotypes also depend on ethnicity and culture to some extent because gender-related beliefs are based on ethnic and racial affiliation. However, hardwired biological differences and separate roles in reproduction will always remain, ensuring that gender roles will never completely disappear (Best, 2001).

In recent years, the term "sexism" has been used to describe negative female stereotypes that are utilized in gender discrimination and prejudice. For example, some people believe that women can never become competent in mathematics or the hard sciences. These views, often unconscious, serve to steer girls away from the challenges of science careers. While the two genders may remain different to some degree in interests and motivation, the main criteria for employment and career ought to be the ability to do a job and not prejudgment based on gender. Culture encourages sexism and therefore many boys and girls are unaware of the origin of their beliefs. There still might be some areas where men or women perform comparatively better than the other gender. Rather than negatively evaluate such gender differences, we should focus on the importance of equality of opportunity and choice (Dipboye & Colella, 2005).

Gender roles: Evolutionary, role and socio-cognitive theories

Why have very similar gender roles emerged in all cultures? There must be an explanation for gender behaviors being so ubiquitous in the world. *Evolutionary theory promotes the idea that gender roles are hardwired by the adaptation required by evolution and the different roles played by men and women in reproduction.* Evolution and adaptation produced different psychological traits in men and women. Cultural traits that were adaptive and promoted survival were over eons of time passed on to succeeding generations. Likewise, in the past, males and females faced different pressures in early evolutionary environments. Therefore, behavior that led to reproductive success also became hardwired genetically over time, which influenced human behavior at unconscious levels.

For example, the ubiquitous sexual promiscuity of males improved the likelihood of men leaving offspring and may explain gender-related norms of double standards. Universally, multiple partners are considered more acceptable for males and less so for females. Natural selection and reproductive success in males favored those who had short-term strategies for securing sexual partners. Males developed strategies that helped them acquire resources that favored access to females and over time contributed to deep-seated attitudes of competition and violence. On the other hand, the best chances for females to leave a genetic footprint were promoted by securing the future of their children and that, in turn, was best obtained by having long-term partners in marriage or other social contracts.

Natural selection favored females who devoted effort and time to parenting and who obtained ambitious mates who could provide the proceeds of a

good hunt or a fat paycheck. Women therefore prefer males who are successful and ambitious. These gender differences in mate selection were supported by survey research where males and females were asked about the ideal number of sexual partners over a lifespan, with the average male response a very promiscuous "more than 18", whereas female respondents preferred a more modest "four or five". It is not possible to observe directly the evolutionary process or prehistory and therefore evolutionary theory makes logical inferences, but nevertheless offers a scientific view on how gender attitudes and roles could have developed (Buss, 2004).

However, others would argue that gender differences occurred because men and women historically played different roles in society and were the outcome of socialization and cultural experiences. In nearly all cultures, women have less status and power and that, in turn, motivated gender-specific adaptation and attitudes. Because of the lack of power, women were more willing to cooperate and were less interested in competition and dominance. Gender differences from the perspective of social role theory are rooted in the ubiquitous traditional hierarchy that men and women have lived with for eons (Eagly & Diekman, 2003).

Social cognition offers another alternative for understanding gender differences. *This perspective argues that children's understanding of gender develops from their observation and imitation of adult models like their parents.* In addition, movies, television and other media play a large modeling role where children can observe both healthy heterosexual behaviors, but also frequently dysfunctional gender relationships. Gender-specific toys also play a role in socialization and cognition; for example, girls' fascination with Barbie dolls helps explain female obsession and dissatisfaction with their bodies and certain neurotic manifestations such as bulimia and anorexia nervosa.

Parents teach gender-appropriate behavior from the very beginning of life and reinforce behavior they understand as gender appropriate. Later, peers reinforce gender-appropriate norms in play and other activities outside the home. In the early years, children perceive no difference in genders, but at about age four, boys and girls begin to have playmates more exclusively within their gender and participate less in cross-gender activities. As boys interact among themselves, their play activities become more robust, whereas girls learn to play more gently with their dolls and toys. Therefore, childhood play is in many ways an education in gender roles and interests that creates permanent preferences in both boys and girls.

The interactions between the child and his or her family and community finely hone expectations about appropriate gender role behavior. As noted, children learn by observing significant others behaving in gender-related ways and seek to imitate such behavior in childhood games like "playing doctor". Children are rewarded or punished by parents and peers for expressing correctly or incorrectly norm-related behavior. Of course, the child also participates in gender development by evaluating different behaviors and the reaction of powerful others such as parents and teachers. The assimilation of gender-related behavior occurs after children begin to think of themselves as boys or

girls. As children grow, they develop thinking structures that define socially correct gender behavior. Throughout the many phases of development, children experience a constant social basis for gender-related thinking that evolves over time. Socialization is an obvious determinant because very young children have no conception of psychological differences between males and females.

Differences and similarities between genders

The physical differences between the genders are obvious and related to different roles in reproduction and childrearing. Women have more body fat than men, especially in breast and hip tissue. For men living in the nutrition-rich West, fat is often concentrated in the stomach and is a health issue related to many chronic diseases. Men are physically larger than women and have greater upper body strength. Hormonal excretions differ between genders with different concentrations of androgen (predominantly male) and estrogen (predominantly female) contributing to subtle but powerful gender differences in behavior. Many health differences between men and women are also related to gender role expectations. Males typically have higher levels of stress hormones circulating, which can result in higher blood pressure and cardiovascular disease. *Overall, the health differences between genders cannot be separated from roles and role expectation. Together, they produce a longer life expectancy for females.*

The brain is the central organ channeling sexual behavior. Some research suggests that the part of the brain structure called the hypothalamus is responsible for sexual behavior and is comparatively larger in males. Yet, the brain structures that mediate emotional expression are larger in females. From the evolutionary perspective, the differences in brain structures have developed over time, contributing to survival and natural selection. On the other hand, sexual brain differences could also have evolved over time because of experience and socialization that produced adaptable changes in the genetic code.

Socialization exaggerates any inborn sexual differences and has created universally female and male cultures that pass on gender-specific cultural traits through generations. In recent times, psychologists have debated the validity of differences between males and females in cognition (thinking). Early researchers argued that males had better visual-spatial and mathematical skills, whereas females had better verbal skills. However, recent research that reflects the more equal female participation in the educational system shows fewer differences. Alternatively, girls, being more cooperative, are often better students and have outshined boys in various studies in recent years. Any gender differences that remain are not likely inborn but probably connected to role conformity, social expectations and parental socialization.

Different styles of communication

As noted in Chapter 3, some researchers have argued that men and women have different styles of communication. For example, men will talk about sports

and politics, often without looking at each other. When men communicate, they often seek to convince others by trying to control the conversation and arguing, as well as seeking to impress the others. The language of men tends to be fact oriented where talking is more important to the participants than listening. On the other hand, women talk willingly about feelings and their relationships, typically communicating face-to-face with the other person. Rather than using command language, women make requests of others in relation to their behavior and the help needed. Women will respond more to the actual words spoken in a conversation and communicate with others in an effort to seek agreement and share information. The language used by women is often emotional and they evaluate what matters in life. When conversing with men, women tend to be interrupted more and use more tentative language (Gray, 1992, 2004).

Tannen (2001) suggested that men and women are socialized in different cultures. In conversations, men are more likely to talk about status and independence, whereas women speak about their connection with others and use words that denote intimacy. Men use communication to challenge others and to keep from being pushed around, whereas women use words to promote closeness and the values of equality in groups. These socialization differences put a different perspective on male gender dominance in conversations. Perhaps it is not so much dominance that men consciously seek in relationships, but rather two distinct cultures trying to communicate and find something in common.

Gender differences in relationships

Men and women are different in how they interact with other people. Women are less defensive, more open and willing to disclose salient and intimate aspects of their lives. Men are more constricted and less willing to share important information. Women reach out to others both to give and receive support and tend to have more close friends compared to males. When relating to males, women are much better at establishing cross-gender friendships. Men tend to think of women primarily as sexual beings and passion as the primary gender-related emotion. One important gender difference that is ubiquitous in all cultures is that boys and men are physically more aggressive compared to girls and women.

Testosterone prepares boys to flee or fight at any provocation. However, there are other forms of aggressive behaviors where girls and women excel. In verbal aggression, females are at least as aggressive as males, and women find ways to express hostility, such as spreading rumors about other girls or getting their way by being passive–aggressive. Passive–aggressive personalities obstruct others by delaying solutions and indirectly by withdrawing their support (Crawford & Unger, 2004).

There are, of course, important differences between the genders, and as the French would say, "long live these differences". Contrary to common folklore, gender differences are often complementary rather than oppositional in nature.

For example, males are more likely to endanger themselves by saving people from fires or drowning. These heroic behaviors are undoubtedly related to the greater upper body strength of males and a preponderance of testosterone hormones. Conversely, females are more likely to volunteer and help in the community or help protect children. These behaviors reflect the greater nurturing nature of women. Culture always plays a role in exaggerating gender difference in behavior. That assertion is supported by research in cultures where boys and girls both care for the younger children in the family and both genders therefore display similar nurturing behavior. In the Larsen and Long study (1988), gender differences were summarized as preferences for traditional or egalitarian sex roles.

In the final analysis, culture determines gender-appropriate behavior that may vary widely from egalitarian norms in Europe and North America to women being confined largely to the home in Saudi Arabia and other oppressive Muslim societies. Cultural values and gender roles took many centuries to develop and are very difficult to change or moderate when anchored in religion. However, no country remains isolated in our globalized world, and the internet communicates norms of equality with consequences for gender lifestyles. There is little doubt that girls and women prefer more egalitarian relationships, whereas many men still cling to their dominance found in traditional families (Larsen & Le Van, 2013; Matlin, 2004).

Vignette: Love at first sight

My wife always thought I was very romantic. I proposed to her at a drive-in movie while they played our favorite song prior to the movie (*Nel Blu de Pinto de Blu*). Previous to that peak moment we had talked about marriage while lounging around in my room. So I asked her to go get the calendar so we could select the best time. The year was 1958; we had been engaged for three weeks and had known each other for three months. We were also very young; another negative for marriage I was told. The marriage took place at my in-laws in a neighboring state. The night before the wedding, I was at the state fair with my best man where I won a giant toy bear for her that she still keeps as a wedding memory in her office. We left that night for our return to California in our sporty 1951 Ford. It had all the latest gimmicks including natural air conditioning that we employed continuously driving through the desert in the throbbing September heat. One of the sweet memories from that day is my wife sitting next to me with a wet cloth and constantly wiping my forehead. Eventually, we stopped in Las Vegas. Even then I was a big spender and I think we got a room for five dollars only a mile from the strip. I thought it was a good deal although this accommodation was also without air conditioning. The next day, we returned to Los Angeles and it was back to work.

The girl I married deserved a honeymoon so some weeks later we drove across the border down to Ensenada, Mexico. We didn't have a lot of money for rooms so we slept in the car. Of course, I was a gentleman and she had the entire back seat. However, despite her satisfaction

with that honeymoon experience, I wanted to spoil her and took her on another trip to Yosemite Valley a few weeks later. We enjoyed crystal clear waters and a pristine sky, though a bit crowded with so many other people. However, we came prepared with my scout pup tent and managed to squeeze in between two other campers.

These were the days of California dreaming. A time when Orange County still had orange trees, and when you went to the beach you could find a place to lie down. We worked hard for a year and saved $1000 to buy a house. Eventually, we selected a property with a nice older house in the front and a rebuilt garage in the back. We rented the house in front to cover our payments, but the rebuilt garage was our honeymoon house. It lacked a few things which I don't have the space to explain but suffice it to say the day we moved in, my wife cried. "What's the matter honey?" I asked. She just helplessly looked around and yes it needed some work. My father and I began to rebuild; new floors, new walls and ceiling. In anticipation of the future, we even added an extra bedroom. One small problem was we had no heater in the garage, but hey this was California and how much would we miss that? It turned out we really missed it! We did have an oven that we ended up turning on and opening in the winter to warm the house. We also had each other so we were in great shape. Then my wife started to look uneasy again. "I want a baby", she said. "A baby??" I said helplessly, "what about a dog?" "Listen young man (she was not that polite), I didn't marry you to have a dog, I want a baby!" So I surrendered and within the next four years, we had three beautiful children. These experiences (and many that followed of similar and superior quality) built character and I figured if my wife passed these few reasonable tests early in our lives she was mine for life and maybe longer. So this year we have been married for 59 years and don't tell me that romance is not enough!

Today, we have grandchildren and great grandchildren and we practically laugh every day at their many antics. The other day my grandson brought his two-year-old daughter over for a visit. We are playing in a circle and as I caught the ball my grandson tells his daughter, "Go get the ball from Grandpa". Looking at me with dismay she says, "I can't, I don't have a ladder!" Then there are the sweet moments. Like one day when my youngest granddaughter came for a visit and left me a note in the book I had been reading. "I love you Grandpa. Bigger than the world. Bigger!"

Gender conflict

If styles of communication are different between the genders, it follows that perceptions of reality are also gender based. Men and women therefore view conflict in different ways. Women often feel validly that men are primarily concerned with status and power and uninterested in relationships. When a relationship is threatened by conflict, women take the consequences for the relationships seriously and will do what is possible to resolve a situation. Overall, gender differences in how men and women handle conflict are not large. Some

researchers have noted that the nature of the relationship matters more than gender in managing conflict. However, both men and women would cope better in conflict by being more flexible. For example, men could learn that it is possible to solve differences by negotiation and cooperation, and women can learn that conflict is often natural and if managed well is not a threat to the relationship. Frustration can be reduced in both genders by realizing that relationship conflict is often the consequence of different and gender-specific ways of approaching and understanding conflict (Adler & Proctor, 2007).

The power of socialization and new sexual understandings

All gender differences that are measurable are exaggerated by culture. Gender differences in cognition are often politicized. Many women feel that observed differences in thinking are used to their disadvantage by pointing to the inferiority of females; for example, in scoring lower than males in mathematics. It is important to remember that any observed gender difference is more likely the result of socialization and not some genetically based immutable inborn factor. If replication and balanced research should find reliable gender differences in some areas of thinking, these variations are more likely the outcome of the division of work that served the purpose of reproduction and survival during evolution. Perhaps more importantly, people need to remember that the genders are complementary rather than oppositional in nature. We are much more alike as human beings than different and the differences that remain are to be treasured as they serve complementary needs for individuals and families.

Many men and women became unhappy with the stereotypical roles of masculinity and femininity during the 1960s in the United States and Europe. Rather than think of gender behavior as categorical, some researchers began to think of gender differences as a continuum where both males and females display dominance and nurturing behavior. The concept of androgyny suggested that an individual could possess both masculine and feminine traits. For example, females could express dominance in careers and yet show caring and nurturing behavior toward their family and children. Bem suggested that androgynous individuals were healthier because they were flexible regarding roles demanded by life. The ability to adapt to a rapidly changing world seems valuable given that capitalism has largely destroyed the nuclear family and traditional role of both genders. Others would argue that we should wean ourselves away from gender obsession and try to think of others as people primarily and focus on preparing both genders to be competent (Bem, 1977).

The consequences of gender

We are living in dynamically changing times and traditional gender roles are weakening in most parts of the world. At least in Western culture, gender equality has become a norm and put into practice in educational systems and

society. In the United States, Title 9 provided the basis for equal access to resources in education and many fields formerly dominated by men are now open to women. However, gender equality is still dependent on culture and country, with some societies lagging far behind. Furthermore, gender roles remain and affect men and women in obvious and significant ways.

Traditional gender roles assigned subservient roles to women, requiring them to work primarily in the home. Despite the recent large-scale social changes in gender relations, women still do more of the childcare and housekeeping compared to men, even when they work fulltime outside the home. In some Islamist countries, the role of women remains domestic and female servants are viewed as domestic slaves. Often daughters are married away at an early age or used as barter by poverty-stricken parents. Participation of women in national decision-making also varies with the egalitarian or traditional gender roles that dominate in society. Although the right to vote has been achieved in most countries, few women are elected to office. In countries such as Saudi Arabia, women cannot vote, drive a car or appear in public without a responsible adult male.

Women's work was historically devalued with lower pay and status even in the most advanced countries because their role in the past was primarily domestic. As primary caretakers, women often have to take time away from work and their career to have children and provide childcare. That natural responsibility in turn gives employers an excuse for downgrading female contributions and pay. In many parts of the world, girls do not get a proper education. Islamic fanatics who are especially opposed to women's education have carried out murders of female students and those who provide education for girls; as well as burning schools that served female students. In some countries where women belong to national or ethnic minorities, they often suffer from the double jeopardy of being both a discriminated minority and oppressed as women.

All women are exposed to common gender-related stress that impacts their health. Women in even the most egalitarian countries often experience domestic violence. Negative gender attitudes derived from the broader society influence the perception of the self in women with many unhealthy consequences. Exposure to sexism often results in women feeling devalued, depressed and anxious. Stress is an added factor when women do double duty of taking care of all domestic duties while still holding down an outside job.

The quest for feminine beauty is a constant stress exploited commercially in too many ways to enumerate because most women feel that their real appearance falls short of the ideal promoted by the cosmetics industry. As female beauty is a signal of fertility and health, women's greater interest in appearance compared with men is probably a hardwired evolutionary trait created over eons of time by natural selection. Even examining artifacts from thousands of years ago, women were then very much obsessed with their appearance and attractiveness.

It is interesting to speculate that had women not interfered with evolution thousands of years ago with the use of makeup, the sought-for appearance of

red lips, rosy cheeks and perfumed fragrance might have naturally and universally evolved as a part of the genetic code. Unfortunately, women's desire for a certain appearance of beauty causes many to be unhappy with their bodies. In some cases, bodily dissatisfaction produces obsessive dieting, and in extreme cases, disorders such as bulimia and anorexia. Because of stressful issues that are unique to women, mental disorders also vary in frequency as women are more likely to suffer from mood and anxiety disturbances (Nolen-Hoeksema, 2004).

Women also respond to stress in ways that differ from men and are more open to receiving social support, as well as being more likely to benefit from supportive relationships. Women are also more likely to worry and think about the events that cause stress, and when abused, often think about the consequences and wait for an optimal time to leave a relationship. Sadly, at times, waiting can become habitual and in extreme cases abuse can be fatal. Women invest heavily in relationships and their lives are often spent in helping their children and spouses develop. Caretaking might in some ways be satisfying and contribute to the development of relationship skills, however, living their lives for others leaves women vulnerable and dependent in relationships (Taylor, 2002).

Is it a man's world? The traditional gender roles assigned dominance, power and control to men. However, there are many male disadvantages as well because boys and men experience more role conflict today compared to the traditional society of past centuries. *Men are still expected to become the primary breadwinner who acts assertively in securing benefits for the family. The acceptance of egalitarian gender norms creates role confusion in men because they are also required to be both cooperative and more sensitive in their relationships with women.* Men are asked to do more, but are still required to accept the equality of women in all spheres of life. The cooperative and teachable nature of girls means that they today outshine boys in educational learning and achievements. Boys who are naturally more physically active are often repressed by female grade school teachers who expect boys to behave in the same cooperative way as girls (McCreary, 2003).

Men have a significantly lower life expectancy of some eight to ten years compared to women. That life is not easy for men can be observed in the higher male incidence of stress-related disorders and substance abuse. Men are more likely to be killed in the United States and suffer from a higher incidence of alcoholism. Traditional gender roles in the past caused much damage to men's relationships with women because they supported male dominance and focused primarily on the physical attributes of women. At the same time, the focus on physical attributes and dominance makes it difficult for men to develop intimacy in their relationships. The traditional male gender role also impaired relationships with other men who are seen as competitors rather than as potential partners for the common good. Many men also have emotionally constricting relationships with their fathers that negatively impact other parts of their lives.

Different gender perspectives and happiness

Relationships are a source of both great happiness and sorrow. Gender identification and the issues surrounding gender contribute to well-being or stress in many unchartered ways. An awareness of how gender issues prevent people from experiencing their lives in optimal ways is essential. In marriage or permanent relationships, an important initial step is developing empathy for the partner's understanding of the relationship and taking practical steps in solving misconceptions in the interest of more human happiness. It seems that a first step is for both women and men to recognize the equality of the value of the two genders. As Mao Zedong said, "women hold up half of the sky". Women could improve their lives by developing their own interests and confidence in personally improved competencies. In most societies, women devote their entire lives to the promotion of the welfare of families while frequently ignoring their own needs. It is important to understand that it is possible to maintain relationships while also pursuing personal aims and salient goals. Women need to look at their own satisfaction with self-fulfillment recognizing that they have their own needs and goals and could improve their lives by being more self-assertive. That self-awareness includes insisting on the value of women's lives and opposing the social constraints imposed by the sexism of inequality.

Men need to become more aware of how stress and lifestyle create lower life expectancy. Dealing with stress by violence or escaping through alcohol or drug abuse does not solve underlying frustrations in the lives of men. Frustration is frequently caused by the inability to foster close intimate relationships with women as well as other men. Traditionally the breadwinners in society, men are obsessed with getting ahead economically and that preoccupation often comes at the expense of nurturing important relationships. Finding more satisfaction in relationships might help reduce the self-destructiveness that reduces the average male's lifespan.

Differences between men and women are to be expected because both socialization and physiological development vary. For females, a primary goal is to have good interpersonal relationships. In addition, for many women, the feelings of accomplishments are still primarily based on the building of families and communities, whereas many men are motivated to pursue economic and scientific accomplishments. However, these are not categorical differences between the genders because there is a considerable overlap in motivations and interests.

Overcoming hurdles toward better gender relationships

Romantic gender relations are ubiquitous in all cultures. Successful and happy adult relationships are very much dependent on the attachment experienced as children with parents, foremost with mothers. In many ways, adults continue, for better or worse, the secure or insecure attachment style that was experienced in childhood. The infant attachment style determines, to a large

extent, the choice of the people we associate with as adults and how secure and content we are in the relationship. Secure children bring out the best in other people, and as they grow into adult relationships, also find more satisfaction and happiness. Research shows that securely attached individuals are more likely to stay married and perceive fewer marital tensions when compared to those who develop insecure attachment. Some results show that adults fall into three attachment styles of the securely attached, the avoidant and the anxious-ambivalent that are thought to have derived from infant–mother interaction. Attachment styles that were learned as a child are the gift or burden each generation passes to the next generation.

When the attachment style of a partner is "avoidant" or "ambivalent", that in turn is a significant obstacle to overcome in relationships. However, a love relationship may be so strong that partners can overcome the negative attachment experiences of childhood. Nevertheless, secure individuals have more satisfying intimacy in relationships and are more prepared to offer mutual support when facing problems. On the other hand, avoidant people find it difficult to develop intimacy or trust in the partner and the anxious-ambivalent individuals, while desiring affection, are not sure if the partner feels the same way. Avoidant or anxious partners tend to view life events in pessimistic ways and are oversensitive to threats in relationships (Collins & Feeney, 2004).

Women consider verbal communication to be of special importance. *Many couples, therefore, have at least two possible hurdles to overcome. First, a possible negative attachment style learned as infants and carried into current adult relationships. The second problem is the disparity between the genders in the ability and desire to verbally communicate in intimate ways.* Women are better communicators of emotions and are more emotionally expressive. The gender disparity in communication is a source of discord and female dissatisfaction and is a bridge to cross in order to find relationship satisfaction.

Gender relationships and positive illusions

At the end of the day, the highest level of human happiness is possible in building creative, satisfying and permanent gender relationships that offer sexual satisfaction and personal security and nurture the partner's development. The many problems in communication discussed previously are less salient in a committed relationship. Partners naturally become more interdependent when the focus of life is on the relationship and less on the individual. When people invest in long-term relationships, they develop a common history by helping each other on the road of life. Partners can better adjust to the many stresses of life, including the arrival of children (that are undoubtedly the greatest source of stress as well as happiness), when committed for the long term. As people are not perfect, committing to a relationship also makes it easier to forgive one another for the inevitable failings that occur in human relationships.

In the most fundamental way, relationship commitment expresses the value of personal integrity, where giving a word of lifetime assurance and support

to another person means something lasting. Giving a word of commitment is a voluntary act, but once given, becomes a moral obligation. In fact, moral commitments do not imply staying with a loveless relationship, but rather the possibility to build a better relationship based on greater security and happiness. Marriage, however defined, is a moral commitment that is meant to last in a world where everything else changes. Finding something novel or interesting in a relationship may not be easy for long-term partners and the struggle for intimacy is lifelong. Mutual rewards, pleasure and novelty must be consciously sought as keys to long lasting and happy relationships between men and women.

Even when our perceptions are based on illusionary positive views of life and of the partner, the enhancing illusions bring happiness into our lives. *Couples in love often have positive illusions about each other that actually have many beneficial effects and contribute to mental health and life satisfaction.* People find it difficult to think of anything negative when believing in positive partner illusions. Powerful positive illusions selectively filter away what is harmful and negative and the partner is seen as more rewarding and the couple feels a stronger commitment. The idealization of a romantic partner is experienced as support and security and is an essential component in the satisfaction of intimate relationships. With positive illusions, people overestimate the good and underestimate the negative and that can't help but increase mutual liking and relationship satisfaction. Even when people are aware of faults in a partner, they can quickly explain these away as insignificant, especially when in comparison with the many (perhaps illusionary) virtues they think are found in the beloved. There is no substitute in creating relationship happiness compared with the ability to see the behavior of a partner in continuously positive ways.

Having positive illusions is aided by faulty memories. For example, many people believe that their relationships are actually getting better with the passing of time. Partners in a committed relationship seem unable to remember any bad times but rather see their relationship as an unbroken path to ever improving intimacy and trust. Couples that "suffer" from positive illusions see their relationship as better when compared with the opinions of those who know them well. This positive relationship bias exists in all cultures studied (Endo, Heine & Lehman, 2000; Larsen & Le Van, 2013).

Intimacy and disillusionment

The desire for intimacy is a universal longing present in all cultures. Most people have a need to trust someone with their deepest emotions and ideas. Loneliness is also ubiquitous in the world and is characterized by feelings of disconnection and feeling unappreciated. Intimacy between two people is deepened when both feel valued, appreciated and understood. Although people may be infatuated at the beginning of a relationship, and have temporary feelings of joy in finding a treasured partner, lasting intimacy comes about as a result of communication. Participating in meaningful communication about

what matters in life is the key to lifelong intimacy. Although men and women both desire intimacy as noted, women more readily share their emotions and, in general, place a higher value on intimate relationships. As most cultures tolerate more emotional expression in women, they also become more skilled at expressing deeper feelings that confirm relationship satisfaction (Reis, Clark & Holmes, 2004).

Romantic love is initially the focus when seeking intimacy, and as it develops, sexual relations become one more expression of that love. More precisely, intimacy combined with passion is generally what people refer to as romantic love. However, life is about change and adjustment. The sexual passion and interest present at the initial stages of a relationship may wane as the couple mature. For some relationships, these changes in sexual motivation bring disillusionment and eventually the end of some relationships. However, other couples build on the initial passion to communicate trust that becomes the basis for companionate love. *Companionate love is the deep affection that couples have for each other because of intimacy and commitment.* It is based on the feelings of attachment that a person has for a partner with whom they have shared the trials of life and lived a common history. From a lifelong journey, couples come to share values that define their life and a shared commitment to the integrity of the relationship.

Romantic love creates the interest and motivation that are necessary to bring couples together. The media in the West emphasize the importance of romantic love to the exclusion of other feelings of attachment. However, in many parts of the world, romantic love is a luxury, and as a concept is primarily a characteristic of wealthy societies because, in developing countries, people are more concerned with the challenges of survival and creating a common destiny. Children are often the expected outcome of romantic love, but to foster a family requires much deeper commitments found in companionate love. Therefore, while romantic love is important in the beginning of the journey of life, for many couples, companionate love is just as real and is essential for the survival of families. Sadly, not all romantic love is successful and some couples experience disillusionment. Although divorce rates vary by culture and country, in the West they are close to 50% of all marriages. Perhaps marriages ending in divorce were based less on genuine intimacy and the trust essential for companionate love, so when the physical passion was spent, so was the relationship.

Unfortunately, in our rapidly changing world, some relationships become dysfunctional and one or both parties decide it's time to divorce. Divorce is more likely in countries that value romantic relationships to the exclusion of community or extended family considerations. Undoubtedly, changing gender roles have caused confusion and many couples experience an inability to adapt. Couples also have to adapt to the many stresses in modern life related to the economy or the general insecurity in the world. Conflict in marriages is also becoming more common as women become more independent and the moral commitment in marriage is less certain. The end of a relationship under

conditions of conflict produces disillusionment for many and it is very stressful for the partners. Sadly, it can have lifelong negative consequences for children. Indeed, children also suffer in broken marriages that frequently include fighting or devaluation of the partners. A healthy marriage brings along many positive health outcomes, whereas family conflict and dysfunction have negative impacts on the immune system and cardiac health.

Demographic considerations contribute to divorce statistics because couples of lower socio-economic status are more likely to experience stress that impacts marital contentment. Likewise, marrying young contributes to divorce because such couples often don't have the maturity and resilience required to survive the inevitable trials of life. While more mature couples grow stronger in the face of adversity, younger couples may fault the partner for the frustrations experienced rather than the objective stressful conditions of life. In today's competitive world, young couples often lack the education needed to succeed and earn a decent living, consequently, having poor prospects. In some countries and cultures, the extended family is a security network that buffers a young couple, but in developed and many developing societies, such insurance is no longer a part of the journey of life.

Gender conflict solution

Very few relationships are without conflict. Generally, conflict occurs because the partners have different preferences and values. One partner may, for example, desire to save for a house or apartment, whereas the other partner wants to take long vacations. Some conflicts are caused by dysfunctional habits such as alcohol dependence or drug use. Changing gender roles have also produced many conflicts growing out of different views of men's or women's work. Typically, women have more egalitarian views that conflict with men's greater benefits in the traditional relationship. While gender role conflicts can produce dysfunction and bankruptcy in a relationship, they can also offer opportunities for growth.

Conflict solution can be found by attributing positive intentions to the partner even when disagreeing about gender roles. Compromise is essential because otherwise the marriage is soulless and under the dominance of one partner. Giving the partner the benefit of the doubt and attributing good intentions helps create a climate for discussion where agreement can be found. A balanced marital consensus on savings is where mutual needs are met and the partners enjoy, for example, some vacation time together while still saving for long-term goals like a house. Regardless of the nature of conflict, most relationships can weather differences if the partners are able and willing to have an open and free discussion.

It is always a temptation to blame the other partner for negative outcomes in life. Attributions of blame to the partner are poisonous to a relationship. Blaming occurs when people attribute bad intentions to the partner, thereby creating counter responses as each side refuses to take responsibility.

Dysfunctional couples on the road to relationship dissolution participate in the blaming game. Blaming occurs when the spouse's behavior, even when conciliatory, is seen as having bad intentions and the partner is consistently viewed in a negative light. A mature relationship takes mutual responsibility seriously as a necessary buffer against the disappointments of life, but also encourages mutual admiration in days of success and happiness.

Summary reflections

In this chapter, the discussion focused on the meaning of gender, which is defined as the total socialized psychological and socio-cultural dimensions developed by being raised as a boy or girl. The obvious physiological differences between the sexes are the platform for socialized gender differences and the related stereotypes of boys and girls. Reproductive sex roles support many common gender-related beliefs. It is believed by many people that girls and women are more emotional than boys and men, that they are not as good in mathematics and that men focus on problem solutions whereas women are more expressive. Female stereotypes are also often associated with female powerlessness and victimization.

How did gender roles come about? Some research points to evolution and the viewpoint that gender roles are hardwired. Gender roles evolved from evolutionary demands as over time they improved survival. Gender-related traits that were adaptive contributed to individual and community survival and were passed on to the next generation. From the evolutionary perspective, the ubiquitous male sexual promiscuity improved their likelihood of leaving offspring, an explanation for the greater social tolerance for males having multiple sexual partners. Conversely, natural selection favored females who took parenting seriously and who connected with an ambitious male with the prospects of providing well for the family.

From a different perspective, gender roles are an outcome of socialization and are based on the historically different requirements of men and women in reproduction and in rearing a family. The lack of power in females encouraged their greater willingness to cooperate and explain gender-related attitudes toward relationships. Social cognition theory suggested that gender roles developed from an observation of parents and other adult models, and therefore, social learning is an important factor. The logical conclusion is that all the approaches discussed previously explain, to some degree, gender-specific roles.

Hormonal excretions explain some differences between the genders. Males are more competitive and consequently have a higher concentration of stress hormones that shorten life. Men and women also practice distinctive styles of communication that lead to miscommunication. Men will typically seek to control a conversation and focus on the transmission of facts. On the whole, men, in an effort to dominate the conversation, tend to speak more and listen less. Women, on the other hand, know the importance of listening and are

willing to speak about feelings and communicate face to face in an effort to find agreement.

Gender role socialization has produced many social and individual consequences. Despite more egalitarian developments in society, women still carry the largest burden in childcare and domestic work throughout the world. In some Islamist countries, the fate of girls and women is worse because the woman's role is domestic and they have no say in the affairs of the community and are seldom elevated to elected office.

Typically, women's work is devalued in all societies and they receive lower pay, even in developed countries. In the most backward countries, girls are prevented from receiving a proper education and they and their teachers are murdered by extreme Islamic fundamentalists. Women, even in advanced countries, are exposed to domestic violence. The commercially exploited desire by women for beauty has created unreachable ideal standards of attraction that negatively impact women's self-esteem and has serious health outcomes. There are also male disadvantages in changing gender roles as men today must cope with the relatively new role conflict between egalitarian and traditional gender role expectations. As men and women use different communication styles, some researchers suggest that socialization has produced different gender-related cultures and bridges are needed for mutual understanding.

Different physiological platforms, hormone distribution and communication styles also produce different perspectives on relationships. Men with hard-wired dominance tendencies tend to think of women as sexual beings and the focus is initially on passion. Women value cross-gender friendship more and are better at establishing such relationships. Although men and women are both socialized in thinking that gender is opposite in nature, most genuine differences tend to be complementary and not conflictual.

Gender conflict is partially an outcome of different views about reality, starting in early childhood with boys being more aggressive and competitive. Women initiate changes in behavior by making proposals, whereas men use command language, and these language differences are retained in adulthood. Conflict could be reduced if men learned to negotiate more and women could help by understanding that conflict is not necessarily a serious threat to relationships.

There are hurdles to overcome in most relationships. The ability to achieve happy and successful relationships depends, at least partially, on the attachment styles learned in childhood. However, in a strong loving relationship, dysfunctional attachment styles can be left behind. Women like to communicate in intimate ways and men need to learn that communication is not just about facts or to express dominance. Having positive illusions, even when they fall short of reality, is a big plus in relationships and has many positive benefits.

Sadly, many couples do not manage to achieve satisfactory levels of intimacy. The need to trust someone with the deepest feelings is a universal longing that is gradually built over time by communicating about what is important in life. Over time, most relationships change from the stage of initial passion to

a calmer companionate relationship that is required in order to build a family and meet the long-term challenges in life. Companionate love is based on a deep affection for the partner producing intimacy and commitment. In cultures that value romantic love highly at the exclusion of commitments to family and community, the passion is rarely lasting and divorce more likely.

6 Friends, lovers and marriage

Is lasting love possible?

What attracts us to other people? Research suggests that the mere physical exposure to another person over time creates attraction, at least in the initial phases of a relationship. Exposure produces familiarity and therefore psychological comfort. The saying "birds of a feather flock together" is a proverb that points to the importance of similarity of background and personal characteristics. When people have a common platform, they are better able to communicate, which encourages the development of deeper relationships. Research shows that friends and lovers are often alike with similar personality characteristics and behavior.

It is often stated that opposites attract. However, while that is true in sexual passion, in other areas, salient differences tend to turn people away. Nevertheless, there may be a few instances where complementary traits make the other person desirable; for example, when an introvert feels attracted to an extravert. For reasons of psychological comfort, people look for the familiar and the similar when establishing relationships. When people feel that their own attitudes and behaviors are validated in another person, it produces a sense of psychological comfort. It is a rare, courageous person who encourages the development of dissimilar relationships.

Is physical attractiveness important in attraction? There is little doubt that physical attractiveness (at least in the eye of the beholder) is important to what is called romantic relationships. Men differ from women in the importance rating of physical attractiveness. Women are more likely to consider other traits like honesty, kindness and dependability to have greater significance, whereas men are more motivated by hardwired evolutionary outcomes that value feminine physical beauty, as it signals health and fertility. Having said that, people generally also seek similarity in a partner's physical attractiveness and most people end up in relationships that rank similar in attractiveness.

Friendship

People initially choose friends that are similar in physical attraction and personality traits, and over time, selection processes create friendship circles that become even more similar in traits and attitudes. Friendship is important to

the human journey as it supports self-esteem, reduces feelings of alienation and loneliness and helps the individual weather times of disappointment and stress. Research supports the idea that friendship is very important in sustaining well-being and healthy development. All humans have needs that can only be satisfied in relationships including the desire for play, intimacy and sexual encounters.

In most cases, relationships do not occur spontaneously, but require effort and time to build. Making contact with someone attractive is the initial step and that is more likely to happen in settings where potential friends are physically close and therefore familiar. A person is more likely to make friends with people from the same neighborhood, religion and ethnicity compared to people from more dissimilar backgrounds. As noted in Chapter 5, self-disclosure is the important bridge between two people who want to build a friendship. Self-disclosure is the process by which trust increases over time when each partner invests confidence in the friend and discloses important inner thoughts and feelings (Taylor, Peplau and Sears, 2009).

There are gender differences in friendship. Typically, women have more close friends and are more willing to be vulnerable and self-disclose. Women talk with each other more than men do with other men, and they are more likely to lend a sympathetic ear and express sympathy for the experiences of other women. Men, on the other hand, associate friendship with activities such as sharing a journey on the river, going to a football game or other outdoor experiences. Men look for solutions when they have problems and are dissatisfied with just a sympathetic ear since they typically don't like to reveal weaknesses. Men are also more likely to disagree with one another and tend to be more competitive in interactions.

Can men and women be friends? That depends to some degree on age. When people are young, sexuality either implicit or explicit is always a variable in cross-gender relationships. Complementary gender friendships however can be very fulfilling since they provide useful information on opposite sex feelings and behavior. At the same time, there are issues in cross-gender relationships because men and women have different expectations in friendship. Women are generally better at developing cross-gender friendships that are not based on sexuality.

Meeting and keeping friends

To have a friend is to be a friend. What qualities are most important? Key ingredients in friendships are mutual trust, keeping confidences and loyalty. Carl Rogers emphasized unconditional acceptance as a key to fulfilling relationships. A precondition to successful friendships is to accept the other person as she or he is and not seek transformation according to some self-conceived ideal. At the end of the day, friendship is about feeling safe and secure. Trust among friends develops over the long run from predictability of behavior, support and by observing the friend's consistency. Friends are by definition

dependable and can be relied upon when it really counts. Fair weather friends need not apply in most relationships!

Where do people meet friends? In the past, it was always at a place of gathering in the neighborhood, church or club. More recently, the internet has been a venue for meeting people. Thousands of sites are involved in bringing people together and taking their money. Many who have tried online dating have positive experiences, but since there are also predators on the internet, it is important to have safeguards in protecting personal information.

Meeting complementary needs is one way to attract friends and retain friendship. A person who is very shy might be attracted to an outgoing extravert. Nearly all relationships (except parenting) involve costs and benefits as suggested by social exchange theory. Since relationships carry both costs and rewards, people only stay in relationships where the benefits outweigh the costs. The benefits of rewarding relationships include feelings of love and companionship and help in overcoming loneliness. Costs refer to the maintenance requirements of a relationship, the stresses that life brings along and the psychological discomfort that occurs from conflict. Friendship is also built on reciprocity and exchange of favors. Genuine friendship is nurtured by kindness and consideration. Interpersonal traits important in friendship can be summarized by saying good friends offer support, help where needed and, where possible, engage in mutually satisfying activities that increase bonding.

Moving on: Becoming lovers

Selecting a permanent partner for life comes about through courtship. What do most people look for in a potential mate? For many if not most people, the traits leading to romance are not well articulated and psychology is not very helpful in unravelling the mystery of romantic love. There are gender differences in the perception and experiencing of love that result from the different roles played by men and women in reproduction and long-term child and family care. While people look for similarities when selecting partners, both men and women rank feelings of mutual attraction, emotional maturity and dependable character as highest among desirable traits.

The evolutionary developed desire for children motivates women to have a greater interest in men's socio-economic prospects, ambition and intelligence that enable a man to support a family. On the other hand, men are more attracted to the physical beauty and youthfulness of a woman that signal health and fertility. For the same evolutionary reason, women tend to prefer slightly older men who are more established economically and men are attracted to younger women who can still bear children. Gender differences in attraction are hardwired and largely unconscious driven by the different roles in reproduction. However, with women's increasing socio-economic independence, gender differences in attraction may change (Buss, 2005).

All traditional societies valued chastity, particularly in women, as an important prerequisite for love and motherhood. The importance of chastity varies by

culture; for example, it is considered of little importance in Scandinavia, but is critical in China and some other societies. In Islam, chastity is related to family honor and is a force for the repression of the natural sexual desires in women.

What is love? It is the outcome of a person's investments in a relationship built over long periods where eventually the security and development of the partner is as important as one's own satisfaction. Does love last forever? For some couples, the answer is yes. However, many other love relationships end in disappointment or in endless conflicts and struggles. Love is not just about positive experiences, but also the ability to cope and support a partner through the frustrations and pain that is part of the human journey. Love is a very complex emotion and not easy to measure, except from the observation of faithful and resilient mutual support over time.

Commitment in a relationship deepens as a result of the shared journey and is an important factor in the stability of the relationship. Committed partners feel happier in their relationship and begin to envision a future together. Exclusivity of love and sexual interest becomes part of commitment and is, for most people in the world, essential for a long-lasting relationship. However, exclusivity of love is not a determinant where society institutionally condones or requires polygamy, or where marriages are arranged. In these cultures, commitment to a relationship is maintained by personal and social sanction, and by feelings of fear and guilt when violating norms.

Erich Fromm had a different idea about love commitment. He did not like the notion of "falling in love" since such emotional behavior is not influenced by conscious will. He noted emotions of love may come and go, so if we only have strong feelings for the partner, love may not last. Love is also a decision and manifestation of will and judgment that makes us ethically responsible for our choice and for each other.

As noted earlier, we learn how to love, at least in part, from the attachment experienced with our parents or parent surrogates. That early attachment becomes a model for relationships later in life, including love relationships. The research shows that people who had close and secure relationships with a caregiver as a child found it easier to relate to and experience intimacy later with others. Not all people have early secure attachment experience and may therefore have problems with intimacy later in love relationships. Although human behavior is complex, the attachment style brought to a love relationship may have an important impact on the success and failure in the long term (Atkinson & Goldberg, 2004).

Some gender differences

Men and women have different perspectives on love. Men tend to be more romantic and may regard love as something mysterious and difficult to understand. Women, on the other hand, are more pragmatic and may believe that their economic security matters as much as passion when developing a close relationship. Women are also more likely to believe that there are many

potential partners in the world, and for that and other evolutionary reasons women are more cautious in making a final decision.

Women invest more into relationships than men and are more comfortable when expressing feelings and being psychologically intimate with their partners. Having better relationship skills can often leave women dissatisfied with male insufficiencies in communication and psychological problem solving. Men tend to think that physical intimacy is sufficient; however, passion is only part of the complex picture that women envision in a relationship. Women place great value on friendship and tend to disclose more of themselves to their male partners and often feel that their male lovers do not respond or care about their feelings and emotional life. Women are more likely to initiate separation and divorce because of these dissatisfactions since the lack of communication produces feelings of emptiness and a concern that the relationship has become sterile and less meaningful.

What about cohabitation: Do changing norms matter?

There is no shame attached to remaining single in the United States or Europe. Changing economies and cultures have increased the average marriage age, and at the same time the proportion of the population who don't marry has also increased. However, research supports the idea that marriage is a buffer against the stresses and adversities of life as married spouses live longer and with greater health. There is a particular health bias in favor of men who benefit somewhat more from marriage than women.

A major change in attitudes toward marriage in the Western world has produced an increasing number of young adults who cohabitate without marriage. Many children are born to such unions (in about 30% of cohabitating relationships) that potentially produce disadvantages for children, who are often confused by being part of split families or being in multiple relationship structures. Most cohabitating relationships last for a brief time, on average, 24 months. Such trial marriages have unknown long-term consequences, although with such a high failure rate, one must wonder about the grieving and the psychological trauma produced in the aftermath. Only about half of cohabitating relationships end in marriage (Strong, DeVault & Cohen, 2005).

A common belief is that cohabitation improves the chances of success in marriage. That, however, appears to be a delusion, as research demonstrates a link between premarital cohabitation and subsequent conflict in marriages and increased divorce rates. Some research shows that 40% of cohabitating couples who marry will divorce within the first ten years of marriage. Perhaps cohabitating couples are at greater risk for divorce since they already have more liberal and ego-centered views of life and relationships. Cohabiting couples tend to be more liberal in social attitudes, are experienced in sexuality, have lower income and have less traditional attitudes toward marriage and religion. These issues may produce tension when a couple is unmarried, leading to the breakup of the relationship and a higher risk for divorce if married (Coontz, 2006).

Nurturing love

Looking for an ideal Prince Charming or Cinderella will almost certainly ensure a life of unrealistic pursuance and no love satisfaction. Love is possible, but life is dynamic and ever changing, and it is how we respond to changes that lead to dysfunction or satisfaction in relationships. Love may help solve some problems such as loneliness, but in truth relationships can produce more difficulties than they solve. It is important to accept that a love relationship is not exclusively a positive experience, but can also, in certain circumstances, bring pain and despair. A precondition for a happy life is to travel the road of reality so people must divorce themselves from the idea of "falling in love". Anything lasting in love is much more likely to be gradual and achieved over time as couples observe the partner in a variety of circumstances and come to admire good judgment and character. Even in intimate love reason must rule the heart, as infatuation is more fantasy than love. As Fromm would say, love is not just a feeling, but a decision.

It is important to remember the importance of encouraging a partner. All people feel the need to be appreciated and loved. Appreciation should especially be expressed when a partner makes an effort to spend quality time and listen to the concerns of the spouse. Doing small favors is an excellent way to express support and affirm of the value of the partner. People should remember that love is also expressed physically, by hugs, kisses and a touch on the shoulder. Our very nature is nurtured by such behavior and our value to the partner is confirmed by physical kindness.

There are times when ending a bad relationship is essential for good mental health and in the hope that a different future might bring some happiness. Living in a loveless relationship produces a variety of negative emotions including depression and low self-esteem. That, in turn, can impact in very practical and negative ways the person's overall adjustment in other relationships and in the workplace. Because of vulnerability, people with low self-esteem often select partners that are not suitable and who will be unable to share long-term affection and love.

Marriage: Love forever?

Since marriage is no longer associated with economic survival or even sexual satisfaction in the Western world, one wonders why people get married. Research shows that people marry for many mixed motives, which can be related to other relationships, insecurity and economic advantage and not necessarily for a love commitment. In conservative families and societies, people believe that marriage makes the relationship more respectable and the extended family feel more secure about the genuineness of the relationship. Other couples marry when they are friends with the additional benefit of regular sexual satisfaction. If marriage is taken seriously, it is obviously a risky challenge in today's world of indifference to commitments. Clearly, the couple must be

able to project their relationship into a distant future with the ability to love the same person, even when life changes drastically in the forthcoming decades.

The choice of marriage is often made for reasons that prove troublesome down the road. Marriage is a bad choice if the love of either partner is not reciprocated. Other people marry not for the life of struggle in the present, but for the unpredictable ideal potential they believe exists in the future. Some feel called to save the partner and believe they can change or rescue him or her from a difficult life situation. It is also a poor choice to marry if the partner is seen as some ideal or role model to be emulated, since such infatuation rarely passes the test of time. Some people marry because they see themselves as being compatible to the partner in significant areas like religion, but they ignore many other important differences such as varying desires for new experiences, travel or education. Clearly, compatibility in philosophy and world outlook does not make up for incompatibility in many other salient domains of married life.

Traditional or egalitarian roles in marriage?

Therefore, with so many pitfalls, is it not a wonder that many relationships still pass the test of time? Add to these pitfalls the changing gender roles that have challenged gender relationships over the past few decades (Larsen & Long, 1988), which is relevant because the moment a person marries their identity changes from being a single person to becoming part of a couple. Expectations about gender roles in marriage are not uniform in any society and often differ if the partner comes from a different ethnic background, or from dissimilar religious groups and cultures. If gender role expectations are not explored fully prior to marriage, they can be a source of friction from the very beginning. A marriage will probably be more lasting to the degree that the partners agree on the roles they take as providers and caretakers in the home.

A natural infatuation is part of many relationships in the early phases where the partner is in love with what is perceived to be the potential of the spouse and dreams of a common future. Soon enough the honeymoon is over, and with the arrival of children, marital satisfaction often diminishes because of the obvious labor and diversion of attention that children require. These days, some couples decide not to have children or they delay having children for reasons of career or other goals. Like all decisions, being childless also has consequences, perhaps in a future when the couple is retired and alone and other families are enjoying the presence of grandchildren.

How will the tasks of the household be divided and will both partners work outside the home in addition to domestic duties? Couples who have an egalitarian outlook have different expectations from those whose partners have traditional views on the gender division of labor. Women in most societies continue to bear an unequal burden in two-paycheck families. Many mothers who work outside the home are overworked and don't feel sufficiently appreciated for what they contribute. Is marital conflict inevitable? It is a rare couple

that has not experienced disagreements, especially given the dramatic social and normative changes related to gender and insecurity in the world. Money often becomes a serious concern, and when there is not enough the deficit can cause constant stress. Regardless of whether money is plentiful or not, the key to resolution of marital stress is making joint decisions about budgets and what material goods are important for the satisfaction of the family (Warner, 2006).

In an area of no small interest, some recent studies have shown that traditional gender roles bring the greatest sexual happiness. When men did more of what was thought feminine household tasks, the couple engaged in less sexual intercourse compared to couples where the man did the tasks thought assigned to males, such as washing the car and taking out the garbage. The greater the man's share of masculine duties, the larger the reported sexual satisfaction by wives (Gottlieb, 2014). At the end of the day, perhaps what matters is the intimacy negotiated by the couple, and for some the traditional gender role brings greatest happiness.

Vignette: We were traditional and then egalitarian

> We started life as a traditional couple. We both believed that the wife was the homemaker and the chief boss in the house. I was tasked with making a career and making enough money so we could flourish. Having fun was important to a balanced life. We took time off nearly every weekend for a day at the beach. Early in the morning, we loaded the kids in the backseat of our large Buick and we would go down Atlantic Boulevard for the 90-minute drive to Huntington Beach (no direct freeways in those days). When the children were small we brought a basinet, and after play we put them there to be out of the sun and rest. We lived life to the fullest. I worked fulltime and went to school fulltime at night. My wife was a fulltime mother. Of course, we were lucky because we lived at a time when a family could live on one good salary and we didn't have to live paycheck to paycheck.
>
> I think we enjoyed our lives as a family. To support that assertion, we have never been able to get rid of our children or grandchildren and they all continue to live within 20 miles of our home. As a family, we went on many journeys. We travelled in the United States and Europe and experienced several memorable years in Australia. After some time, my wife went back to school and soon had a degree in music education. As time passed, we seemed to glide effortlessly into a more egalitarian marriage. I know this is a stumbling block for many, the transition of roles and responsibilities when exiting the early years, but we found it easy. I think it helped that we did not believe that personal fulfillment was the only criterion by which to measure a marriage, but rather that the family as a whole also mattered. Not long ago, we were in a situation where we were asked to identify the head of household. I turned to my wife and asked her who the head of our household was. "You are", she said. I knew better that her role was far more important, but did not gainsay her. I knew I was a lucky man, living a lucky life.

Reality based love relationships

The divorce rate today suggests that many people make bad marital choices. Unequal love commitment between partners is a precursor to frustration and unhappiness. It is also a problem when people look for happiness in the future rather than in the relationship forming in the present, as the hoped-for future may never happen. Unhappiness is sure to follow if attitudes toward the spouse are based on infatuation and a mixture of fantasy and sexual attraction rather than real commitment. Couple immaturity is not compatible with the difficult challenges of life and a marriage built on fantasy is not likely to survive in the struggle for existence that all face.

Falling in love with someone already committed in a relationship or marriage is not a good idea when looking for a lifetime partner. Poaching from another relationship ensures that someone will get hurt and the emotional loss may be spread broadly. Unhappiness is also likely to follow if a person chooses to be in a relationship as a form of defiance because the family does not approve. The story of Romeo and Juliet did not end happily. Rather than illusionary commitments, it is important to have a rational appreciation of the values of the partner. As noted, it is likewise unwise to focus attention during courtship on only the partner's compatible values and behavior and ignore other areas that may, in the long run, produce frustration and anger.

Here are a few more direct questions that a person might ask that are relevant to marital success. Rate the following statements on a scale of 1 to 5, where 1 is disagree strongly, 2 is disagree, 3 is uncertain, 4 is agree and 5 is agree strongly. Is your potential partner also your best friend with whom you can share intimate thoughts? Do you accept that marriage is a long-term commitment? (If not, you can save grief and expense by not marrying.) Do you have a genuine desire to see your partner and the marriage be successful? (If you do, you will behave in ways that support that desire.) Do you find your partner more interesting today than earlier in the relationship? (That would indicate that you are bonding and you are getting to know the real person behind the impression formed earlier in the courtship.) While being similar in social attitudes is not critical in a tolerant relationship, it is important to share common goals in life. Where do you want to be in five or ten years? What about your education plans and economic goals? Will you live in a house that you are buying or spend your resources traveling to foreign lands?

Religions promote the sacredness of marriage and undoubtedly keep many incompatible spouses together in lives of frustration and loneliness. However, incompatibility may diminish if the couple work on goals in life and find compatibility in these aims. For example, mature couples have a responsibility of service toward the larger community. Accepting such a commitment can contribute to the bonding of the couple and with society. The questions listed above represent issues that can contribute to lasting and compatible relationships or to a toxic family life that ends in divorce.

Finally, all couples could ask a few specific questions that directly impact the welfare of the relationship. Is there a sense of trust in the relationship, a feeling each can count on their partner, come what may? Do you feel connected to your partner even when you are not together? Do you feel that your partner is supportive, even when you disagree? Is there empathy between you and your partner? Can you and your partner compromise when you differ about issues? Is it possible for you and your partner to focus on what you disagree on without bringing up more issues from the past that escalates the conflict? Do you celebrate the success you each experience however that is defined? Do you and your partner generally agree on the family economy, how to spend or save your money? Do you have a plan in your marriage to cope with boredom and to plan new activities that rejuvenate the relationship? Is your sexual intimacy satisfying? From the answers to these questions, spouses can get an assessment of their marriage and whether the relationship is in danger and in need of repair.

Communicating about conflict in marriage

Many couples cite communication issues as a major problem in their relationship. With the arrival of children and attending to their needs, time devoted to the spouse will of necessity decrease. Young adulthood is also the time when careers are built and personal relationships are likely impacted by the time and energy required. Conflicts can accumulate in a marriage since it is common and easier to temporarily delay important communications about difficult choices in values or goals. However, repressed conflict is still viable, and sooner or later there must be some attempt at resolution or the couple will experience continuous and corroding damage to the relationship.

Some communication failures in a marriage occur because the couple never acquired basic skills. To be successful in communicating important messages requires partners who are tactful and show mutual concern. Physical violence is one outcome of communication failure and personal dysfunction. Children who learn attachment styles in such relationships are often violent themselves because they have not learned other communication skills for getting attention or for satisfying their wants. Family violence toward women is moderated by cultural attitudes toward females. Other factors that contribute to violence against women include drug abuse, financial conflict and other types of frustration. If abuse starts during dating, the violence will most likely transfer and become a permanent part of marriage. Physical and psychological abuse is not likely to change in such a relationship, since the abusing partner may feel even more entitled by the marriage contract (Duffy and Atwater, 2008).

Jealousy is a seriously disruptive emotion derived from the fear of the loss of exclusive love. That dark emotion affects not only the relationship; since family members may feel impelled to takes sides, the extended family is impacted as well. Jealousy is a threat to relationships and is often caused by real or imagined emotional ties to a rival. However, it is more likely that jealousy is rooted

in personal dysfunction, particularly in people with low self-esteem and self-worth. When a partner feels unworthy of a relationship, they experience threat and fear that their relationship is not exclusive. Jealous people are sensitive and suspicious of other valued relationships, even when these constitute no threat to the marriage.

Jealousy is motivated by a desire to exercise control over the partner by discouraging, limiting or prohibiting contact with friends or the spouse's extended family. Secure individuals who are confident of their self-worth are not likely to have unwarranted fantasies about other relationships from the past or present. However, dysfunctional partners harbor unjustified suspicion even when there is absolutely no objective reason for jealous feelings that cast a pall over the marriage and marital happiness. Research supports the presence of important gender differences, as men typically experience more sexual jealousy and react strongly to sexual infidelity, whereas women are more concerned and react strongly to emotional infidelity. Most researchers interpret these differences as being evolutionary in origin and derived from the effect of infidelity on reproduction and survival of offspring.

Spousal emotional or physical abuse is an important cause for ending a relationship. The abuse of spouses occurs in all cultures and contributes to emotionally scarred lives and physical battery that at times can end in death. In recent years, society has responded to this large and dark page in gender relationships by the creation of women's shelters, counseling for victims of battery and enforceable laws to punish offenders. Many women unfortunately accept battery as just being part of men's nature, but if that was the case, all men would offend and be physically violent. In fact, there is no hard-wired genetic basis for abusing women. Physical violence is often learned from parental behavior and abuse. Therefore, it stands to reason that violence can also be unlearned and controlled. When women stay in these relationships, it is for many complex reasons, including the belief that they deserve a life of abuse and that there are few other options, particularly when children are involved. As a result of the emotional and physical abuse, women must often give up other supportive relationships, which increases their isolation and dependence on the violent spouse.

Over time, people change in many psychological dimensions, and after 30 or 40 years of marriage may find themselves married to a physiologically but also a psychologically different person. However, despite these life-driven changes, if a couple looks deeply, it is always possible to discern the reasons they fell in love in the first place, and each can still find the core personality of the partner that was attractive then and remains so today. Nevertheless, in the new world where commitments are often shallow, divorce or separation is frequently a choice. Divorce rates are very high in the United States and Western Europe, and perhaps the rest of the world is not far behind. It is thought that up to 50% of all marriages end in failure, and many also divorce in second or third marriages. We live in a world of constant change that creates stress and insecurity in relationships. These social dysfunctions cannot be separated from

family life since we all are forced to endure the consequences of economic frustrations and insecurity.

Further, many social factors have contributed to marital instability. For example, norms governing sexual behavior have been relaxed since the 1960s, and sexual and emotional jealousy impacts many relationships. The growing use of drugs to escape from personal and social realities also impacts the maturity required to master the difficulties of life. Unfortunately, despite the popularity of divorce as a solution to couple dysfunction, it produces many negative consequences for partners and families. Men in particular suffer after divorce from lack of emotional support. Although divorce action is more often initiated by women, men suffer more immediate emotional loss. Women and children are negatively impacted in the long run from reduced opportunities associated with lower income. In divorce, there are often conflicts of loyalties with traumatic consequences for children who love both parents. A significant number of children from divorced families have subsequent emotional or broader psychological problems. Of course, it must be acknowledged that there are times when a relationship is bankrupt and it is time to say goodbye (Hetherington & Kelly, 2003).

The desire for a permanent relationship does not end with divorce. The large majority of divorced people (perhaps 70–80%) remarry. Unfortunately, the results are not better for remarriage as the divorce rate is higher than for first marriages and typically remarriage lasts about as long as the first (about eight to nine years). One outcome of remarriage is that parents have to cope with what today is called blended families which involve children from both partners. Blended families often involve conflicting loyalties and it is not easy to keep these relationships functional over the long run without experiencing some conflict. A different kind of blended family in the fluid world we live in today is where partners from different cultures or religions marry with diverse cultural gender expectations and practices. Many of these issues, however, can be mediated by open communication and tolerance (Kreider, 2005).

Some pitfalls and affirmative behaviors for a successful marriage

There are many practical considerations that a couple should discuss prior to marriage. Research shows that age of partners at the time of marriage matters to marital success and happiness, and marriages that are contracted when the couple is very young have high divorce rates. It is likely that the very young get married for reasons of infatuation and not with a sure knowledge of the character of the spouse. Young married people might live a self-fulfilling prophecy or with the common thought that if things don't work out, they can always divorce. Also, the young may not have the maturity or formed their own core personality to be able to make sound judgments about long-lasting commitments. Impulsivity is a recipe for marital disaster, as it does not form the basis for any lasting commitment.

As we noted in the above discussion, it is also important to remember that our interaction patterns with partners and thoughts about marriage often come from observing our parents. Children who see fighting or emotional abuse in the home may often unwittingly practice these behaviors in their own relationships. However, parental modeling of dysfunctional relationships does not condemn partners to live the same way. In all relationships, partners have an individual volition, but being aware of early family influences can help a couple guard against toxic behaviors that destroy relationships.

Personality makes a big difference in happiness, both to the individual and in relationships. For a variety of reasons, many people suffer from personality disorders that affect their emotional behavior and connections with others. It takes time to see whether a potential partner's emotional shortcomings are of sufficient severity to cause chronic problems in a relationship and whether it will contribute to divorce or lifelong marital dissatisfaction. Defensiveness leads to an unhealthy repression of feelings and has a negative impact on intimacy, which can be destructive in a marriage.

The research literature offers some good advice for those who want lasting marriages. Similarity is again an important guiding principle for liking and staying together, as it is rare to find individuals who don't need the reaffirmation of similar beliefs and values. Some values have greater currency than others, and of particular importance in a marriage are similarity of beliefs about childrearing practices. Similar religious and ideological beliefs also reaffirm each partner and it takes great personal moral strength for love to flourish in the absence of such similarity of worldviews. Fundamental to marital happiness are also similar beliefs about what constitutes moral behavior and ethical conduct.

Bonding is the result of sharing the journey of life together. Couples that enjoy mutual activities are happier. Recreation can be found by participating in activities that the couple found enjoyable during courtship, but also by staying alert for new and novel aims to refresh life and the relationship. One key to lasting happiness is the flexibility to accept any changes in the spouse that occur. Some life experiences produce significant changes in marriage and it is also inevitable that couples growing older together will perhaps have discordant interests and abilities. Profound loss such as traumatic illness or the loss of career may create stress that affects many marriages. However, spousal commitment makes a difference, as partners can find meaning and resolution in the face of adversities. Change in life conditions requires patience in order to find a new basis for building happiness, and putting the spouse first is one important step.

Research shows a simple method for evaluating your marriage and whether you will divorce. Gottman, Gottman and DeClaire (2007) found that the longevity of a marriage is determined by the ratio of positive versus negative interactions with your partner. All marriages experience frustration and disappointments, but how these are conveyed and how often matters. Basically, longevity of marriage is ensured if you are five times nicer in your interactions than negative and hostile.

Being open with important feelings is the best way to preserve a marriage and foster growth. Research shows that spouses who complain about each other from the beginning of a marriage are more likely to stay married than those who repress such feelings. When open with each other, even negative feelings are not a threat to love and the relationship. Even anger bluntly expressed is much healthier than keeping feelings repressed, since spouses are likely to explode after an extended period of resentment. As long as each spouse remembers the five-to-one ratio of positive to negative expressions in a marriage, even anger expressed is healthier than a repressed relationship. In happy marriages, both men and women can freely express feelings knowing that the partner is supportive. Whether a couple stays together has a lot to do with the memory of the mutual story of the relationship, the origin story of meeting each other and what followed. How warmly that story is remembered can predict divorce or marital happiness with great accuracy.

Although it is important to release feelings, it is also vital not to let emotions rule marital interactions. To find a proper balance in managing feelings is really the key to happiness so people don't overreact to events that have little or no meaning. This advice is often heard: calm down, count to ten, walk away from the dispute until it is possible to rationally evaluate the conflict. When taking part in a calming process, it is possible to convey empathy to the partner and express that although one may not agree, one is trying to understand the other's point of view. Needless to say, when after consideration a partner is in the wrong, it is important to apologize and make the situation right.

In summary, to have a lasting marriage or relationship, do not marry in early youth. Modeling of marital relations are important to children's adjustment and a couple are more likely have an enduring relationship if each came from a stable two-parent home and dated for a long time before marriage or at least long enough to overcome infatuation. Also, education matters to marital success with chances for happy relationships increasing with good and similar levels of education. Having a good job reduces many of the economic frustrations that can be toxic in a marriage, such as not having sufficient income to establish a family or participate in growth activities. Similarity in faith and being approximately of the same age are also factors, as the spouses can relate better to similar narratives about life. Finally, research shows that the religiously committed who don't cohabit or become pregnant before marriage are more likely to experience marital bliss. These latter results emerge from how marriage is conceptualized as a permanent commitment, although both the religious and atheists are capable of such commitment. So at the end of the day, happiness comes down to making informed decisions and making a strong commitment.

Summary reflections

Chapter 6 builds on previous discussions by evaluating the relationships in friendships, becoming lovers and in marriage as a permanent commitment. Research strongly supports the importance of similarity in background characteristics as

a basis for attraction and interpersonal comfort. Physical attractiveness is also a factor, especially in early romantic relationships. Typically, people choose friends that are similar to them and agree about what is important in life, and as time passes, the friendship circle becomes even more similar in values. Gender differences show, as noted earlier, that women are more willing to self-disclose and for that reason have more close friends. Men associate friendship with activities and tend to look for solutions to relationship problems and are dissatisfied with empathetic listening. During a person's younger years, cross-gender friendships are difficult to sustain since sexual attraction is a ubiquitous factor. Still, there is much useful information to be extracted from friendships between men and women. On the whole, women are better at establishing and nurturing cross-gender friendships.

At some point, friends may move on and become lovers. The basic human characteristics of mutual attraction, emotional maturity and dependability are valued by both genders when establishing loving relationships. Women take a longer look at the financial capability of men to earn an income, which is based on the female hardwired evolutionary desire to have children in a healthy environment. Men are evolutionary short-sighted, as they are primarily influenced by the physical attractiveness of women, which is a signal of health and fertility. Love is present when the security and development of the partner is of equal importance to concerns for the self. Love creates perseverance in relationships, and by developing maturity, partners understand that life will test the mettle of all. Novelty, exclusivity of love and satisfying sexual behavior are major components in lasting passionate relationships, and they are important in keeping a relationship fresh and hopeful for the long run. Women are better at relationship skills and they are often dissatisfied with male insufficiency and inadequate communication. Women place great value on friendship in a relationship and the ability to share feelings and emotions.

Cohabitation without marriage has almost become the norm in the US and Western Europe. The prevalence of these relationships should be measured against the research findings that show that marriage is a buffer against the stress and adversities of life. Men benefit more from marriage than women and live longer when married. Today, about 30% of children born in the United States are born to cohabitating unions. Unfortunately, the success rate for such trial marriages is low and most do not last long. The breakup of cohabitating unions can be expected to cause trauma and grief and decrease the level of trust necessary for lasting relationships. In fact, the experience of previous cohabitation failures reaches into new marriages and causes subsequent conflict and divorce. Reason must rule even passionate love because all love involves ethical decisions and not just feelings.

Disillusionment in marriages is often caused by inadequate premarital exploration and knowledge of the character of the spouse. Some immature people marry not for what is real and now, but for illusionary dreams of what might happen in the future. Often, the attraction of a potential partner is based on similarity of religion to the exclusion of many other important differences. In

a world of changing gender roles, it is a matter of importance whether spouses have similar views on traditional or egalitarian relationships. Having children will inevitably change a relationship as they divert attention and energy away from the other partner. On the other hand, not having children can produce loneliness in old age. When women do double duty in the home and at work, they often feel their efforts are not appreciated, an assessment that is a threat to the relationship over the long run.

Family conflict is inevitable but most couples learn to resolve issues in non-violent ways. Violence toward women is sadly acceptable in some societies and moderated by cultural attitudes toward women and beliefs about gender roles. Social frustrations are often precursors to violence in the family, especially if associated with drug abuse. The Great Recession also created havoc and insecurity in the wake of large unemployment and lost retirement hopes. Jealousy is a common reason for violence toward women, which is often caused by male paranoia of losing exclusive love and a desire for control and dominance. Jealous feelings are especially likely to occur in dysfunctional people with low self-esteem who feel threatened by a potential competitor for the exclusive affection of the partner. The display of such feelings during courtship should be a warning to not make a permanent relationship that could end in violence. Women also feel jealousy, but worry more about the loss of emotional fidelity.

The divorce rates today suggest that the easy path is often chosen, and when couples grow apart, they separate rather than work out new adjustments in communication. Divorce is not cost-free, and men suffer more in the immediate aftermath. However, women and children also suffer in having lower income and reduced opportunities in life. Most divorced people remarry, but generally not with better results. An outcome of the frequency of divorce are so-called blended families where the partners bring together children from other relationships. These families can experience unique problems of multiple loyalties. Finally, in overcoming obstacles to happy relationships, the most important predictor of a happy marriage is the ratio of positive to negative interactions with a spouse. If the ratio is five to one in favor of positive encounters, the longevity of a marriage is on solid footing.

7 Stress and illness

Maladaptation or coping rationally with adversity

Only dead people experience no stress. Struggling with personal problems is an integral part of life as we adjust to challenges throughout the human journey. Perceptions and cognitive appraisals of stressors play a determining role in what is considered stressful and that varies between people. This chapter will discuss the long-established relationship between chronic stress and psychosomatic illness, as well as examine the effects of stress on the immune system and the long-term consequences that create serious illness. The relationship of personality traits, the work environment and the broader socio-economic conditions to stress is then outlined. As we shall see, stress is part of the very fabric of life and cannot be avoided.

However, not all stress is negative, and to live a life without stress or problems is not only unrealistic but would be a boring life without challenges. When life is faced with courage, and when people don't run away from problems, the stress that has negative consequences on health can be reduced and ameliorated. All significant life events cause stress, whether it is moving a family to a new location or experiencing the death of a loved person. Therefore, seeking a stress-free life is neither possible nor reasonable. Nevertheless, people can do much to alleviate stress by taking resolute steps, which will be discussed toward the end of the chapter.

However, stress is increasing in the world. Social trust that is a foundation of a just society decreased during the last half of the twentieth and beginning of the twenty-first centuries. Consequences can be observed broadly in society and in individual lives. For example, about 50% of all households are now led by single mothers (mostly) and fathers. That is not unrelated to the deterioration of children's health and well-being. Mental health reflects this increase in stress and has come to the point that more than half of the US population will suffer from some mental illness in their lifetime. We can observe a general crisis of morality as empathy is decreasing. Self-regulation of negative feelings is evaporating in the presence of anything goes in cyberspace and the ease of hiding behind anonymity on the internet. It is strange to acknowledge that, for Darwin, moral agency was the most potent force in evolution expressed in the human species by pervasive desires to help one another. At this point in history, we are electing leaders who express with pride negativity toward all possible 'others' (Heckman, 2008; Klinenberg, 2012).

Acute and chronic stress

Any event that can cause stress depends on the appraisal and interpretation of the situation and the resources available to cope. Family members are frequently a source of stress caused by conflicting goals, values and personality traits. Aging often produces negative health conditions and an increased awareness of mortality, and depending on individual appraisals, declining well-being can cause worry and stress. People in modern individualistic competitive economies feel constant stress and social insecurities are linked to negative consequences for health. In the aftermath of the Great Recession, many people still have serious financial problems and billions of people worldwide live with absolute poverty. An added dimension of insecurity occurred during the recession when many people in Western societies lost their retirement income that was spent in order to survive. People who live in countries without a social network of support foresee insecurity and struggle in old age.

Students also experience stress as they fret over grades and timely responses to homework demands. Youth is also a time for making important decisions in dating relationships, and for most young people, making long-term commitments in marriage. Family problems are stressful whether caused by illness, employment insecurity or the sure knowledge that one can never protect loved ones from all possible harm. However, people can utilize thought processes to either diminish (the optimist) or increase (the pessimist) the trauma felt when things are not going right or as hoped and expected.

Stress is experienced when a threat is perceived in a situation and the individual is required to adjust to changing circumstances. Some life events can be anticipated: for example, graduation from university and marriage. However, other changes are unexpected and require immediate adjustment and acceptance of new conditions of living. Stress can be caused by a variety of challenging life events including failure at job applications, automobile accidents or by unanticipated interpersonal conflict. For many people, stress is experienced from the simple accumulation of daily frustrations and hassles. In individualistic societies, people feel under pressure to achieve, and at the same time, experience frequent frustrations by not reaching important self-relevant goals. While each of these daily frustrations is not traumatic in and of themselves, they nevertheless contribute to the accumulation of stress over time. Different small and daily stressors can add up and can eventually produce psychosomatic responses and dysfunction. Students, for example, experience test anxiety on the road to graduation and employees often undergo periodic performance evaluations that are important for their future with the company. Many known hassles, along with other conditions of life, contribute to stress (Lazarus, 2006).

Insomnia and not getting sufficient sleep is a concern of many people in our competitive world. With a focus on competition and achievement, people often feel time pressure that they do not have enough hours each day to get their work done or to perform the other necessary activities related to daily

living. Not getting enough sleep produces similar reactions in the body as people experiencing severe stress. People deprived of sleep tend to be oversensitive to perceived threats, even in cases where the threat has no basis. In both cases, the body reacts with a flight or fight response whether from stress or a lack of sleep. When sleeplessness is prolonged, it can produce chronic inflammation that is thought to be a driver of cognitive decline, heart disease, diabetes and some cancers. Some researchers believe sleep deprived inflammation to be a causal factor in chronic pain (Park, 2017).

Another source of stress is being employed in a job that is perceived to be dead-end and from which the worker gets little satisfaction. Furthermore, most people in the world have at some point not only worried about their own health, but also the health of loved ones, which together contributes to a stressful existence. Economic threat is present for many who worry about finances and economic insecurity unless they are born into a wealthy family in the top 1–5% socio-economic layer.

Conflict is also stressful and occurs when people have to make choices between options that are not compatible. An approach-approach conflict is where people must choose between two choices that are both attractive and they are, therefore, pulled in different directions and feel conflicted. A person might like both steak and chicken but not be able to eat both. When people choose one option they have to forego the other in the approach-approach conflict. A more serious conflict is a choice between two partners for marriage. In most societies, if a man chooses one woman for marriage, the relationship with any other woman must be abandoned. In avoidance-avoidance conflict, the choice is between two unattractive possibilities and the individual would like to avoid both. For example, a person may have the choice of showing up late for a job interview or driving too fast and taking the chance of getting a fine. When neither event produces a happy outcome, procrastination is a common way to delay decision. Other conflicts are of the approach-avoidance types. For example, a person might be attracted to another individual and want marriage. At the same time, he or she dreads the responsibilities that come with a long-lasting relationship. While the partners are attracted to each other and want a permanent relationship, at the same time they want to avoid the responsibilities and the effort it takes to look after a family.

In the course of living, all people experience a variety of stressful events. In the modern competitive world, stress accumulates from being required to participate in work that demands a high level of psychological preparedness. Many people who work in the helping professions experience "burnout" characterized by both physical and emotional exhaustion. In the aftermath of "burnout" the individual will complain of chronic fatigue and experience low levels of energy. Scientists who concentrate large amounts of energy on difficult and complex problems may also experience an overload and eventually feel discouragement in work unless they have sufficient leisure time to allow for replenishment of energy and psychological balance.

Selye (1983) studied stress over several decades and noted that chronic stress typically passes through three stages. Different stressors can produce very similar physiological responses that in turn follow a predictable pattern when impacting health. If stress is chronic, it might be associated with serious psychological symptoms including a decreased interest in the world and a loss of appetite. The general adaptation syndrome consists of the three related stages of alarm, resistance and exhaustion. In the initial alarm stage, the body rapidly mobilizes to face the perceived threat. The endocrine system secretes hormones that activate the neuroendocrine-immune responses and the sympathetic nervous system. These activations prepare the individual to respond rapidly as the adrenal glands also secrete hormones that in turn produce physiological changes in the body, which includes increased blood pressure, heart rates and heightened perceptual focus. In essence, the alarm stage prepares the individual to either fight or flee from the perceived threat. It stands to reason that if a person is in a state of constant alarm, the physiological consequences for the immune system and heart health will be severe.

The alarm reaction is followed by the stage of resistance where the body adapts to the continual presence of stressful conditions. In the resistance stage, the glands continue to secrete hormones that help the organism adapt to the stressor, for example, by reducing inflammation in the aftermath of an injury or to help the immune system fight viral and bacterial infections. However, if the stress remains chronic, the individual will eventually move into the stage of exhaustion where adaptability ceases and the individual is at increased risk for illness. A number of small events or one excessive trauma can produce very similar physiological responses that will eventually damage the body at probably the weakest physiological point where the individual is most vulnerable. For example, in families with a history of heart disease, that organ may be the weakest link, in other families, the immune system may genetically be the weakest link and when attacked by chronic stress, it may allow cancer or other serious reactions to occur.

Vignette: Encounter with my ladder

I have experienced acute stress a number of times over the years. There was the time when I was cutting the top of the arborvitae that surrounded our property. As I stood at the top of the ladder, I remember thinking this was not safe but I would have time to jump if the ladder falls. Guess what? I didn't have time to take any corrective actions when I fell from a height of four meters onto the crossbars of the ladder that in turn broke five ribs, squashed my spleen and punctured my lung. As I lay on the ground groaning in pain, I was unable to communicate, although I hoped the neighbor would see me and call for help. After what felt like an eternity, but was probably ten minutes, they looked out of their window and saw me sprawled on the ground. The ambulance arrived shortly thereafter. I spent weeks in the hospital and in physical therapy. Gradually my body healed.

The stress I experienced was immediate and acute. Don't believe people who say you have time to weigh the situation and evaluate a more prudent course once you stand at the top of the ladder without a parachute.

So it was painful and, yes, scary. On the other hand, I learned what I meant to my family and grandchildren. They would come by and offer little tokens of love to remind me of happy times. At one point, I was hallucinating from the mass quantities of opiates and I looked at a painting on the wall. It became alive and the objects in it moved as I looked at it. I found that experience very interesting, and I told my granddaughter what was happening. She almost cracked up with laughter but maintained decorum. Despite my condition, I knew what reality was and I explained to her that the picture was moving and that I should know what is real, since I am a psychologist. My granddaughter and the family have reminded me many times since of my capacity to hallucinate so I don't come to believe too strongly in anything unimportant. It was a rather irrational appraisal of the situation.

Gender and stress

The literature discusses the varying responses of men and women to stress. Men's behavior is governed more by testosterone, and hence when faced with a threat they typically respond with "fight or flee" behavior. On the other hand, women, when faced with stressful situations, often respond with "tend and befriend" behaviors that are characterized by seeking social support and by overall nurturing behavior. Women, when experiencing negative emotions and feeling overloaded with stress, find that talking with friends or family is a healthy release. Men, on the other hand, are more focused and withdraw from social interactions as they seek more solitary solutions.

These different gender coping styles can be a source of additional conflict between the genders and added stress. When men are faced with stressful conditions they often don't feel the need or desire to talk since they are searching for solutions. Women want to be supportive and their natural response is to talk over the issues with trusted confidants. The apparent withdrawal behavior by men runs counter to the coping styles of women and can contribute to conflict. If the two genders have such widely different coping styles, it is understandable that misunderstandings occur when a couple is facing stressful conditions. The gender differences in coping and subsequent misunderstandings have been shown to add substantial more stress to an already difficult situation (Taylor, 2004).

Dysfunctional coping: Relying on defense mechanisms and neuroticism

Stressful situations create demands on our attention and behavior. Coping refers to the ability to make good problem-solving decisions required by stressful demands. Inadequate coping behaviors are dysfunctional and create more

problems and difficulties. Unfortunately, stressful conditions also encourage escapist maladaptation and many people become addicted to tobacco, alcohol or harder drugs. When people become dependent on chemical solutions and self-medicate, it usually leads to ever-increasing physiological and psychological dependency and negatively affects so many other areas of life. An alcoholic lifestyle is an example of dysfunctional coping. Alcoholics often have problems in relationships and difficulties in keeping a job, which is essential to survival and functioning in modern society.

Escape through drugs

A great deal of research has been carried out on chemical dependency that today impacts large proportions of the population in most countries. Chemical dependency is dysfunctional, and for people who are addicted, there is no solution other than abstention. Addicts never start using drugs believing that they will become dependent. However, physiological habituation requires that the addict obtains ever larger amounts of drugs to provide the same level of highs or lows. Using increasingly higher levels of any drug is like playing Russian roulette with life. Regardless of the stress experienced, it is unwise to start drug consumption not counseled by a doctor, since the outcome might become a monkey on the addict's back and not easy to dislodge. Tobacco claims millions of lives in the United States alone; 500,000 people die each year from illness caused by or related to tobacco use. Campaigns against the use of tobacco in Europe and North America, and laws requiring employers to keep the workplace free of tobacco smoke have reduced the percentage of adults who smoke. Unfortunately, the tobacco companies have renewed their deadly advertisement campaign in societies where people have not confronted the danger of tobacco to health, for example, in places such as Southeast Asia and Eastern Europe. Would any person start smoking if they were informed and knew with some certainty that it would bring an early and painful death?

Escape through the use of psychological defenses and neurosis

Feelings of insecurity produce a natural desire to escape from threat and many people become drug addicts as a way of modifying unpleasant psychological reality. Along with drug use, people who experience threat and anxiety also seek psychological means of escape by distorting unpleasant reality through the use of psychological defense mechanisms. Psychoanalysis made a signal contribution to psychology through its research and understanding of defense mechanisms that all people use to greater or lesser extents. The main function of defense mechanisms is to distort or deny reality, thereby making unpleasant facts of life more acceptable.

Denial is a mechanism where the individual simply denies or refuses to acknowledge a potential or real threat to well-being. The terminally ill patient

may simply refuse to acknowledge the seriousness of the disease that will bring an end to life, but the denial does not change the outcome. Likewise, the individual who experiences anxiety from having unwanted or dangerous thoughts may try to repress these unwelcome ideas and refuse to think about the situation. The unconscious hope is that the threat will disappear. However, refusal to allow unpleasant thoughts admittance to the conscious mind does not modify the real situation.

Another very frequently used defense mechanism is rationalization. This is where people offer reasonable and rational arguments that a given behavior is acceptable. However, rationalizations prove in the end to be false explanations used in an attempt to convince the self and others that we live with propriety. For example, a person might say that the reason he cheats on income taxes is that all people do when the real and more truthful explanation is that he wants to keep more of his money.

Have you ever met people who act childishly when not getting their way? That is referred to as regression, where the individual returns to behavior typical of and functional at an earlier stage in development. Some adults throw temper tantrums because that was once a successful strategy to get what they wanted from their parents. Other defense mechanisms include projection where people attribute to others what they find unacceptable in themselves. Decision makers in the United States might say China is aggressive, when the true reality is that it is the United States that undertakes expansionism and hostility.

Reaction formation is another defense mechanism where people try to control unacceptable behavior and thoughts by acting out exactly the opposite behavior. The hostess at a party dislikes one of her guests, but goes out of her way to make nice comments about her dress and appearance. Displacement is where the target of negative feelings is too powerful and people therefore find a substitute target to vent anger. For example, most people feel that they can't talk back assertively to the boss because he or she has the power to fire them, so the worker displaces the anger felt in the job toward an innocent member of the family. Finally, in the sublimation defense mechanism, people redirect socially unacceptable desires into socially valued goals. For example, a person with strong but socially unacceptable sexual desires may sublimate by becoming a great musician or engaging in other creative activities. To some degree, all people use these defensive distortions to get through and cope with life and to avoid the anxiety that psychological reality creates (Weiten, Lloyd, Dunn & Hammer, 2009).

The power of cognitive appraisal

Stress is part of the common human experience. People can manage some stress-related issues in life, but there are many common sources of stress over which people have little or no control. Cultural values also determine the means of coping in some cases. For example, collectivistic societies make it

difficult to confront authority because of the cultural values and respect toward social hierarchies. Being born into a poor family or in a dogmatic culture may also limit objective choices. Nevertheless, people have the power of cognitive appraisal and can decide whether the glass is half full or half empty. Through cognitive appraisal, people can evaluate stress and decide whether the threat should be seen as a challenge or as a cause for anxiety.

In some situations, it is possible to change conditions in the environment that is causing stress. A person can leave a relationship that is dysfunctional. If relationships in a job are toxic, a worker can in some cases find other employment or otherwise change the situation that causes stress. For example, if an employee is asked to work too many hours, the worker might be motivated to find another situation that allows for more balance in life and one that values family activities and leisure. Finally, it is important to remember that it is not situations or conditions that cause stress but our attitudes and cognitive appraisals.

Vignette: Positive appraisal when we are solidly anchored in a benign world

My mother loved me; I was the most fortunate of boys. Soon after my birth, my mother returned to work and then I was placed in a nursery to play and be socialized. Socializing me was something my mother took seriously, and when I reached older childhood, it meant taking dancing lessons. I really didn't mind that at all as even then being with girls was very pleasant to my thinking. However, I vividly remember the first day in nursery school. When my mother left me there I thought the world would end, and my cries at her betrayal followed her as she left me with strangers. I can still see her as she left on her bicycle; I probably thought the separation was permanent. Actually, the young nursery school ladies who looked after me were all very nice and so I learned to behave. Every day we had to take a nap which was incomprehensible to me as it was way more fun to play and run. They must have liked me though, since one day I came home and told my mom, "Miss so-and-so told me I had a sweet mouth," a story which was frequently passed around approvingly by the ladies in the family. At that time in my life, there were three primary women who positively influenced me from childhood onward: my mother, of course, but then I also had a nanny who was my mother's youngest sister and my dear godmother, my father's sister, who was present at my birth. My nanny enjoyed teaching me songs and claimed that at age two or three I had learned the words of a number of songs and in her mind, I performed so well that I should be singing for the National Radio. Yes, you are right, I never believed it either. But the story was also endorsed by my mother and godmother, and they could not tell a lie.

I had no complaints in early childhood … well, only one. Since my parents had a son on the first try, they wanted me to be a girl. I think they lived long with those regrets and would have changed the gender

outcome if only possible. There was one day when I was being dressed (so very early childhood) that stands out in my mind. My mother tried to put girls' stockings on me and I had an apoplexy of anger and what must have been a hardwired rejection. I protested so loudly and long that my mother gave up and allowed me to be the boy I was born. There really were no other gender-changing events following that, but I remember that particular day many decades later.

When I was very small, everything was free and for the asking. I think when I was three or four, I became acquainted with a very sweet lady who took a daily walk along our street. She lived in one of the large villas across the street and I don't remember how the robberies began. However, it seemed that every day I was on the lookout for the lady and when she started walking down the street, I would cross over and approach her. "Could I please have a nickel?" I would ask. The lady looked at me kindly, opened her purse and searched the coins and usually found a quarter. She would hand it to me and smile as if I had done her a big favor. I came to think that in life you just had to ask. Later, I got bolder when a fellow aspiring criminal who was a little older and more experienced than I told me that you could get cakes for free at the neighbourhood bakery. All you had to say was "it's for my mother", and then the lady would give it to you. So, I proceeded in following these directions and my friend went with me for support. It worked totally as planned and we proceeded across the street to the bandstand with this huge five-layer cake with whipped cream and devoured the cake across a lazy afternoon. Not much appetite that night. We managed to get away with a few more capers like that, until my mother came to pay the bill. It did not help my rehabilitation that my parents laughed heartily and thought it was very clever of me. "That boy will go far", I heard them whisper.

Stress and illness

Stress impacts well-being and health in many ways. Some researchers have estimated that up to 90% of all disease is affected by stress. Stress also has an impact on work habits and is related to higher absenteeism rates and turnover. Many workers looking for new jobs do so because of stress. Therefore, if a person feels the physical symptoms of stress discussed above it is time to take some action to improve the conditions of life or reorganize thinking (appraisal) about what causes the feelings of stress.

There are many physical manifestations of stress and headaches are among the most common. However, many other physiological reactions can also be linked to stress including asthma, the common cold, colitis, allergies, fatigue, hypertension and rapid heart rates. All in all, the effect of these stress reactions is to make the body more vulnerable to a variety of illnesses. Stress has been found to weaken the immune system, have a negative impact on the cardiovascular system and contribute to the development of cancer (Duffy & Atwater, 2008; Steptoe & Ayers, 2005).

The immune system, cardiovascular illness and cancer

With continuous stress, the victim eventually reaches the exhaustion stage of the adaptation syndrome and the immune system is compromised. The inherited immune system is essential to well-being since it functions to detect many harmful substances including viruses, bacteria or emerging tumors and subsequently fights these with white blood cells. Research has now documented the relationship of various psychological factors to the immune system and illness (Dantzer, 2004).

Major stress has been related to whether a person experiences frequent illnesses, such as the common cold. Other evidence suggests that the immune system performs poorly after either major stress events or chronic long-term stress. Research has also documented that acute stress, such as that experienced during the sudden loss of a close relative, can negatively impact the immune system, and that long-lasting chronic stress affects the body's ability to fight back in a variety of illnesses. On the other hand, research also shows that positive psychological factors like supportive relationships produce higher levels of natural killer white blood cells that attack cancer. Although there is still much research needed in this area, it would also appear that stress can facilitate the processes that lead to illness, for example, by activating dormant viruses linked to serious disease. Since people are organic beings, it should not be surprising that psychologically stressful experiences have a negative impact on well-being and health (Farag, Van Desuen, Fehniger & Caliguiri, 2003; Reiche, Nunes & Morimoto, 2004).

Recent evidence also demonstrates a relationship between stress and cardiovascular disease. Some research has suggested that the drastic increase in epinephrine that is associated with the progress of the general adaptation syndrome produces more rapid blood clotting that, in turn, is a factor in causing heart attacks (Kario, McEwen & Pickering, 2003). Chronic stress is related to high blood pressure and shorter lifespans by promoting the physiological changes that lead to disease. Blood pressure, on the other hand, can be lowered by happy marriages, again demonstrating the importance of supportive relationships to well-being. An important factor is the lifestyle adopted in response to stress. People who live stressful lives typically neglect ordinary rules of healthy living, such as eating a proper diet or participating in daily exercise. As noted earlier, the lifestyle of stressed people is unfortunately often escapist as people abuse alcohol, eat fast food to excess, smoke tobacco or use other drugs that undermine health (Kario, McEwen & Pickering, 2003).

Most people would think of cancer as a strictly malevolent response of the body. However, recent research suggests that quality of life matters in cancer and that acute stress has been linked to the inability of the body to suppress the disease. It is important to remember that all activities of a person, whether psychological or physiological, have concomitant consequences.

People cannot hope for a stress-free existence, but should recognize both the usefulness of moderate stress leading to achievement and also dysfunctional

stress that leads to poor health and early death. There are environmental conditions of war and poverty that the individual cannot escape. In these dire situations, people have only their appraisals of the situation to rely on. Even under extreme conditions, Frankl found meaning in the concentration camp by offering service to others (Heffner, Loving, Robles & Kiecolt-Glaser, 2003).

Common sources of stress: Economic issues, gender issues and cultural adjustment

Stress can be increased or decreased by a number of socio-economic factors, by personality types that affect coping, by traits such as hardiness, by gender and by cultural values. Central to the experiencing of stress, is the feeling and perception of lack of control and the common belief that large unmodifiable forces determine outcomes in life. In recent times, capitalism has undergone great shifts and produced changes in the pursuit of greater profits, which in the United States and Western Europe, has resulted in the outsourcing of well paid jobs to countries that pay starvation wages. The pursuit of ever lower wages has caused entire industries to be eliminated in the West. The focus on the total rationalization of the workplace has produced high chronic unemployment and a shift from manufacturing to lower paid service-related work.

The Great Recession cost jobs and produced economic insecurity for millions of workers. In current times, compared to previous periods, workers face increasing demands in the workplace and have less autonomy and control over working conditions. The combination of low control with high demands is very stressful. Workers in industrialized countries are working harder and longer than previous generations in exchange for the bad bargain of less job security and lower compensation.

The economic greed that motivated the destruction of labor unions in the West caused the outsourcing of jobs overseas, and other management policies have caused a great deal of worker stress. The accumulated stress from poor work conditions also affects the health and well-being of the worker's family. For example, when stressful conditions cannot be solved on the job, the frustrated worker often takes the anger home, causing family conflict and disruption. The high divorce rate today must, at least in part, be placed at the door of economic insecurity created by the prevalent economic system (Bowes, 2005; Warr, 2005).

Poverty pervades the globalized world, with increasing evidence that the top 1–5% of the population control the largest proportion of wealth generated by billions of workers from globalization. Today, workers in many societies have lost the protection and advocacy of unions and, as noted, have seen their jobs outsourced to cheap wage countries. Immigrants and single heads of households are particularly vulnerable to living in poverty. Poverty adds stress to life since it is often associated with appalling living conditions, family instability, violence and criminality. The poor have little power, and in the United States they are blocked from the health and medical resources that can prolong

life and are essential to well-being. Associated with poverty are the many problems of drug culture, criminal gangs and pervading insecurity. The poor struggle just to stay alive and do not have the resources to plan for a better future. Such accumulated stress over a lifespan takes a toll on health and longevity.

The preceding discussion presented issues of frustration that are primarily social in origin and not under individual control. Nevertheless, there are adaptive choices that a person can make that can ameliorate frustrations of the powerless and victims of greed and anomie. The economic issues that have created poverty and insecurity in the Western world are caused by individual greed, desire for increased profits and dominance of the world political system. In the early years of capitalism, workers responded by organizing unions and other self-protection organizations such as insurance programs. However, in the past few decades, the union movement in the West is in retreat, but strong unions remain the only alternative for workers who want economic justice. Another area that requires change is the unfairness of treating women as not having the same workplace value as men. Although women have made significant strides in the West in the last few decades, they are still paid less than comparative males. Helping women become more assertive in standing up for their rights will help everyone in society and should enjoy broad support. On the whole the world is experiencing social and economic turbulence that requires creative ideas and social solidarity.

Summary reflections

Chapter 7 discusses the relationship between stress and illness and how to cope with adversity. Stress is the result of real or perceived threats that require changes in either the person or the situation. In individualistic societies, but increasingly all over the world, people work harder to achieve economic goals compared to previous decades. At the same time, many economic conditions are outside individual control and people often experience the frustration of being unable to achieve self-relevant goals. Life requires relationships to solve many sources of stress related to gender, cultural, socio-economic and personality issues. High stress occurs when some of these stressors are combined with low control in the workplace and high workplace demands. Unfortunately, frustrating conditions at work are often brought home causing family conflict. Poverty adds another dimension to stress as poor people have few options or resources. Poor people live in appalling conditions with family instability, violence and criminality. Escaping poverty by migration creates a new set of stressors as the migrant adjusts to a new cultural expectation.

Selye (1983) performed signal work on the general adaptation syndrome that related stress to ill health. Chronic stress leads to exhaustion where adaptability is no longer possible and the individual experiences negative health outcomes. Typically, stress assaults the body at the weakest most vulnerable point, which in some cases produces heart disease, and in other people compromises the immune system or predisposes the victim to cancer.

As we have seen in the preceding chapters, gender matters to outcomes in almost any arena of human activity. Men, being under the influence of testosterone, are more likely to respond to stressors with fight or flee reactions. Being more individualistic, men also tend to search for individual solutions in relative isolation. Women, on the other hand, seek social support and respond to stressors with nurturing behavior. These gender-related responses to stressors can cause conflict, since men's apparent withdrawal when seeking for solitary solutions can be misconstrued by women as disinterest.

Coping is understood as making good decisions in solving problems related to stress. However, many people rely on escape from stressors through drug abuse or psychologically by the excessive use of defense mechanisms. Drug abuse is dysfunctional because the addict needs ever-increasing amounts to obtain the desired effect, and related conflict with family and the law increases stress. Using defense mechanisms excessively to change unpleasant reality is maladaptive and does not alter anything substantial, but it increases dysfunction in relationships. Chronic stress is related to negative outcomes in nearly all illnesses. Research has thoroughly documented the impact of stress on the immune system, health and well-being. However, research also supports the effect of positive relationships on health. Psychological support can support the body's defenses by creating more white blood cells that, for example, can attack cancer. Getting sufficient sleep is essential when coping with stress. On the other hand, stressors increase the levels of epinephrine that negatively affects blood clotting associated with heart attacks. Happy marriages have broad positive effects on health outcomes, for example, by reducing blood pressure and by improving the quality of life in general.

8 Rational or irrational appraisal of the situation

Stress and post-traumatic disorder

It is easy to see that people do not all react the same way to similar stressful events. This writer used to tell his family "90% of what you worry about never comes to pass", but Mark Twain said it better: "I have known a great many troubles, but most of them never happened". More recent research has taken note of these individual differences and suggests that it is not the stressors that cause strain, but how people appraise, perceive and interpret potentially threatening events. For a person to feel stress, a perception of threat requiring adaptation must be brought to awareness, along with an uncomfortable feeling that the resources available are inadequate. Individual differences produce unique reactions to potential threat and anxiety.

Standing in lines waiting for service or sitting in a traffic jam is frustrating for some individuals and that appraisal can, in turn, accumulate along with other daily hassles and produce stress. Other people just accept these same events as part of daily living and learn to cope. For some people job interviews are extremely threatening, because they fear rejection; for other applicants, the potential threat is viewed as a challenge on the road to a better life. Many students are crushed by low grades and feel their future is in jeopardy, whereas other students take a failing grade as an incentive to work harder to accomplish academic goals.

Cognitive appraisal of threat

Cognitive appraisal theory argues that it is not the stressor that creates the damaging physiological changes, but how the potential threat is perceived and interpreted. Initially, according to Lazarus (2006), the individual when faced with threat will try to understand whether the event will cause harm and if there is a possibility for that to continue in the future. In the primary appraisal, a person also decides if adequate resources are available and whether the stressor is an event that can be overcome or modified. After this initial appraisal, the individual typically reviews the resources available and decides how they might be best applied. By viewing the event as a challenge rather than a threat, the search for solutions is directed toward adaptive coping activities rather than fleeing from the situation. For example, a worker with an inadequate performance review

might view that as a challenge and decide to increase efforts in the job, but at the same time might also decide to use contacts and resources to find a better job. Any effective coping response is better than being frozen by the fear of what might happen next or thinking that all events are potentially catastrophic.

In summary, cognitive appraisal theory points to the useful idea that a great deal of stress has its origin in our thinking. Stress is often created by thoughts that magnify threat and create feelings of impending doom. However, people can control thoughts. It is possible to block negative and anxiety-producing ideas through self-talk that evaluates the reality of the feelings of threat. It is how people appraise and interpret events that largely determines whether events are perceived as threatening and stressful or as challenging with positive solutions.

Personality and stress

In recent years, research has examined personality differences that might modify reactions to stress. It was theorized that certain personalities, called type A, were excessively competitive and tended to be impatient and hostile. The type B personality, on the other hand, was more easygoing and relaxed and easier to get along with within the family or in the workplace. For a time, it was believed that possessing the type A personality was a precursor to cardiac ill health. Later research, however, has pointed to the hostility component of type A personalities as most reliably related to heart disease.

Another line of research has examined hardiness as a personality trait that is related to reduced stress and acts as a buffer against stressful events. People who are hardy have a commitment to work and relationships and feel that they are in control of events and possess what is called an internal sense of control. Hardy personalities do not feel subjected to fate or fortune, but believe they have control over the salient events in their lives. You will undoubtedly recognize this trait as being similar to Rotter's Internal Locus of Control. People with a hardy personality see problems as challenges and not as threats to well-being. To have a hardy personality is of obvious utility in a world that is constantly changing and where security is difficult to find. Measured hardiness has also been linked to lower levels of illness and greater health (Lambert, Lambert & Yamase, 2003). Hardy individuals tend to be more involved in life and feel a greater commitment to their jobs and other self-defining activities. Furthermore, stress-resistant individuals feel in control and empowered to influence important outcomes in their lives. The demands of life or career are not perceived as threats to well-being, but rather as opportunities and challenges (Kobasa, 1984; Lindsay, Paulhus & Nairne, 2008).

The optimism bias and self-efficacy

The self-powering traits discussed above are fundamentally related to a person's optimism bias, which acts as a stress reducer in many arenas of life. It is good

advice to accept personal control of attitudes and feelings. While it is not always possible to modify the debilitating effects of adverse environments people can approach life with positive emotions and use humor in coping with adversity. Adverse conditions can at times contribute significantly to personal growth and the development of increasing stress tolerance. An optimistic person views the future as having happy outcomes, and their behavior often becomes a self-fulfilling prophecy since optimists who believe in positive outcomes also tend to be more solution and action oriented.

Perhaps it is time to make a reality check on what is a stressful event. Is there any reason to believe that the problems each of us experience in life are of catastrophic proportions and not solvable? Is the source of stress located in a competitive outlook where the people find themselves obsessively wanting more by comparing themselves to successful peers? There is the old proverb about a glass half full or half empty. A person who is chronically pessimistic will probably see the glass as half empty, whereas the optimist sees the glass as half full with a bottle nearby to fill it to the brim.

Remember that stress is often self-created and dependent on appraisals. When feeling stressed, a useful question might be "are you expecting too much of yourself?" A perfectionist with few resources often sets high but unrealistic goals. Perhaps it is time to pull back a little and be less self-critical. In building self-efficacy, we need to take note of past accomplishments and be happy about the good happenings of life rather than focus on shortcomings. Perhaps it is also time to examine whether it is possible to be of service to others. When people engage in helping others, they leave behind self-absorption. All people have the ability to improve life for others, and there is something to be learned from every challenge. The power of positive thinking is more than a slogan, it is a way to positively interpret and appraise the challenges that we all face through the stages of life.

Psychoanalytic theory advocated catharsis as a suitable venting response that will lower anger and aggression. For example, psychoanalysis argued that venting anger or viewing aggressive videos to release anger might reduce hostility in other situations. However, that idea has been pretty well debunked by social-cognitive theory, which draws the opposite conclusion and suggests that watching people being rewarded for aggressive acts (which happens often in movies or videos) will, in fact, increase the level of anger.

It is important to remember that each individual in the final analysis is responsible for their own emotions and thinking processes. In relationships, anger is often connected to problems, especially conflict about financial issues. Discussions that focus on these problems, and on commonly agreed solutions, are constructive and are more likely to reduce stress. People have the power to cognitively restructure their thoughts and gain a broader perspective.

In summary, having a hardy personality is related to the perception of self-efficacy and healthy cognitive appraisals, including a belief in an internal locus of control. Hardy personalities believe they can control themselves and to a large degree the situations they face in life. An internal locus of control is a trait

found in hardy personalities since they believe they are not subject to inescapable fate, chance or powerful others, but think they determine the outcomes of life by their own behavior. Even goals that must be delayed years down the line, such as professional training and distant career goals, seem possible with self-efficacy. It is not always possible to change a situation or the environment that causes stress, but people can improve their skills in coping.

Rational or irrational threats: Absolutist thinking

Irrational beliefs produce self-defeating emotions and behaviors, which increase fear, threat, stress and maladaptation. On the other hand, developing and acting on rational beliefs enable the individual to achieve valued goals and reduces the impact of negative events that can cause stress. Rational beliefs are related to problem solution, whereas irrational thinking produces dysfunction in relationships and in well-being.

Suffering from extreme and debilitating emotions is largely the outcome of irrational beliefs that undermine self-efficacy and happiness. An example of irrational beliefs is the idea that all people must always have the approval and love of family and peers to properly function in life and be satisfied. A more rational belief is the thought that approval can have positive outcomes in work and life, but it is not a dire necessity. Ellis suggests it is much healthier to concentrate on giving love to others rather than obsessing about not receiving it back in equal measure. Other people are handicapped by the constant search for perfection and feel they have to be competent and achievement oriented in all they do. That irrational belief can be contrasted with the more rational idea that all people are imperfect and to be human is to err. It is more rational to set goals that are realistic and in all our behavior to do our best rather than seeking perfection (Beck, Freeman & Davis, 2006; Ellis, 2003).

The pervading religious cultures in the world influence another largely irrational belief that when people behave in bad ways or treat others unfairly they should be punished. It is irrational because the underlying assumption is that only bad people commit bad acts. However, that assumption does not reflect reality because at times good people may behave badly. Rather than rejecting people for bad behavior it is more useful to think of ways to help people change and then accept them with their flaws. People also create self-induced stress by evaluating events that are contrary to their wishes and values as having catastrophic consequences or at least being very awful. A rational response to an imperfect world is to change that which can be changed for the better, but also accept the reality that humanity will never reach a perfect society, community or family.

People often create alibis supporting their unhappiness by saying that it is caused by events over which they have no control. In that case, is it more useful to say yes, there is much wrong in the world and people suffer from illness, poverty and war, but since these events are not caused by me, I choose to be happy. Negative events can at times be overpowering and impact personal

well-being. However, it is also true that attitudes rooted in long-term optimism or pessimism can color the outlook on life for better or worse. Even in the worst of circumstances, people can be aware and control attitudes to some extent.

Many people live in the disheartening past, remembering only the negative events of life. Other people project themselves into the unknown future and worry anxiously about events not present and fear happenings that may never actually occur. This writer lives a short distance from a fault line that might or might not produce an earthquake in the next few hundred years. It is more rational to acknowledge that people cannot control all outcomes in the future. It is also realistic to accept that some negative outcomes are inevitable and beyond control. It is better to focus currently on that which can be changed and accept the rest. There is a zero benefit to worrying about matters that are beyond our ability to influence. Some people are irrationally imprisoned by the past. For example, it is a common irrational belief that current problems are the outcome of previous personal decisions and history, and that it is not possible to change because the past is the deciding factor. It is more rational to say people can learn from past experiences and, despite mistakes in the past, can learn to make better decisions. Many people seek saviors and are dependent on others that they see as strong and capable and on whom they want to rely for guidance. However, in the final analysis of life, people are alone and personally responsible for the decisions made. While people can and should seek good advice, it is rational to make and own our own decisions as the pathway forward.

There is rarely any perfect solution to anything people experience and there are problems in life for which there are no solutions. Western societies have created the myth that people live in a "just world" and that life is fair and people get what they deserve. However, despite the strivings for justice of past generations, society still creates numerous inequities and unfairness. Some situations cannot be changed, but people have the right to seek and find happiness despite the inequities of life.

In a pleasure-seeking world, it is also commonly believed that life should be without pain. Modern advertisements appeal to the common misconception that life should be pain-free and that people should live primarily for pleasure. In fact, few worthwhile objectives are achieved in life without some pain and it is the daily companion of many people. It is rational to tolerate the pain of life as much as possible and still try to find some contentment. In the final analysis, it is rational to live in the real world rather than seek escape through dreams and fantasy. What is, is—what isn't, isn't!

Irrational self-talk is a form of absolutist thinking that makes demands on life in the form of "should" or "ought" statements. Dissatisfied people might say that the family "should" be more considerate, or I "must" finish my course work with straight A's. Absolutist thinking that demands others to conform to moral imperatives creates stress, since such requirements seldom reflect possibilities in the real world. It is very unlikely that those we know will meet expectations for ideal behavior, or that, given limited resources, a person can

achieve irrational goals. When people make such absolutist demands of others, or of themselves, they will not be satisfied with shortcomings and will feel both powerless and miserable. Absolutist thinking encourages irrational demands and are often combined with the tendency to see any failure as a catastrophe, with those who don't conform to expectations as failures. Absolutist thinking encourages overgeneralizing and evaluates personal failure in the extreme by using categorical descriptive words like never, always or everybody. Overgeneralizations seldom meet the test of credulity and hence contribute needlessly to stress and personal misery.

Vignette: My life with FBI agents and associates: Rational or irrational threat?

One day, I returned to my home in Los Angeles after a day of visiting customers. I was working at that time as a representative for several toy manufacturers. As I turned into my driveway that went up a little hill I heard wheels squealing and another car came up behind mine, obviously in great haste. The driver put on his brakes with authority. We stepped out simultaneously and he flashed his identification card which read in bold letters FBI and invited me to sit in his car. Despite my surprise, I declined his invitation and said, "Anything you wish to say you can do so in front of my wife." At that time, I had become active with some organizations that demanded fair play for Cuba and her new revolutionary government. After he was seated he proceeded to say in effect, "It has come to the attention of the government that you have been attending meetings of these groups (which he then named). Do you have anything to say to the government?" In response, I told the agent that I stood by my civil rights as outlined in the constitution, and that I had nothing else to say. After staring at me for an uncomfortable amount of time, he got up and left without saying another word. This was my first visit with agents of the government, and they would come to have a presence in my life, as I learned over time. For example, when my wife sought a job with the federal government, the FBI sent agents out to interview all contacts, not to ask questions about her, but to learn more about me. Later, as I became active in the movement against the war in Vietnam, I learned that two members of our organization were actually paid FBI agents. The FBI had a file on me and nothing was too small to be noted. For example, my wife played at a concert and the article evaluating her performance found its way into my file. No sooner had I finished my degree and obtained university employment than two FBI agents visited the Dean of Faculty (as it was then called). They informed the Dean that I had unsavory contacts with people in the peace movement. I would of course never have known about the contact, except the Dean was a good guy; he told my chair, who was also a good guy, who told me.

As I became aware of the presence of the FBI and other associated unsavory characters in my life, I requested my record. After eight years of

repeatedly demanding my FBI record in accordance with the Freedom of Information Act, I was finally sent some 400 pages with 80% of the record redacted and unreadable. I was able to read between the lines and see it was only a partial record that did not report on my more interesting activities. They did find my work at the International Peace Research Institute, Oslo (PRIO) important; they had several reports about my participation there and had even followed me to Ljubljana in Slovenia for project meetings. Of course, all these surveillance activities were a waste of time and money, which must have cost US taxpayers many thousands of dollars.

I didn't laugh then, as I experienced this as a real threat to my employment and the well-being of my family. I saw they wanted to sever my academic career and I had to develop a rational response. Today, I feel total contempt for their promiscuous interest in my life and frequently laugh at the antics of FBI agents and their disreputable fellow travelers. In the end, they motivated me greatly and my response was to work very hard and establish a career that led to academic success.

A rational approach to irrational ideas and behaviors

When people become conscious of their unhelpful irrational ideas and beliefs, they can take steps to avoid these thinking traps. Ellis and MacLaren (2005) suggested that people can learn to monitor feelings and describe them as accurately as possible. One approach is to label the specific emotion that an individual is experiencing. It would be possible to write a descriptive list of feelings and beliefs and compare these with the trademarks of absolutist thinking and reality discussed above. By writing down the feelings in some organized format, a person can begin to control the effect of these events and question absolutist reactions. For example, being fired is unpleasant, but not necessarily awful, and could be an opportunity to start a different and more satisfying career and life.

Talking to oneself and questioning reactions to frustration creates self-insight. What in particular does the self-talk reveal about the causes of powerful negative emotions? Remember, it is not the activating event that causes distress, but a person's appraisals and perceptions. It is possible to compare a record written on paper or memorized about personal reactions to the distressful issues, and then with self-talk decide whether the reactions are rational or not. Explain why a statement like "all people are unkind" is irrational and practice how to modify absolutist thinking. If a person is scared of failing at work or in studies, a rational and coping response might be to say, "I might not be perfect, but I will apply myself and expect that I will be successful".

Stress is a reality in all human lives and it cannot be avoided. However, it is possible to minimize deleterious effects by taking sensible steps to promote psychological balance. For example, people who set aside time to help others will have less time to worry about themselves. Participants who contribute to others tend to be good company and provide needed social support since they look for balance in life rather than obsess about possible calamities. Intimate

friends who are willing to lend support can contribute to stress reduction. All people need someone to trust, a person who can help evaluate the reality of worries. Stress is increased by delay and procrastination. A good suggestion is to face up to what is the most difficult task in a stress response plan, whether for study, work or exercise, and do it early in the day when one has the most energy and fewer distractions.

An organized life is a strong antidote to stress. If a person has goals, it is also necessary to have a plan and schedule the activities that will help reach objectives. When a person is organized, there is less time to be preoccupied with worries and more time for enjoyable activities. Many people experience overload because they have not learned to say no to demands. It is important to say no when the plate of life is full, and when people are making exhausting emotional demands or when they want others to resolve their insolvable problems. During the journey of life, people will be confronted with many issues that are not really theirs to solve or asked to participate in activities that they will not enjoy. Talk it out with yourself and set some limits. Of course, finding balance in life does not imply that a person should not be helpful or that there are not occasions when people have to make an effort even when they don't want to participate. However, our lives should not be dominated by the requests of others, and people have to learn to enjoy and find satisfactions in their own activities.

That brings us to the importance of having fun in a well-balanced life. Having an appetite for fun in a balanced way helps reduce stress. People who have fun are better able to solve other issues, whereas worrisome and absolutist ideas block creative and happy impulses. Most individuals know what fun is, whether it is seeing a movie, meeting friends or reading an interesting book, and such happy activities are important for finding balance in life. We need to focus on the zest for living by finding enjoyable ways to have fun and deliberately participate in such activities from time to time.

The benefits of stress reduction can be achieved by simply living a sensible life. In recent years, people have become more aware of the advantages of regular exercise (discussed further in Chapter 12). Even older people can benefit from 30 minutes of movement each day. The literature also suggests that when people are angry, it helps to engage in physical activities that include athletics, gardening or taking a vigorous walk in nature. As in other human activities, there is an optimal level of exercise. People can build up a gradually more intense program over time and enjoy the fruit of exercise in reduced stress and better cardiovascular health. Furthermore, research shows that exercise also helps reduce depression, probably due to biochemical changes that physical exercise elicits in the brain. Physical exercise can also help reduce anxiety that many people experience daily. People can, in their own way, develop a sustained program of physical activities for good health and lower stress.

Many people expect too much from life and set difficult and unrealistic goals. Life is never perfect, and to reach for perfection creates many avoidable frustrations and stress. Striving is important, but perfection belongs to another

existence and not to this life. The rational goal should be to do the best possible with the resources available. Some people are so obsessed with work and achievement that they forget other important relationships with family and friends.

Post-traumatic stress disorders: A common experience

Many people in the world have experienced great and acute trauma in the past few decades. The war in Vietnam brought with it very terrible human costs and long-lasting scars in the aftermath. There is probably not a family in Vietnam not directly or indirectly traumatized by the terrible warfare and the socio-economic conditions that followed. Many wars have been fought since that still affect large parts of the world. In the United States 9/11 brought feelings of chaos and vulnerability to many sections of the population. However, the interest in post-traumatic stress disorder (PTSD) was probably initiated by the consequences of war on the psychologically wounded participants. Veterans of the war in Vietnam returned home with many physical and emotional scars from participating in combat or engaging in war-related genocidal attacks targeting civilians. Being present when human life is taken, and when it has no apparent meaning or importance, is traumatizing to people with a normal psyche who have not previously been blunted by psychopathic behavior. It is not difficult to imagine that all or nearly all survivors of the Holocaust in the Second World War, where death and brutality were constant companions, also suffered from PTSD. Refugees from the wars in Yugoslavia were subject to many atrocities that permanently scarred their feelings and outlook on life (Fontana & Rosenheck, 2004).

Many other traumatizing conditions can also be precursors to PTSD, including severe physical and emotional abuse, being the victim of violence in sexual assaults, coping with oppressive political conditions suffered in daily life, such as by the populations of North Korea or Saudi Arabia, and living with the ever-present threat of religiously oppressive regimes. Large parts of humanity are also subject to acute illnesses and forced to observe great pain and death in their families and relationships. Some illnesses are so painful, severe and chronic that patients, even if they recover, bear many scars and symptoms similar to PTSD. Living entails being confronted with the inevitability of loss and tragedy, but for some victims, the impact is devastating.

All humans will experience the loss of someone close to them who was an important source of stability and happiness, and all people will eventually lose their own lives. Illness that threatens life is, or eventually will be, a part of life for most individuals and families. Some patients with hardy personalities can cope better and develop a stoic acceptance of the threatening outcomes. Other patients seek escape into fantasy or religious dogmatism. In some cases, a chronic illness is of such duration and severity in symptoms, that even if recovery occurs, the patient will have developed PTSD. The difference between the

ability to cope or not cope with long-lasting illness is connected to the severity of the symptoms, length of illness and the resources available. If the severity of the illness is long enough, with no compensating factors, most people will develop PTSD (Kroll, 2003).

Compounding the willful effects of war, people are also exposed to natural disasters every year, including hurricanes and floods in many regions of the world. A large percentage of the victims of extremely traumatic events end up with PTSD. There is hardly a day when we don't have news of disasters, including plane crashes or train collisions. Since the news of these events is ubiquitous, it is hardly possible for people to shield themselves from the threat that these terrible events bring to mind.

Severe emotional abuse can also cause chronic PTSD. Alcoholic homes that are subject to regular and frequently violent outbursts are likely to traumatize children and undermine their sense of security. Some parents abuse their children emotionally and undermine their sense of self-confidence by constantly belittling the child or use harsh criticism as a childrearing tool. Unfortunately, victims of sexual abuse and sexual assaults are also ubiquitous. Nearly all victims of sexual abuse, assault or incest suffer chronic PTSD symptoms that only long-term therapy can mediate. Nearly all rape survivors experience PTSD symptoms in the immediate aftermath that, in turn, may have lifelong negative consequences impacting trust and relationships (Foa & Riggs, 1995).

As has been noted, stress is normal and most people can deal with the ordinary stress of daily existence. But at times the threat is so high and the ability to cope is so severely tested that a person feels overwhelmed. Typically, PTSD includes flashbacks in which the person feels the nightmare of the trauma again. In extreme situations, the trauma may cause psychotic breakdowns where the victim loses touch with reality. A person suffering from PTSD will express excessive emotions often characterized by aggressiveness and/or severe feelings of anxiety or apprehension. Being in a state of excessive arousal can also cause startle responses and insomnia, and the victim of PTSD may also find it difficult to remember and concentrate on daily tasks. All these symptoms can be seen as defensive in relation to the trauma experienced and the aftermath. Therefore, it is also logical that constricted emotions and inexpressive emotionality characterize the victim that in turn negatively influences relationships with others as well as the victim's ability to feel happiness.

It is good to remember that it is the perception and interpretation of events that causes stress-related damage. The precipitating event is real, but whether it becomes debilitating still depends on appraisal and the perception of the acuteness of the event. The level of personal control is the most important appraisal related to trauma. Social psychology has created a body of research around concepts such as internal locus of control, where people believe that their own willful behavior determines outcomes, in contrast to people living with an external locus of control, who believe that the outcomes of life are subject to fate, authority and powerful others, and that therefore a person's behavior makes little or no difference to outcomes. Self-efficacy describes the

confidence people have that they can handle whatever they are faced with in life and achieve successful outcomes. Hardiness as a personality construct describes individuals who have tenacity and are not easily overcome by frustrations. Believing that the individual is in control reduces stress and allows people to focus on solutions. When experiencing severe stress, it is important to believe in an internal locus of control and self-efficacy, which in turn is related to emotional well-being and good health (Taylor, 2002, 2004).

It is also important to accept that all people have limited psychological resources, and when pushing that limit, victims are left with "burnout", a feeling of emotional exhaustion associated with chronic fatigue and low energy. People who must deal daily with the problems of others, including teachers, nurses and the police, are likely to experience burnout, particularly when they feel they have little control over outcomes. That feeling should be a clue for the individual and administrative supervisors to examine workloads and other emotionally exhausting situations and reduce responsibilities where possible. Burnout requires adaptation and change in order to return to emotional health and a consideration of whether it is time to cut back on obligations and commitments. When having a feeling of burnout, the victim often can't see the forest for the trees, and professional counseling can be helpful. A sympathetic person with no direct stake in outcomes can also help a person in finding a less stressful path.

It is natural to feel angry when subject to adverse events. Unfortunately, victim anger is often misdirected against people who are important to their well-being. Misdirected anger may exacerbate stress, as it is likely to backfire and lead to rejection. Remember that anger is usually not a well-thought-out response, and if people wait a little, the anger will typically subside. People can also deal with anger by changing the way they think about the frustrating situation. It is hard, but when people think logically about the frustrating event, they may realize that anger solves little or nothing in life. Although anger may seem justified at the moment, it usually contributes to more alienation and loss of relationships.

Being in a state of crisis is difficult, but a resilient person will not see most situations as insurmountable. There are many situations that are beyond people's power to change, but what can always be changed is interpretation of the event and the willingness to accept reality. When people look optimistically at the future, many problems that seem insurmountable now will either have disappeared or be ameliorated later by other events in life. Optimism characterizes a person who retains the hope and expectation that good things will happen, even if it is a long way down the road. To overcome a crisis, it is necessary to see the current situation as part of life and keep a long-term perspective that things will get better.

It is true that change is part of life, and because of adversity some hopes may no longer be realizable. It is healthy to accept the situations that cannot be changed and focus on those parts of life that can be altered for the better. Such a positive outlook seeks to develop goals that are realistic and in conformity

with personal resources and opportunity. If a person works at goals in small but significant ways, it is possible to reach even large long-distant goals. However, many people are overcome by adversity and withdraw from the battle of life. Nevertheless, happiness is not an outcome of ignoring problems; life requires decisions and the ability to face adverse situations. A positive self-concept is functional in all situations. We should conclude that we are not prisoners of the past and we can all enhance self-confidence by making successful problem-solving decisions.

Summary reflections

Chapter 8 is a further discussion of stress-related research that points to the importance of thinking and appraisal processes. Cognitive appraisal theory argues that it is not the actual stressors that produce unpleasant physiological changes. Rather, a stressor has little impact unless the threat is perceived and appraised as personally relevant and accompanied with the awareness that personal resources are inadequate to cope.

Personality determines to some extent appraisals of threat, whether high or low, and therefore contributes to subsequent psychosomatic disorders or better health. For example, the degree to which hostility is a component in type A personalities predicts later problems with cardiac health. Some people are favored with hardiness traits that promote an internal sense of control. As a buffer against stressful events, hardy people see problems not as threats, but as challenges to be overcome. Individuals vary in their level of optimism bias that in turn acts as a lasting stress reducer. People would also experience less stress if they were less self-absorbed. Helping others is a healthy way to move away from ego-centeredness and toward a more positive mindset. Finally, it is important to recognize the distinction between stressors and cognitive appraisals of threatening events since the perceived threat is often based on irrational conclusions. When we learn to think logically, it becomes easier to differentiate the irrational from real threats to well-being.

Many people suffer from debilitating emotions that are based on irrational beliefs. Irrational beliefs are damaging and undermine the self-efficacy and happiness that are pillars of coping. It is, for example, irrational to believe that in order to function in life, the approval of others is always needed, that love is not real unless it is returned in equal or greater measure and to demand that people be perfect. It is more rational to say that social support is helpful and that all people struggle with imperfection.

Religions buttress some irrational beliefs because the demarcation between good and bad people is obscure. For example, good people have been known to commit bad acts. Irrational beliefs heighten stress by viewing minor breaches or failures as catastrophic rather than engaging a rational focus on what can be changed. Unhappiness is irrational when it is the consequence of events over which we have no control. Some negative outcomes are beyond human

control. However, it is healthy to make rational appraisals of issues when it is possible to make inputs and create change.

People often look for saviors to rescue them from a difficult life. However, it is rational to conclude that, while people are connected to others, it is the individual who is in control and has responsibility for outcomes. It is also irrational to be imprisoned by negative memories, because nothing will change in life by obsessing over events in the past. It is more rational to learn from mistakes and make better decisions in the future. It is a myth to believe we live in a just society where people get their just desserts. Rather, it is rational to understand that the just society belief is an ideological obfuscation by an economic system that benefits from such disabling beliefs.

Nevertheless, life is not pain-free, and contentment is not easy to find for many people. However, absolutist thinking that demands conformity and obedience to moral imperatives is irrational and as a by-product increases the appraisal of stress. All people should avoid as much as possible using absolute words like never, always and everybody, which don't reflect nuanced reality. An organized life is a strong antidote to stress when it leaves time for enjoyment of life. Stress reduction is produced when people take a holistic view of life that includes deliberate behaviors that create happiness.

Researchers became aware of PTSD after the war in Vietnam. A normal person not blunted by a psychopathic personality would find genocidal violence traumatic. Currently, the medical and psychological community is also aware that other conditions, including severe physical and emotional abuse and extremely oppressive political or religious conditions, can cause PTSD. PTSD is more broadly present today since severe chronic and painful illness can also scar a person and produce PTSD symptoms. PTSD is characterized by extreme aggressiveness and feelings of anxiety. Since the victim lives with excessive arousal over long periods, startle responses and constricted and inexpressive emotions are common. The sufferers of PTSD, unfortunately, often direct anger toward those in close family relationships who are important to well-being.

9 The search for meaning and living life to the fullest

When achieving adulthood, identity formation is completed for most people and the individual has accepted a value system that serves as a guide for the basic decisions of living. As people are social beings, another important adult goal is the establishment of a supportive social network of friends and family. Human development refers to the changes in physiology, thinking processes and socio-emotional adjustment that occur over the lifespan. The adult potential for growth is the outcome of the individual's personality interacting with the social resources available, which produces developmental changes. For example, changes in brain function affect thinking processes, and thinking habits in turn can inhibit or facilitate socio-emotional adjustment.

Lifespan is generally divided into the times of childhood, adolescence and adulthood. In this chapter, we will discuss some of the important changes and challenges that are likely to occur as the individual moves toward the formation of an adult personality. Achieving adulthood requires the completion of developmental tasks that differ somewhat between young, middle aged and older adults. When young, a person is primarily concerned with establishing a career that can ensure both survival and success. Finding a mate is also an important challenge in young adulthood, along with starting a family and bringing children into the world. In middle age, men and women take on more social responsibility and involve themselves in the affairs of the community. This is also a time for achievements in the chosen work and career, as well as enjoying the satisfaction that comes from making meaningful contributions that are recognized and respected. Later in life, older adults must make adjustment to retirement and face the health challenges that come along as a result of the aging process.

Many older people look back in late adulthood and evaluate their life's work. As a person moves through developmental stages, what are considered significant changes? In the early adult years, people invest a great deal of time into work and their career, as well as building family relationships. However, it is not surprising that when people are older, health often becomes a primary concern and thoughts of mortality come to mind more often. Many older people also must adjust to a life of reduced income and have less energy to cope with existing demands. However, there are also compensating factors in aging such as the love of grandchildren and the economic freedom to do something

other than work. Although all time periods and life stages have challenges and trials, they do not affect overall happiness. Despite varying challenges that occur at different stages across the lifespan, a person's level of happiness remains largely unchanged from young to old. These findings suggest that happiness and optimism are hardwired as a personality disposition and unaffected by external events (Diener, Lucas & Oishi, 2002).

Although people carry within their brains the hardwired genetic traits of the long human journey, they also have to learn how to cope and survive in their own unique environment. In the past, society was more structured; for example, there was an expectation that all young adults would find a mate in early adulthood and achieve full-time employment and economic independence. Adults take responsibility for their actions and make decisions independent from parental or other influences. However, to achieve important goals also requires the accumulation of social skills and assets. Meeting the challenges of adulthood requires good decision-making skills, intellectual prowess and skills in planning future activities.

Psychological factors that mark the achievement of successful adulthood are stable mental health and a desire to master the challenges of life. Self-efficacy refers to the self-confidence people acquire from successfully meeting challenges and mastering the necessary skills. Adulthood is also a time when people complete identity formation and accept fundamental values as guides for important decisions and actions. An important achievement of young adults is establishing helpful social connections outside the family and a network of supportive friends and peers. To be connected to others in mutually helpful ways is partially dependent on communication skills, which were discussed in Chapter 3. People who can empathize with others and understand their point of view are more likely to establish a supportive network. Maintaining emotional stability and lending support to others is also necessary in building important friendships (Eccles & Goodman, 2002).

Adults are required throughout their lives to make choices, and some are maladaptive with detrimental outcomes, yet other decisions are functional with more beneficial consequences. Good decision-making skills will optimize chances for a happy life. Setting realistic goals that can be achieved with personal and social assets is essential in avoiding lifelong frustration. Personality matters in adaptation and goals are more likely to be achieved by people who maintain a sunny disposition, who believe success is possible and feel they have control over outcomes.

Becoming an adult is a gradual process that requires growth in several areas. Change is part of all life and requires constant adaptation, but continuity is also a factor. There are many aspects of a person's personality that do not change for better or for worse. For example, individuals who score high in self-esteem in a longitudinal study also had high self-esteem when retested eight years later. Likewise, those students who were achievement oriented at the beginning of the study, remained achievement oriented at the end of the eight-year period (Bachman, O'Malley & Johnston, 1978).

Of course, there are salient factors in development that can change our behavior for better or worse, such as the influence of a partner in a marriage. However, having academic or other occupational success is likely to increase feelings of self-efficacy and lead to further achievements, as "success breeds success". Self-responsibility as an adult also means the development of a personal and independent system of beliefs and values, where the individual no longer robotically conforms to the wishes of others. However, many people have not developed an independent value system, and conformity pressures in family and society are responsible for much of the social behavior of the average person.

As adulthood lasts from the 20s into the final declining years of the 70s or 80s, people who want to live optimally have to prepare throughout for unexpected changes and exercise good decision making. No individual has perfect control in any sphere of life, since external factors in the environment, limited access to resources and congenital health problems can limit options. Nevertheless, where control is possible, taking rational actions optimizes possibilities for good outcomes. For example, based on what we think is important in life, it is possible to have some control over career choices and where to make major efforts in life. However, at the same time, career possibilities are limited by educational opportunities and the value placed on education by culture and family.

A person can control, to some degree, the finding of a life partner, although random factors of time and place are important limitations. The attraction of a life partner is somewhat determined by personal values. For example, choosing a partner based on specific life goals, including good health practices, is a wise reflection of the value of health in longevity and human happiness. Poor health habits, such as smoking and drinking to excess, eventually present a bill of indulgence to be paid many years later in ill health and early death. Becoming an independent decision maker and planning life with forethought and self-efficacy depends on acceptance of adult responsibility.

Our potential lifespan

Despite human attachment to life, it ends at some point, with the upper limit of the lifespan at about 125 years. Most people never reach the optimal number of years, as many become victims to a variety of detrimental environmental- and health-related factors. Life expectancy is the average number of years that a person can expect to live modified by adverse environmental and health conditions, and therefore will vary with conditions of the country in which you live. In the United States, there are many personal and environmental factors affecting the average lifespan. Genetic history is a partial guide, and if someone's ancestors lived to be old, his or her genes may contribute to the longevity of the generations that follow. Many diseases have a genetic component and some people have predispositions for a variety of illnesses, including heart disease, diabetes, breast cancer and other cancers that limit lifespan. The effect of these

diseases on individual well-being can be modified by good health decisions that extend a person's longevity. Economic status also matters as poverty is associated with many stressors that limit lifespan and with inadequate access to health care. Illness propensity is also modified by choices in diet and abstention from poisonous substances like tobacco and excess alcohol use. Today, many people have a greater concern about longevity and have adopted health-related lifestyles that prolong and add quality to life.

Longevity is promoted by factors that are individually controlled to some degree. Physical exercise is necessary for good health at every stage of life. In the modern world, many jobs are physically passive and people need to make deliberate and conscious efforts to stay active. It is also possible to control alcohol consumption and whether to smoke or not. To some degree, people control their level of education, and higher education contributes to the advantages of higher socio-economic status. Nevertheless, educational attitudes are promoted or limited by the socio-economic status of families and by cultural values. Getting sufficient sleep is another important health-related goal that is unfortunately difficult for many to achieve in a world of many stressors. Personality also matters, as people who are aggressive and competitive have shorter lifespans compared to people who are happy, have reasonable expectations and a practical worldview. Furthermore, longevity is promoted by the type and quality of health care, and therefore it is limited for poor people all over the world. In the United States, millions of people have no health insurance or access to medical advice except emergency care.

Physiological changes in adulthood

People have little control over the physiological changes of aging. Although it follows a predictable genetically hardwired pattern in all societies, physical aging can also progress more rapidly due to genetic disorders or serious illness. Typically, people reach their physical peak of strength and health in the early twenties. By the time people arrive in their thirties, physiological status and robustness have begun to decline. Individuals who habitually have misused alcohol, drugs or tobacco begin to feel the impact on well-being in their forties. In middle age, physical changes become more apparent as skin tone begins to age and wrinkles appear. For many people, hair begins to thin and grey strands are an early sign that the peak is passed. People also begin to lose height and develop a stomach pouch as body fat increases in middle age. Most people observe a decline in overall physical fitness, although that can be greatly delayed for those who exercise consistently.

Often people encounter serious health concerns in middle age that can include threats of cancer and heart disease. In midlife, women experience menopause produced by declining production of estrogen and at the same time the eventual loss of fertility. Although men also suffer a decline of male hormone production, they do not suffer the marked physiological reaction of many women, who during menopause complain of symptoms including hot

flashes and fatigue. In recent years, lifespan has increased in many countries due to better nutrition and health care. Physical decline can be delayed for a while by good health habits, but will nevertheless continue until death occurs for most people in their seventies or eighties. Generally, women live seven years longer than men in the United States and Europe, which is probably as a result of wiser and better health habits, but the end of life is certain for all (Payne & Isaacs, 2005).

Normal aging is hardwired in our genes and is probably due to the finiteness of cell replacement. For example, loss of bone tissue is a normal outcome of aging and it affects the majority of women who cope with osteoporosis, leading to bone fractures and other handicaps. Normal aging is also related to other chronic diseases that affect older adults including arthritis. Since few people live stress-free lives, hypertension is also a normal outcome of aging, although it can be controlled with exercise, diet and medicine. However, other external factors also contribute to aging including living with stressful conditions. Although most of the world has experienced increased living standards in recent years, the achievement is often at the cost of greater experienced stress and hypertension. As people get older, many live with elevated stress levels that result in lower resilience and a heightened risk for serious illnesses including cardiovascular disease, diabetes and cancer (Blonna, 2005).

Dementia is a common outcome of the aging of the brain. As the disease progresses, the brain gradually shrinks and its functions deteriorate. People with advanced dementia are unable to take care of their daily needs and become the responsibility of close family or friends. It has been estimated that 20% of people in their eighties have some form of dementia. The most common type is Alzheimer's disease, which is a progressive and irreversible brain disorder that produces significant memory losses and deterioration in the abilities to think and reason, and in the terminal stage, also affects physiological functioning. Although most Alzheimer victims are older than 65, it can occur in younger people. As the population of the world live longer lives, society can expect higher rates of Alzheimer's disease in the future (Meyer & Cummings, 2004).

Staying in control

The outcome of aging may seem bleak to many people. However, it is important to remember that when managing and optimizing health, many individuals enjoy robust lives into their eighties. The foundation for healthy aging is laid down early in life by good health practices and by exercise. It is never too late to start exercising, because even those who start late in life can still attain many benefits and better outcomes. Research shows that health is also improved when older people retain some control over their lives. The elderly who feel in control are happier, more active and stay alive longer, compared with a passive control group. To retain control reduces the sense of victimization in the older age group as they combat illness and reduced functioning and makes it more likely for older people to retain an interest in life, health and outcomes.

Having a sunny outlook is related to many positive aspects of life including a more supportive social circle and better health outcomes following illness. Recent research has also shown that the brain has some ability to regenerate when stimulated. When older people are engaged in worthwhile tasks, it is possible to grow new brain cells and repair damage. The brain also has the complex ability to shift tasks from one region to another when brain structures are damaged, for example, from strokes. For better outcomes in aging, people need to stay involved and work where possible (Lachman, 2004).

Changes in thinking in adult years

Since aging is related to deteriorating brain function, collateral changes in cognition should be expected. Piaget (1952) was the first to study systematic changes in cognition over the lifespan. He found the highest form of thinking is the formal operation stage, which children develop at about the ages of 11 to 15 years. At that point, a young person can think in abstract and logical ways. Thinkers at this stage are also able to form hypotheses about life and behavior, and then test these ideas for verification. Piaget believed that the formal operations stage was the highest form of thinking and that no qualitative changes occurred after adolescence.

However, other researchers have shown that young adults are able to operate at the post-formal thought level where thinking is characterized by reflection. In post-formal thought, the individual is more flexible and does not expect answers to important questions to be absolute but rather dependent on time and place. Young people also become more skeptical over time and begin to question the veracity of absolute explanations as the final word. The search for truth is lifelong, and for the open minded, no answer is final. Science is constantly developing and is a model for how ordinary people can think as they are confronted with new findings and ideas almost daily. Post-formal thought is also realistic and looks for what is pragmatic and workable rather than abstract notions that are of limited utility. Young adults also understand that emotion affects thinking and that calmness is required for deliberate thought (Sinnott, 2003).

The decline in thinking processes are a concern of many people. For the middle-aged person, research results on thinking are mixed. For example, there is some evidence that numerical ability and perceptual speeds decline. However, other cognitive functions improve with age and experience, including vocabulary acquisition, verbal memory, the ability to reason inductively and spatial orientation. Individuals assimilate information throughout life, and verbal abilities in middle age reflect this accumulated wisdom. On the other hand, the ability to reason abstractly begins to decline in middle age. It would seem that these results do not support the idea of declining intellectual functioning in midlife as cognitive abilities both improve and decline depending on what skills are investigated. There are many examples from history of individuals who had great achievements, even in late old age (Horn & Donaldson, 1980).

However, research consistently supports the presence of slower perceptual processes in older people. Older adults also suffer some decline in memory functions. The information needed is located in the brain, but when older, it takes a little longer to retrieve the information. The use of memory to solve problems and make decisions also declines in older adults. However, there are compensating factors. Thinking might improve in some ways as people get older. Older adults also have more practical knowledge, and therefore possess more expert information that can be applied to the solution of a variety of problems. Being wise in making decisions is at a higher, more optimal level for older adults as compared to younger adults. The aging population has a lifetime of experiences that in the past, led to both successes and failures (Staudinger, 2008).

The search for meaning in life

The degree to which people find satisfaction and serenity when they age is related to the establishment of a conscious value system and the fulfillment of important value-related goals. Values reflect the importance people attach to beliefs and ideas, as well as material possessions. Ethical concerns are also expressed in values and evaluating what is good or bad; conscious values are guides for living an ethical life. Values are fundamentally about what matters and what is important in our lives. Whenever people face important choices, values largely direct thinking and behavior. Values exist at both conscious and subconscious levels, and influence decisions psychologically whether the individual is operating in a conscious or unconscious manner.

What matters to you in life? Take any idea and belief and ask yourself, "how important is this for me?" The more intense a person feels about the idea, the closer it is to core values. When people value fairness, then chances are that injustice will be emotionally upsetting and motivate a person to seek change. If money and material well-being is a more important value, then a person is likely to seek riches through employment or schemes that pay well. If truth is an important and dominant value, then a person might become a researcher and think about theoretical explanations in particular fields of study or as explanations for life itself. In all the above cases, we are not describing single values, but rather value systems that provide the background for all behavior (Nevid & Rathus, 2010).

We live in a world of dissatisfied people. Despite material wealth, many people have lost their footing and experience a void in their lives. Modern industrial society encourages the pursuit of efficiency in the acquisition of material wealth. However, having lots of money can be a curse as well as a blessing when wealth becomes an end in itself. For people who value capitalism and money, enough is never enough. Often, wealth creates even greater insecurity as the rich worry about keeping and increasing their wealth, but live in spiritual poverty.

A value system also determines the means people will use to reach their goals. Some people will want to get to their end goals by any means necessary

and others have ethics that limit what they are willing to do. Some criminals are willing to kill to obtain wealth, and unscrupulous politicians will lie to gain power. Ethics defines moral behavior and is based on the person's underlying value system. The meaning of personal integrity is found in people who live consistently by a code of ethics.

Value systems are related to the larger questions of why do we live? How do people find meaning and purpose and live life to the fullest rather than just survive from day to day? From the discussion above it is possible to envision different types of people as discussed by Springer almost a century ago. He suggested the presence of six character types present in society. The theoretical person is dedicated to the pursuit of truth and the systemic use of knowledge. The economic person is motivated primarily by satisfying personal needs and views wealth creation as the primary purpose of life. However, life is also about beauty, and the aesthetic person pursues harmony and beauty in a variety of pursuits from music to poetry. The social person values personal relationships most highly and throughout life seeks to express kindness and unselfish behavior. The nurse or nurturing mother might be examples of this person. The character of a political person values power above all and seeks fame and influence in chosen endeavors. It is unfortunate that at the top of social hierarchies in almost any setting we find people who are obsessed with control and power, and who for these reasons do not exercise power wisely. Finally, Springer described the religious person as someone who seeks the unity of life and an understanding of what life is about. When described in this way, religious people can be found in established religions, but also in people who are devoted to political philosophy and deeper science (Lamberton & Minor, 2010).

Vignette: Experiences on my journey to Bulgaria

> By the late 1980s, I was a frequent visitor to the University of Sofia. On one of my early trips, I decided to take the train from Frankfurt to Bulgaria, as it was both cheaper and an adventure. I had a sleeping compartment to myself and although I had heard of train robberies in Eastern Europe, I considered the trip safe. In the morning, I woke with a terrific headache. I looked around in the compartment and saw all my possessions tossed about. Fearing the worst, I quickly looked at my document folder and found to my relief that my passport was still there, though all my money was gone. As I stepped outside, a chorus of words in German saying, "my money has disappeared", "me also", echoed up and down the hallway. It seemed that somewhere in Serbia a criminal gang came on the train and gassed all the passengers in the sleeping compartments. I later learned the train had a large group of workers returning to Bulgaria with the money they had earned after having worked in Germany for the past six months or a year. In other words, the robbers knew there was a lot of money on the train, and I observed a great deal of distress after the robbery.

I started to talk with the occupant of the compartment next to mine and learned he was president of the Bulgarian Karate Association who had been at a meeting in Germany. The irony was not lost on us both because he had worked all his life on his sport precisely to prepare for what had just happened, but he was gassed along with all the other passengers. He was a very friendly person and asked me if I had anyone meeting me in Sofia. I told him no, but I thought my colleagues knew where I had made a reservation to stay that evening. When we got into Sofia, the man's secretary was waiting and he insisted on driving me to the hotel. I had no money, but I explained that my colleagues would see to me in the morning. My new friend insisted on taking me to the hotel restaurant and bought me dinner, which we enjoyed together. After a while, he excused himself and bid me goodnight.

At this point, another older gentleman came to the table. He said he heard down at the reception office that I had been robbed on the train. I affirmed that, but was very surprised when he gave me 200 German marks. I kindly refused, but he insisted and I relented after getting his address so I could return the money. We fell into a long conversation and I learned he was a survivor of the Auschwitz concentration camp. He showed me his camp tattoos and I had no reason to doubt his story. We spent the better part of the night talking about his experiences and mine and I felt an immediate friendship that remains till this day. These events taught me that even in the worst circumstances, people with altruistic values find ways to bring help and support to strangers.

The development of values

Values are learned, although they are often integrated into thinking processes before children have evaluative thoughts. However, people are also born into cultures, families, societies and socio-economic groups that teach standards and values to children. In most cases, parents are the primary teachers of what is right or wrong and what the child should or should not do. The acceptance of right and wrong is also a consequence of social learning when children observe the value-related behaviors and ideas of their parents. The stronger parents feel about certain ideas and goals, the more likely that children will incorporate these, or later in life rebel against parents to form their own value system. When the child enters school, the influence of peers competes for attention with other sources of value formation. Religious bodies will also seek to inculcate values and beliefs in a variety of ways.

Religiosity is a major contributor to values in most societies, whether defined as a belief in a god or several gods or a quest to personally live a spiritual life. Although there are similarities in ethics between major religions, they differ in explanations about the meaning of life and the concept of an afterlife. Religions support moral codes of behavior that are based on individual value systems and from which individuals develop life goals, purpose and meaning (Compton, 2005).

The person's value system is expressed in several significant ways. Values are the basis for negative or positive attitudes toward people, things or ideas. Attitudes are the precursors of decisions and behaviors, and they determine, for example, whether other people are treated with compassion or with brutality. Attitudes, although based on value systems, are also learned from experiences. More broadly, values are also expressed in prejudice and stereotypes toward other people, especially people who do not belong to the favored national or ethnic groups. Prejudice refers to prejudgment where beliefs and attitudes toward members of other groups are not based on any direct experience or information.

Most people will, at some point in life, experience value conflicts. For example, peers may have accepting attitudes toward premarital sex whereas the Church and parents disapprove. People also become aware of the larger conflicts in society, for example, between socio-economic classes with opposing interests. Living in a multi-cultural nation or a country with many ethnicities, a child will learn that the majority way is not shared by all. Further, over the past few decades, television has had a powerful negative effect on values in modern society and has contributed significantly to the changing values about gender and the family.

Unless we evaluate our value systems, they are just sources of conformity and without any deeper psychological meaning. Becoming mature adults, however, requires among other things that people evaluate their beliefs and values and discard those found without merit. In the process of becoming an independent adult, many people will question established moral codes and seek for new truth in religious and philosophical spheres. Value evaluation is a lifelong process and requires a reflective mind to be open to new information or evidence as it becomes available. A mature adult value system is also based on logical coherence of values and beliefs. That means discarding values and beliefs that defy credulity and common sense. Living life to the fullest requires a continuous evaluation of thoughts, beliefs and values.

What are your values that direct your life goals and interaction with others? Do you value happiness? How do you find a road that leads to that happy end state? Is good health an important value? If so, what does that say about your diet decisions and risk-taking behavior? Some people search for a stable and predictable life and others value highly an exciting life filled with adventure. Values do change as people face different challenges over the lifespan. As adolescents, being popular with the opposite sex is highly valued, whereas for an adult, having a happy family and meaningful work is considered of greater importance. Changing values across the lifespan reflects growing maturity and many individual differences. Some people never grow up but retain the values of childhood and adolescence and experience the dysfunction that follows immaturity in relationships (Feldman, 2006; Freiberg, 2010).

Mature and inner-directed values

The aging process is inevitable, but good physical and mental health habits can give us extra years of useful and happy living. There are also arbitrary factors that impact human life that are both difficult and seem to be without meaning, including chronic and catastrophic illness. However, survival and better outcomes are more likely with a positive attitude toward the illness, the self and others. The search for meaning is important in order to cope with the transitory nature of life and relationships. Meaning is related to what is important in life and the adoption of a personal mature value system. Although the world is wealthier today compared to the past, it is not necessarily happier. The Bible speaks of "the love of money as the root of all evil". Perhaps that was actually a thoughtful historical criticism of the obsession with wealth creation and the concentration of wealth at the expense of human solidarity that people can also observe today. All people have value systems, but it is not possible to claim mature values unless they have been examined critically and are related to worthwhile goals. It is also important to commit to ethical means to achieve worthwhile outcomes in life. A writer said that the unexamined life is not worth living. More enduring meaning can be found in the thoughtful examination of fundamental values such as truth, justice and happiness as related to real life conditions.

The intensity of emotions reflects what people value. Rather than submitting to authority or peer pressure as references for a less intense value system, what does a person actually believe, if anything? When values are "other directed" they provide no sense of personal security and can be easily changed by different authorities, peers or life circumstances. An important goal in adult development is to adopt values that are "inner directed" and reflect real feelings and beliefs. Values involve a choice between alternatives and require an ability to think and evaluate decisions and courses in life.

Values can be clarified by thoughtful examination that focuses on the consequences of each choice. It becomes a value when a person cherishes it to the point that it affects behavior. If human solidarity is an important value, a person might demonstrate that in volunteer work or political action. If a value has real meaning, a person will have a desire to affirm it to others and share the reasons why it is important. Depending on values, people might choose to help the poor or just let family members know their feelings and beliefs. An inner-directed value is reflected in behavior and in some form of action. For example, those who value the environment will try to pass laws that protect what remains of unspoiled nature and in some cases take action, like members of Greenpeace who intervene physically when they observe behavior detrimental to life and species. If a value is enduring, it becomes part of a pattern of life that is manifested in many ways such as in the choice of person to marry, in how money is spent and in the chosen career.

Adaptation and the basic tasks of adulthood

Erikson (1968) was an early and very influential psychologist who proposed a theory that we all move through eight sequential stages of development. Each stage in life presents a developmental challenge and a crisis. If the crisis of each stage is resolved (and the individual adapts), we continue on the developmental path toward happier and more fulfilling lives. In early adulthood, the main task is to develop intimacy with a significant other. If that crisis is not resolved, then according to Erikson, the outcome is social isolation. Intimacy is measured by the level of commitment a person makes to the loved person, which demonstrates that behavior and goals are not solely motivated by personal ego. Commitment can also take the form of close friendships, such as the case of two scientists struggling together to solve some of the mysteries of life or two comrades who, in the spirit of solidarity, find themselves on a common journey to solve the problems of society.

The most common form of intimacy, however, is found in heterosexual love relationships, where both partners let go of their own selfish needs in favor of helping the other person and where they together develop a common identity as a couple over the long run. At this stage of life, young people may ask themselves if it is time to get married or, alternatively, if they prefer being alone. In the past, there was little choice about marriage, as it was assumed by society that a person was not an adult until that bridge had been crossed. In some societies, there was also little choice in partners, as marriages were arranged by parents. However, since the 1960s, the idea of personal fulfillment as a right has become the overarching goal for many adults with a negative impact on the stability of relationships and marriages. As a consequence, in some countries marriages are now delayed for many years, and among those who marry, many divorce (about 50% in the United States). Many of the couples who remain married are unhappy with their possibilities for "personal fulfillment". Today, people make much higher demands of the person with whom they desire an intimate relationship, which is related to his or her self-fulfillment (Markman, 2000).

Another major challenge of young adults is finding a satisfying career. Typically, a young person will explore different options in educational or occupational settings before choosing a career path. However, society is often structured in ways that allows for few options. In the struggle to optimize profits, companies are constantly changing and improving efficiencies. Also, rapid social and technological changes allow no one to rest on their laurels or achievements since constant learning and updating of skills are required. Most national economies are globally linked today, so what happens elsewhere in the world can also impact a person's life and career. In the search for ever-increasing profits, companies create more insecurity and stressful conditions by taking jobs overseas where wages are low, thus undermining the social security of families in their homeland.

Stagnation, generativity and terror management

As people move through the adult years, most people observe the deaths of loved ones and realize that no person is immortal. For many people, this awareness is unpleasant and brings on issues of the meaning of life. The reactions of many people to impending death can be understood as a form of terror management. In early years of adulthood, it is possible to avoid consciousness of death by immersing oneself in the unreal world of drugs and alcohol. However, such escapist terror management can at best be temporary, and when sober again the individual faces the same issues with the additional consciousness of lost time.

Generativity begins when people become conscious of the temporality of existence and begin to question the meaning of life itself. Why do we live? Can some meaning be found through religion, philosophy or perhaps science? Generativity is the seventh stage of Erikson's theory and refers to how people reduce the terror of mortality by leaving something meaningful and lasting for the next generation. In middle age, many people try to resolve the crisis of stagnation by doing the minimal amount of work necessary to stay functioning and employed. Stagnation is maladaptive and eventually leads to self-absorption and the increasing awareness that the individual has done little to improve life for the coming generation. Generativity is a healthy response to managing the terror of personal annihilation by a mature person who wants to create something lasting and useful. For example, some people create lasting values by nurturing a family through the challenges of life. Yet, other people work at developing useful skills and insights that are then shared with others. Very creative individuals make contributions that have a high social value and influence culture. Disciplined scientists have created socially important information that has changed society for better and for worse, and they have become part of the ongoing culture.

Creative activities are important solutions to stagnation that can help manage the terror of limited lifespan. Generativity is not achieved by everyone and many people, as Thoreau said, feel no sense of purpose and suffer "lives of quiet despair". Being creative and willing to give are not independent of the conception of the self, because adults that practice generativity have a positive self-regard and feel they have something worthwhile to share. A form of immortality can be found by helping the next generation and by the profound feeling of being part of a lasting chain of human beings linked to those that came before and those who will come after. Interesting research shows that those who overcome stagnation by giving are also more likely to have happier marriages even in their 80s (Vaillant, 2002).

Many people look to midlife as a period of increasing freedom and possibilities as family and career problems are under control. In these years, people also become aware that they are no longer young and there is no escape from that reality except temporary obfuscations. Being aware of life as temporary motivates the desire to leave a legacy and to think about their values and the meaning of life. Midlife is the season when most people experience the death

of parents and other loved ones, and the limitation of the time remaining enters consciousness. Midlife is often the first time many people begin the search for meaning. Frankl (1984) suggested that even in the concentration camps during the Second World War, it was possible to live with meaning since, even in these desperate circumstances, there were choices to be made (Lachman, 2004).

Winning the struggle for integrity

As an individual passes through midlife, consciousness of mortality encourages a review of life, remembering its sorrows, losses and achievements. According to Erickson, older people (age 65 or older) face the final crisis of ego integrity versus despair. The inevitability of death motivates a person to look back and interpret the events of life, the main chapters in the journey and the solutions found to the crises of development. If a person has been stagnating in late adulthood, old age becomes a particularly difficult time that is often endured with a sense of gloom and despair. On the other hand, if a person has a secure sense of having met the challenges of life, the review can provide great meaning and satisfaction and the achievement of wisdom. Winning the struggle for integrity where we see ourselves as having been successful and productive leads to a life review of satisfying closure and completion. That, in turn, helps us face the final chapter of dying without disabling fear. It is also likely that in old age people think about the crises and problems that were never solved. However, people in old age can engage in compensating activities that help lift the burden of disappointment, less mobility and poor health.

In the review of life, there is no need to obsess about the past since in old age nothing will change except how a person might feel about the journey of life. For people who have made good decisions, old age is a time to take satisfaction from the consistency of values and how these have been expressed in diverse ways from childhood and onwards. Ultimately, the meaning and achievement of integrity is that one has lived consistently with one's own values rather than being buffeted by the views of others or by having conformed to social expectations.

Having experienced the highs and lows of life, older people are often more content than other age groups, especially if they have satisfying relationships with family and friends. Continuous social support is related to many positive outcomes in the aging population. Older people who have the support of others are less likely to be sick because they are encouraged to meet their health needs. Being connected with others also increases the desire to continue with life and people who have a supportive network are less likely to be depressed. Life is a struggle and old age is the time when a person loses even more family and friends. However, the losses are easier to bear when memories of happy times are intact and when each party did right by the other. Of course, in the loss of close family and friends there is always a lingering sadness that never completely disappears, but in that bittersweet feeling, joy is also present.

With less time left, older people become more selective in their relationships. As emotionally related goals are more important to older adults, they tend to focus and spend more time with people that brought or bring happiness into their lives. At the same time, older adults tend to withdraw from relationships that meant less in the past in order to make better use of the time left. Close friends and family are crucial to happiness in the remaining years of life for old people. As older adults are more selective, they also receive more emotional satisfaction being with people they trust to bring happiness and avoid people that at other stages in life brought dissatisfaction and unhappiness (Carstensen & Charles, 2003).

It is necessary to exercise more self-regulation as people age. As people lose some of their capacities due to aging, it is important to select the activities that are possible and engage in what brings satisfaction. When it is no longer possible to jog, an older person can select brisk walking for the same health purpose. Older people can maintain standards in thinking and performance by a continuation of study and practice throughout life. A musician who continues to practice in old age can maintain high standards, although the passing of time may have dimmed the ability to play with the same vigor as when young. However, older people can compensate in many areas. The acceptance of a reduced capacity is easier when people make the best effort at whatever level is possible. In the process, an older person can also find new areas of achievement that can bring satisfaction. For example, when older, a person has more time to do things that provide intrinsic pleasure, such as gardening, that in the past were put aside for lack of time.

Religion and the contemplative life

Loss is inevitable when old. People do not get through life without experiencing the loss of close family and friends, and the pace of losses accelerate in old age. For some people, religion is helpful when facing the inevitable death of loved ones and their own personal demise. Religion helps some people find meaning in what otherwise seems to be a meaningless existence. Some religious organizations also provide a sense of community absent in the larger society and offer social support for the many challenges of family and old age. A large-scale study on the effect of religion on well-being showed that participants who found meaning in religion had a higher degree of life satisfaction. In another study, prayer and meditation were found to reduce the stress experienced by older adults leading to lower rates of death. These statistics do not address the veracity of religion or suggest that religion is about anything real. A controlled study comparing religious practitioners with atheists may have found comparable positive results for the non-believer, that is, those who found meaning by accepting life as it is and who still lived with high ethics (Krause, 2003).

Contemplation and meditation is found in some form in nearly all religions. More recently, psychologists who investigated the relationship of meditation

to positive living found that it produced calmness and a general sense of well-being. Ricard, Lutz and Davidson (2014) reported on a large-scale study on meditation that was completed over 15 years and involved 100 monasteries as well as experimental groups at 19 universities. Of great interest to the aging population is the finding that adult brains can be transformed and improved through experience despite previous beliefs to the contrary. Meditation was also found to benefit practitioners that suffered with psychological depression and pain, and promoted an overall sense of well-being. These benefits have found support at a time when science is also documenting physiological changes that occur in the volume of brain tissue in response to meditation.

Meditation refers to the contemplative practices encouraged in many religions. The practices promote the development of basic human qualities related to psychological well-being, including a stable and clear mind, emotional balance and a perspective of caring mindfulness expressed in loving feelings and compassion for others. Meditation is relatively simple and does not require a special place or equipment. The practitioner is encouraged to have a desire for self-transformation and a concern for the well-being of others. An initial step is mastering the mind so it is not subject to the automatic conditioning learned in the past. The study examined three types of meditations. First, "focused-attention" meditation is aimed at taming the mind and having thoughts centered on the present moment. The second type is "open-monitoring" meditation that tries to promote less emotional reactive awareness that often occurs in the present moment and causes distress. The third type derived from Buddhist tradition is called "compassion and loving kindness" and encourages a more altruistic perspective toward others.

A major finding of the Ricard *et al.* (2014) study is locating the specific brain networks that change in response to meditation practice. These enhanced brain structures show that experienced meditators can, when they acquire the skill, activate these neural networks with less stimulation. Meditation creates a focused state of mind that with experience requires less effort and an enhanced capacity to remain alert and vigilant. Often, clinical volunteers suffer emotional burnout from experiencing empathy with those who suffer. Research showed that the effects of empathy and compassion differed for meditators where compassion reinforced the inner balance needed and encouraged a courageous determination to help alleviate suffering. Collectively, these large-scale studies point a path toward studying the mind, consciousness and subjective mental states in the meditator. It is encouraging for the adult and aging populations to know that meditation practice can change brain circuitry, which can bring about positive and lasting changes in the brain tissue.

Toward an ethical life

Making ethical choices contributes to a meaningful life. As the Danish resistance song states, and the words were often repeated in the struggle for liberation against the Nazis, "Fight for all that is dear to you, die if you must, then

life is not so difficult, nor is death". People live in a world that constantly requires choices reflecting character and ethics. How to behave and act in life is based on a personal value system. In the past, the community highly valued ethics based on the Golden Rule. Character referred to basic standards of honesty and integrity that people applied when interacting with others. In more recent decades, society has shifted away from these basic traits of character and is effectively creating a personality ethic based on images, appearance and being outwardly positive. In other words, it is no longer a person's character that determines effectiveness, but creating a personal presentation that will appeal to others.

Josephson (1994) suggested six basic traits of ethical behavior that included trustworthiness, respect for others, social responsibility, fairness in dealings, caring for others and manifesting good citizenship. If a person does not possess basic integrity he or she will be inconsistent when expressing values in behavior. The many challenges of life require choices and decisions that eventually reveal the presence or lack of character and integrity. A personality trait based on character is a lasting dimension that can be observed by behavioral consistency in a variety of situations. For example, an honest person would be honest whether other people observed his or her behavior or whether totally alone. This cross-situational consistency is what is meant by integrity (Dubrin, 2008).

Some traits of integrity mentioned by Josephson included being honest, standing up for what a person believes to be right, not to be swayed by social pressure and keeping promises made. Other aspects of character development and integrity are being loyal to those who deserve loyalty, accept responsibility for actions, pursue excellence in all that is undertaken, be compassionate and caring, be kind and judge others on their merits and treat all people fairly. Whenever confronted with choices, people can ask if the action is consistent with their conscience. For example, how would it feel personally to discuss the chosen behaviour with people with whom we are intimate? When people are ethical they know the line between right and wrong. A person of integrity will also be consistent in the relationships between knowledge, talk and behavior. Integrity is practicing beliefs consistently over time and in different situations (Reece & Brandt, 2008).

Self-control and positive goals

Self-control is central to the ethical life and to living life with integrity. Exercising self-control implies that a person is not spending precious time in faraway dreams or escaping reality by means of addictions. Education is an important part of self-control and reaching important self-relevant goals is only possible when educated. A person lives longer and better when educated, and in learning important information, people have the expertise that gives them a better chance to live life on their own terms. Despite the aging process, it is never too late to learn, since the brain is like any other muscle and is subject to the same principle of "use it or lose it". A meaningful life is more likely if

people remain students throughout life and study what is of interest and has utility. People who develop an open mind through education will have greater empathy and the ability to interact with those who arrived at a different place in their thinking and behavior.

Life offers many challenges and potential discouragement, so it is essential to learn good coping skills. Although old age can be a difficult time, if people focus on the positive aspects of life the outcomes are better. The more active a person and the more connected to others and meaningful work, the more satisfying life is even late in the day. Many of the habits of youth and middle age reach into old age with positive or negative outcomes. People who across their lifespan were positive in their outlook, engaged in consistent physical exercise, were not overweight, had a stable marriage and who had learned to cope with adversity, were more likely not only to be alive when 75 to 80, but also more content with the outcomes of life (Vaillant, 2002).

What is the meaning of life?

In adult years, it is important and adaptive to have developed a belief and value system in response to the complexity of life and the many choices that must be made. If values are consciously adopted, they impact a person's conscience with resulting feelings of reproach when the individual is not living up to self-expectations. People are happier throughout life living in accordance with a consistent value system. However, value conflicts are always possible and ways must be found to resolve contradictions. For example, there may be family members with very different outlooks and worldviews. If people insist rigidly that behavioral standards must not be violated, and reject those that violate self-adopted ethics, then the solidarity of the family and the happiness of relationships are negatively impacted. Some compromise in our relationships is often required, particularly about values that are considered of less importance. It is possible to compromise on lesser values, but still have a well-defined inner red line that will not be crossed or allowed to conflict with our conscience.

In order to function in a complex world, it is at some point necessary to ask which values are of greatest importance. If, for example, a job is considered of central importance to support the family, then vacation time may be of a lesser value that at times has to be sacrificed. If the boss is overbearing or tyrannical, that may violate a person's sense of justice and fair treatment. However, as job security is a higher value in support of the family, injustice should be confronted without making an enemy where possible. At the end of the day, all people have to compromise, since values may differ in other people who are important in our lives. Nevertheless, it is also important to know as part of self-consciousness our personal central values that we are willing to live for, and, if necessary, willing to die for in an affirmation of what we hold dear.

Some studies have demonstrated that the lack of a value system and finding no meaning in life are related to an inability to solve personal problems and to mental illness. If nothing makes sense, then why should it matter if a person

uses drugs or becomes a criminal? Questions of that type are answered by a value system that has clear guidelines for what the individual wants to achieve and how to treat others on the journey. With a clear vision of life and important goals, people feel anchored and living a worthwhile existence. Taking an interest in the welfare of others seems a natural developmental goal for an adult. That can take the form of volunteer work to help the less fortunate or participating in political activities to solve poverty and ill health.

The meaning of life also changes developmentally. The evidence for evolution is becoming more powerful as the years pass, and many young people are confronted with the question of whether a god is needed to explain life. People grow through each developmental crisis either toward more maturity or toward adopting attitudes of pessimism and cynicism. It is ironic that in a world of increased material wealth, many people still feel that their existence is meaningless. The chase after material wealth is an empty struggle for many unless wealth creation is also tied to the well-being of society. A wealthy society that also has more divorces, more crime and less human solidarity has made a bargain with the devil that, in the end, produced no happiness. Chasing wealth is an illusion since even the wealthiest never have enough and wealth-obsessed people remain insecure.

Life requires that people adopt values and meaning from existence. The rich man thinks little of his daily bread since in the context of wealth and plenty it has little meaning, but for a poor man, bread is life itself. It is what people struggle and sacrifice for that creates meaning. When people work hard, they also learn that difficult work has value and meaning. The rich often live dissolute lives because life produces no significant challenge when riches, status and power are presented on a silver spoon or when wealth is created through corruption and manipulation. When people suffer for a cause, that cause and struggle becomes important and will influence many other aspects of life. The courageous souls who have fought Ebola in West Africa know the value of medicine and nobility in the face of impossible odds. At the end of the day overcoming fear, suffering and struggling defined what these courageous people valued.

The unexamined life and obsessive escape

Despite common beliefs that aging inevitably produces a decline in mental functioning, research shows that people determine some of the outcomes. "Use it or lose it" has as great a relevance to mental functioning as physical exercise has to physiological well-being. Despite the rapid change in wealth and material culture, many people are yet without a sense of meaning or purpose in life. The focus of the past few decades on personal development and entitlement has produced an indifference to human suffering. The focus away from helping others has produced higher divorce rates, broken families and a sense of anomie. However, meaning and purpose in life is a goal people must create for themselves. Although society, religion or political philosophy can

provide a platform in the search for meaning, people must individually define their role and responsibility. Happiness is not found in wealth obsession or in robotic conformity. Well-being is more likely the consequence of developing character and living consistently with a value system. Although people are born into cultures, they don't have to conform to all social demands but rather can develop an awareness of what is good and right, and incorporate that in life. The unexamined life is not worth living, but decisions based on contemplation and an awareness of what is right and wrong lead to self-insight and compassion for others and more human happiness.

Summary reflections

According to Erikson, people pass through eight stages of development, where each consists of a challenge and a crisis that, if solved, is adaptive and leads to ongoing development. The main task of adulthood is developing an intimate relationship and giving up ego-centered and selfish needs. The solution to the crisis of intimacy is found in loving and unselfish relationships that prepare a couple for the building of a family and creating a common identity. Unfortunately, the social ideology in Western societies, which emphasizes the right to personal self-fulfillment, has been widespread since the 1960s, with negative outcomes for families and marriages. Change in life will always require adaptation but something must be wrong when half of all marriages in the Western world end in divorce.

The second to last crisis of the lifespan in Erikson's theory is generativity versus stagnation. Too many people seek to escape from mortality through drug abuse or other unwholesome diversions. Generativity is a healthy response in reducing the threat and anxiety of mortality by contributing something meaningful and lasting for the generations that follow. Being creative and willing to share is also related to positive self-regard and efficacy. The final phases of life are really all about winning the struggle for integrity.

Stagnating old people live with despair and the absence of a meaningful existence failing the final crisis of ego integrity versus despair. However, when the developmental challenges of old age are met, it can be a time of great meaning and satisfaction. As an older person reviews the accomplishments of life, the contribution to creative work or acting as a mentor to students and family is very satisfying. Although personal life comes to an end, older people continue to find joy and happiness in their descendants, family and community. In the final sense, meaning is found by living with integrity and being consistent with a conscious integrated value system.

Research shows that religion can be a source of meaning and results in higher life satisfaction for some people. For example, prayer and meditation reduce stress in life, probably from the belief that someone is listening and it is possible to communicate with a deity and not be alone. Meditation has demonstrated great utility in producing a stable and clear mind, leading to feelings

of compassion for others. These findings are unrelated to any judgment of the claims made by religion for veracity.

Making ethical choices is what makes life meaningful. Contemporary life has changed and not for the better. In the past, people valued ethics based on the golden rule of honesty and integrity. Now society is more obsessed with person presentation that appeals to others and is rewarding. However, the meaning of life is found by being decent human beings who live with a code of ethics. When critically evaluating value systems, people need to understand their core stands that cannot be compromised and what values are more peripheral. All people will, at some point, find it necessary to compromise on peripheral values in order to function in relationships. It is dysfunctional not to have a value system since it leads to the conclusion that life has no meaning and to mental illness. The betterment of humanity as a value has great meaning. In the final analysis, it is what people struggle for that has value and meaning that is lasting

This chapter discusses the many changes and challenges of becoming an adult and learning to live life to the fullest. Despite varying challenges that occur across the lifespan, a person's level of happiness remains largely unchanged in different age groups. Those findings suggest that happiness and optimism are hardwired as a personality disposition and they are unaffected by external events. However, to meet the goals of adulthood requires stable mental health and a desire to master challenges encountered on the journey. By the time the person becomes an adult, identity formation is completed and the individual has accepted a value system that serves as a guide for the basic decisions of living. Since people are social beings, another important adult goal is the establishment of a supportive social network of friends and family.

10 Finding the balance

Meeting the challenges of midlife

The Kansas City studies on adult life conducted between 1954 and 1964 concluded that midlife was a time of peak performance in psychological and social competencies (Neugarten & Datan, 1974). These findings were largely supported by the Midlife in United States study conducted in 1995 and 1996. That study examined the psychological, social and physical factors that predicted health and well-being in midlife. Other findings showed that personality is set in early childhood and individual differences remain relatively constant in midlife and throughout life. Temperamental qualities of children also predicted adult behavior to a great extent; for example, children who were shy tended to delay marriage and generally manifested lower levels of occupational achievements at later points in life (Brim, Ryff & Kessler, 2004).

Midlife is a period of emotional calm and stability for the vast majority with most relationships secure, people enjoying good health and many having secured financial security. When older people are asked what time of life they would like to live again, the mid-forties are considered the most ideal time (Drimalla, 2015). The nature of midlife is best understood as a continuation of young adulthood. With a well-developed identity established, most adults function well. Midlife is a time of increased well-being, although that is negatively impacted by low socio-economic status. Personality and the self are anchors that ensure continuity throughout life and that is true for midlife as well. There are many complex factors that contribute to midlife well-being, these include gender, socio-economic status, marital status, race and culture. As in every season of life, the conditions of midlife involve some gains and positive experiences balanced with losses. Midlife ushers in many positive psychological and social changes, including the possession of more wisdom and applied intelligence, as well as better emotional regulation (Magia & Helpern, 2001).

However, midlife is also a time when chronic disease makes an appearance for the first time, and for many people there are higher cholesterol levels, the beginnings of arthritis and high blood pressure. The demands of multigenerational caregiving are typically a feature of midlife as aging parents as well as children need emotional, financial and physical support. With both partners working, there are also increasing demands from satisfying work obligations and looking after family needs. In midlife, it is only natural for people to evaluate how

life developed and all that remains to be done. Some people identify personal desires and goals that need to be met while there is still time. Life reviews in midlife motivate the desire for change. At the same time, multiple generational needs must be met and leisure and health often take a back seat. Nevertheless, it is worth noting that midlife is also a time when a change in lifestyle can still be accomplished with long-term benefits to well-being and longevity.

The range of what is considered midlife has expanded in recent decades as longevity has significantly increased in advanced industrial societies. In living longer than expected, some people feel subjectively younger than their chronological age. Feeling subjectively younger is associated with well-being and good health. On the other hand, respondents who subjectively state that midlife ends at 60 are more likely to suffer from heart disease or other health problems. Socio-economic status has an impact on health and well-being as poor people subjectively enter and exit midlife earlier than people higher in social status. Differences in socio-economic status are related to the level of stressors in life and overall health (Kuper & Marmot, 2003).

In past research, midlife was emphasized as a period of emotional upheaval and crisis where people in the cohort behaved like undisciplined adolescents. Some researchers thought that the crisis occurred from an awareness of mortality and the perception of the limited time left in life. The recognition that life is half over and that life-achievements will fall short of desired goals brings grief to some people. Arriving at midlife, many men and women also ask deeper questions about the meaning of life and personal identity. Being unsatisfied with existence might mean some individuals will try to create a new identity or seek to recapture lost youth in defiance of aging. Some couples who are stagnating may divorce or otherwise make other disruptive and illogical decisions (Tergesen, 2014).

Is midlife a time for an inevitable crisis?

Research supports the idea that relatively few people experience the emotional turmoil of a midlife crisis. People who experience disruption have probably been in maladaptive relationships, are neurotic or have unrealistic expectations of happiness. In the modern industrialized world of the West, dysfunctional family relationships are ubiquitous and often result in divorce. Levinson (1986) thought of midlife as a time marked by crisis and internal instability. However, less than 10% of the people in the United States experience a crisis attributed to aging. Personal characteristics and history are more likely predisposing factors for any midlife crisis. In a different survey involving over 3,000 participants aged 25 to 72, midlife is perceived as the time when individuals actually feel greater financial security, increased sense of control and the confidence that they are able to deal with most of the daily responsibilities of life (Drimalla, 2015; Squires, 1999; Whitbourne & Whitbourne, 2011).

Most people do not experience a midlife crisis, but nevertheless pass through challenging family transitions including changes in love and power

expectations that can lead to conflicts. Most family conflicts involve either a power struggle or struggle for intimacy. The struggle for power is expressed by the desire of a partner to change their relative dominance. The struggle for intimacy involves an attempt to change the degree of closeness between partners. Conflicts over personal identity are closely linked to the roles played in the family. When these roles change, for example, in marriage, divorce or when becoming parents, periods of uncertainty and doubt follow (Cummings & Davies, 2010).

However, an actual midlife crisis involves relatively few victims. In one study only, 8% of the participants saw aging as responsible for the emotional turmoil in their lives. Another 15% noted that significant life events produced a crisis experience including loss of employment, divorce, loss of relatives and severe financial threat (Squires, 1999). These stressful events can occur at any age and it is not exclusively a happening of midlife. The very notion of a midlife crisis appears to be a cultural variable that occurs in societies that value youth and find aging abhorrent. Midlife turmoil is also an outcome of socio-economic status because the poor have no time for crisis in the struggle for survival. For the majority in society, midlife is probably a time where the overall gains are greater than the losses typically experienced in the afternoon of people's lives. People may experience turmoil in some areas and mastery and competency in other aspects of life.

Midlife changes in health and well-being

Changes in health, mental well-being and physical functioning are considered by many to be the downside of midlife. Due to negative lifestyle factors, midlife is for many people a time of increasing health problems. Unhealthy lifestyles are sadly more frequently present in people of low socio-economic status as they seek escape from the daily stress caused by the struggle for survival. As people age, they spend more time attending to chronic health issues that are linked to socio-economic status. Ill health is not caused by the absence of material wealth, but rather is the outcome of socio-economic inequality (Marmot, Ryff, Bumpass & Shipley, 1997).

Midlife is a time when changes in lifestyles can still prevent many chronic health problems and make direct contributions to long-term well-being and health. Life is enriched in midlife by the accumulation of life experiences and at this point many people also have the security of being settled in a career. For people with well-established careers midlife bring financial security and more freedom to use their time. As grown children leave the family home there are more possibilities to exercise personal freedom in travel and experiencing creative aspects of life. Increased marital happiness and satisfaction occur when children leave home (Ryff & Seltzer, 1996).

As noted in Chapter 9, Erikson suggested that midlife is a time for the resolution of serious challenges, where conflict is a choice between generativity or stagnation. Generativity is met by achieving worthwhile goals, for example,

by devoting time to creative work and by helping others. Healthy people at midlife are involved with promoting the establishment of the next generation and want to guide and influence younger colleagues or members of the family toward positive accomplishments. In midlife, optimal health is found by living a meaningful existence, in particular by sharing a productive and connected life. Midlife is not a time of inevitable crisis but rather a time for transformation and change. Although generativity begins in early adulthood, it is in midlife that commitment typically extends beyond a partner to the larger community.

Generativity is essential for the continuity of society and cultural improvement achieved by raising and guiding children, developing ideas and contributing to cultural expressions. Stagnation occurs when people become self-centered after achieving important life goals such as getting married and having children. Stagnating people take little interest in young people, including their own children, and focus more on what they can get from others rather than what they can give and offer. Work in midlife means more than the financial rewards, as successful midlife workers also seek to create and transmit lasting values to younger colleagues. Generativity is also associated with greater involvement in parenthood and in political and social activities to better the community (Lachman, 2001).

It is true that negative hallmarks of midlife can create dismay and dissatisfaction. The aging process causes self-reflection in many people. In evaluating career objectives, some people experience failure in not having achieved all that they hoped for in life. Family issues and problems often accumulate at midlife. However, people who experience emotional turmoil typically attribute that to significant life events such as death of a parent or loss of employment and not to getting older. Probably less than 10% of midlife women and men experience the turmoil commonly identified as a midlife crisis (Drimalla, 2015; Wethington, 2000).

Loss of youth and the reality of aging

People in midlife experience a range of changes in both external appearance and internal physiological function. In addition to grey hair, wrinkles and putting on weight, midlife people also experience a reduction in the efficiency of the cardiovascular, respiratory and nervous systems. Farsightedness is also common in midlife, as for the first time the individual is unable to read small print and hearing begins to weaken. Midlife is also the time of menopause where women cease to menstruate. Menopause does not cause great discomfort for most women, and what does occur probably reflects cultural differences in the emphasis on youth.

Psychological problems at this point in life are primarily the result of relationship dysfunction. Some interpersonal conflicts can actually be constructive and help a person grow, while other types of disagreement are mutually destructive. In family transitions, members are often faced with fundamental decisions of accepting or not accepting change in relationships. The most important feature

of human existence is change and the need to adjust to change continues throughout life (Cooper and Dewe, 2004; Oltmanns & Emery, 2012).

Stressors in midlife

Stressful events can happen at any point in life. However, some events are more typical of midlife transitions. Death among family and friends can occur at any time in life, but the death of a parent is more likely in midlife and in later aging. Personal health will come under closer scrutiny in midlife as lifestyle factors begin to impact well-being. People in midlife also have concerns about bodily appearance as the freshness of youth disappears and people put on weight or see grey hair and wrinkles appear. Some people in midlife worry about the health of their parents and as they move into deeper aging begin to share plans for caregiving with siblings. In midlife, parents also have heavy responsibilities for their children's financial security. People at midlife often experience stress relating to work and their career, with nearly half of all employees dissatisfied with their employment. This vulnerability and our inability to protect those we love from health and accidental threats also reminds us of our own mortality. Evaluation of our career brings to mind that midlife might be the last time to make adjustments to vocational choices or find work more consistent with values and aspirations.

Research tends to support the importance of day-to-day stress affecting well-being in midlife, for example, conflicts with a spouse, frustrations at work and daily aggravations. These daily events have a greater impact on well-being than the more catastrophic events usually the focus of research such as divorce or the death of a loved one. In midlife, people experience more overloads of daily stress because, at this point in life, they are juggling many competing demands from children, aging parents and career demands. Women in midlife have many additional challenges to balance work with increasing responsibilities for children and ageing family members. In addition, women also experience more crossover stress in responding to multiple demands from family and work (Clay, 2003).

In midlife, the individual confronts many important questions about meaning and existence that encourages personal changes in time commitments and values. Creativity is a broad concept that includes such activities as mentoring, teaching, promoting useful ideas, creating stronger family bonds and contributing to positive values that embrace justice and decency in human relations. For socio-economically secure people (who are not struggling desperately for survival), midlife is a time to take ethical positions and actively promote their values in practical ways.

Midlife brings with it considerable stress from increased role complexity. People at midlife are not only parents, but perhaps also grandparents and may have additional responsibilities for aging parents. The so-called "sandwich" generation, people in midlife are squeezed by competing needs to launch their children on to a successful life path and caring for aging parents. Volunteer

organizations depend greatly on people at midlife to devote time to religious, political or community activities (Aldwin & Levenson, 2001).

Some research shows a modest link between age and life satisfaction observed as a curve across the lifespan with satisfaction high when young, bottoming out at the average age of 50 and then increasing again as the aging process continues. However, this age-related effect only appears when controlling for important aspects of midlife including income, marital status and employment. The middle-aged group nearly doubles the use of anti-depressants, reflecting tense times. However, it is important to remember that the challenges are high at midlife and personal expectations are high. When expectations come more in line with social reality, satisfaction begins to peak again (Rauch, 2014).

Some common challenges in midlife

In the past, divorce was thought of as an event occurring mainly among the younger generation, but in recent years, the trend in the United States for the decades between 1990 and 2010 shows that divorce for people aged 50 years and older has significantly increased compared to other age groups (Brown & Lin, 2012). Conflict in marriages often occurs because of frustrations that are unrelated to the relationship. However, marital conflicts are common in the industrialized world and occur in every family and family life is rarely without stress. On the positive side, conflicts can contribute to growth and development in a committed relationship.

Children leaving home are a challenge in midlife because it changes the parent-child relationship. However, for most families, children becoming independent is a significant positive milestone because parents and children can experience the freedom of a new phase in life. Most parents report positive feelings and are happy when the nest finally empties (Drimalla, 2015). Many couples yearn for the empty nest but have a child or children that still live at home for financial or personal reasons caused by unemployment and underemployment. Recent research shows that 36% of US young adults aged 18 to 31 still live with their parents and delay their independence, mainly for financial reasons (Fry, 2013; Siniavskaia, 2014).

The loss of intimate others will be discussed in more detail in Chapter 11 on death and dying. Regardless of age, the loss of a parent is among the most traumatic events in life, and when this loss occurs in midlife, the feelings of mortality become especially acute. With death of a parent comes a final reminder that life is temporary and that the personal end to existence is approaching. Such thoughts provoke questions about the meaning of life that we discussed in Chapter 9 (Rando, 1991).

The challenges that people face in midlife are often connected with the workplace. Stress in the workplace occurs for all age groups, but is particularly acute in midlife as that is the period of the most intense professional activity and formation of professional identity and personal expectations. Adjusting to employment-related change is often required in a dynamic technological

society and can cause high levels of stress in employees. Central to the stress experienced are imbalances between work-related demands and inadequate decision latitude or control of outcomes. The sudden loss of employment is especially traumatic during midlife since that is the time when people have many financial obligations and are making plans for retirement (Arnett, 2012; Feldman, 2012).

Midlife: A moment to contemplate change

Many parents look forward to children leaving home when they are no longer required to offer constant emotional and financial support, but can work out plans for enjoying their own life. Many couples begin extensive travel during this time since that desire was often repressed during childrearing years. Others look forward to re-engaging in education or participating in cultural activities.

When coping with death, the quality of relationships in the family matter. It is important to remember that families that foster close relationships bear the loss better than those with a maladaptive history. Research shows that when relationships in the family have been negative or unsatisfactory across the life span, grief will be more prolonged and difficult to process.

Work identity is a central component in the self-concept, particularly for men. With broad unhappiness connected to the workplace, it is worth remembering that midlife is probably the last time that the issue can be evaluated. Although gender roles have changed drastically in recent decades, it is probably still true that for most women, parenthood and family relationships are more important components of selfhood, whereas men look more to work as a source of identity and satisfaction. However, times are changing as gender roles have tended to converge more in recent decades, but the biological platforms still would suggest differential satisfaction from work and family.

Vignette: Midlife was another chapter in my life story

> Midlife was not a time of crisis in my life. I acknowledge that my good fortune made all the difference. I enjoyed solid family relationships and the struggles we experienced were not overwhelming since we had expectations that life would improve and get better. An important decision for me was to take early retirement (again, I acknowledge that only a minority can do so realistically). Professionally, it was a time to reassess and decide what I wanted to do with the rest of my career and in the longer term how to plan my life. I wanted to make changes and focus on what I thought was important while there was still time and energy to do so. Although my career had been international in interest and scope, now I found more time to support the values I found compelling and right. For many years, I went to Cuba with medical equipment needed after the collapse of existing socialism and in personal opposition to the US boycott. I made lasting friends in Havana who became family. I also reached out to Vietnam and began to do practical things there to improve the academy.

For example, I established English language libraries containing several thousand volumes at the University of Vietnam and the National Institute of Psychology in Hanoi. I restarted my research career with my young Vietnamese colleagues.

I experienced the sorrow that affects nearly all people in midlife. I lost my parents and nearly all my uncles and aunts. In our once large group of cousins, I am now the second oldest. I experienced grief and found it difficult to say farewell. However, I knew we all had a good conscience in how we treated our parents. We surrounded them with love and unlike many our parents went into the deep sleep knowing that they were beloved and admired. As my father and I agreed on long ago, "life is for the living".

It motivated me greatly that all my male ancestors had died young. At this point of life, I have already lived longer than all male members of my direct line going back several hundreds of years. I never had the feeling that midlife would be a time of decline, rather, I felt lots of vigor that only recently has started to level off. So midlife for me was a time to reach my potential and to live in accordance with my values. That meant making an effort where I thought I could make a difference. To use the language of Erikson, midlife for me was a time of generativity. For example, where before I was absorbed in the minutia of research details, I now had time to write books that required broader assimilation and evaluation of what I knew. Having spent nearly all my life with my feet in two continents, midlife also opened an opportunity to return to my homeland and teach at the two largest universities. Although university students in Denmark are bilingual, it became a matter of pride to lecture and teach in my native language. These stays completed my sense of permanent identity and my self-concept. At the same time, midlife was just another chapter in my life story. For me, there was no crisis and no stagnation as I enjoyed the outcomes of positive mental health.

Challenges are not precursors to crisis

For the educated population, midlife is typically the time when people take on more responsibility and contribute to the better functioning of society. For many people in midlife, it is a calmer and happier time as they foster the progress of family and culture. With much invested in the community, people in midlife also tend to be a more conservative force, preserving the status quo and acting as a break to rapid social change.

Crisis defined as emotional turmoil that demands change occurs in midlife to just a few people. However, such emotional reactions are typically attributed to life events and not because of midlife. Regrets are not uncommon in midlife, as many people failed to pursue desired career objectives earlier in life while they had the opportunity and time. Others become aware of the effect of negative lifestyle factors on health and regret they did not make timely changes in favor of longevity. A healthy reaction to regrets is to disengage from these worries and invest life and effort in what can be changed now and in the future.

Many researchers today think that midlife transition and outcomes are simply reactions to major life events such as raising children to independence and the need to begin thinking and planning for retirement. Midlife can be stressful for many people who at this point have increased responsibilities, including managing career peaks, looking after both parents and children and responding to what they consider social responsibilities. Meanwhile, as people grow older they gradually recognize the limitations of life and accept that the remaining time will never allow one to fulfill all ambitions and that life will always remain incomplete.

Loss of employment, financial problems and illness are difficult challenges in midlife, but can, of course, occur at any point in the lifespan. Personality and neuroticism are the main precursors to crisis in midlife and in any other point of life as well. The concept of midlife is most likely a cultural construct and an artifact of advanced industrialized societies. In some cultures, there is no concept of midlife (Shweder, 1998; Wethington, Kessler & Pixley, 2004).

Cognitive changes

Midlife is not a time of cognitive loss. Although perceptual speed and memory functions begin to decline in midlife, that deficit is more than offset by increased cognitive abilities in other areas. The midlife person has, over time, developed higher order cognitive skills, such as logical thinking, which can be relied on to compensate for any loss of speed. In fact, people at midlife score higher on all measures of cognitive performance compared to when they were 25. Research also shows that people achieving higher levels of education suffer less cognitive loss. Significant negative changes in cognition do not occur until much later in life. Verbal memory and inductive reasoning seem to expand in midlife and many individuals make their most significant creative contributions during this period (Willis & Schaie, 1999).

Gender-related challenges

Most challenges in midlife concern work and occupational choices. Women's work lives follow a different trajectory compared to men as they seek to adjust work responsibilities to the importance of marriage and having children. Men typically reach career peaks in midlife as they are given increased responsibilities and challenges and accomplish important career goals. Gender roles that focus on caregiving make it difficult for many women to reach important work-related objectives. Low socio-economic status is a chronic obstacle for both men and women who as a result find it difficult to create a satisfying life that meets personal needs, and over the long run low income stressors impact well-being. At the same time, women experience more accumulated stress from multitasking family and employment responsibilities. Men focus more on the stress on the self, trying to cope with the frustrations of self-defined plans. Gender-related interpersonal tension and dissatisfaction accounts for a large

number of the stressors present in both men and women (Almeida & Horn, 2004; Clay, 2003; Squires, 1999).

Encouragingly, women rate their sex lives and relationships better the longer they are married, and content couples who enter midlife married have good chances of staying together permanently. Sexual functioning is an imperative of women's lives, and midlife does not change women's desire for a satisfying sex life. In one survey, about 75% of women stated that sex was moderately to extremely important. Women report more stress from multitasking the needs of spouse, children, employment, care for elderly family members and maintaining family networks. Men are more impacted by stress related to employment and career. People in midlife have, however, learned from experience to cope more effectively with daily stressors that are common to life, evaluate alternatives and plan better for future problems and issues (Cain, Johannes & Avis, 2003).

Relationships at midlife

A major source of well-being throughout the lifespan is the outcome of positive relationships, especially that of a loving spouse and supportive children. For most people in midlife, family interaction is considered the most important and satisfying part of life. However, midlife offers challenges because relationships change over the course of time and are restructured as children leave and return home. At the same time, the well-being of aging parents becomes a concern for many in middle age. The mobility of our society also offers challenges as family members leave and live in different locations with large geographical distances. When midlife children live in different regions, the monitoring of parental health is difficult, although electronic communication has enabled some adult children to provide continuous emotional support and an understanding of current health conditions. Relationships can be a source of great satisfaction, but when dysfunctional, can also be a major source of stress (Rook, 2003).

Midlife is the time when people concentrate on relationships that are the most important and meaningful. At the same time, the older generation is for the most part still alive supporting important feelings of continuity that contribute to family identity. As children grow up and marry, there is also a need to adjust to in-law relationships that produce new and interesting challenges. The downside of this otherwise rich relationship environment is that some of the older generation is in the final phases of life, bringing an increased awareness of personal mortality and shrinking amount of time left. Highest ranked among the stressors experienced in midlife is the death of parents and children.

Marital relations. Marital happiness is the strongest predictor of well-being in midlife. Although most divorces occur early in a marriage, some also occur in midlife to dysfunctional couples. Couples with higher socio-economic background are more likely to divorce as the economic circumstances make it

easier. However, for most women, divorce brings many economic challenges that result from lower income and status. Single women supporting themselves and their families have become the majority of the population living in poverty. Women initiate two-thirds of all divorces, which they mainly attribute to the bad behavior of men. Often, women divorce because of communication problems and resulting loneliness. Some men are willing to recognize that the problems in marriage are the result of a workaholic lifestyle that leaves little time for a wife and children (Marks, Bumpass & Jun, 2004).

Grandparents and happiness. Many couples find great satisfaction in becoming grandparents. As lifespans have extended so significantly in recent decades, today, grandparents can expect to spend a third of their lifetime with their grandchildren. Grandchildren represent hope and family continuity, giving great personal satisfaction. Many people in midlife gain a sense of immortality from leaving two generations behind, as with increased longevity, some also experience being great-grandparents. Being grandparents offers an opportunity to talk with their grandchildren about family history and their own significant personal experiences. Mutual pleasure is promoted by the indulgence of grandparents and by encouraging and unconditionally loving grandchildren who reciprocate by expressing love to their "magic" older generation.

Relationships between grandparents and grandchildren depend on the support and time investment offered to the child by other family members**.** Many families today are headed by single parents, usually the mother, and therefore depend greatly on grandparent support. In single-parent families, grandparents and even great grandparents take on parental roles by providing emotional and financial support as the center of family life. The time they spend together provides high quality contacts between grandchild and their grandparents that are not maintained to the same level in families headed by two parents. Likewise, the bonding that occurs when grandparents are primary figures in children's lives is at a deeper level, which unfortunately, also leaves the potential for trauma when the grandparents die early in the child's life. In many cases, grandparents take on parental roles as primary caregivers in families that are otherwise dysfunctional or that have experienced tragedy, such as the loss of a parent through death or divorce. A significant proportion of grandparents in the United States take on all responsibility if both parents are absent. There is little doubt that the emotional strain for these deeply involved grandparents is a significant burden.

Divorce can change the relationship between grandparents and their grandchildren since parents typically decide on the nature and frequency of contact with grandparents. Grandparents will seek to establish strong relationships with their son's spouse and most will continue the contact after the separation. In a breakup, the grandparents related to the custodian (typically the mother) will see their grandchildren more frequently and seek to compensate for otherwise missing family closeness and emotional support. It is a major concern for the grandparents on the other non-custodial side to maintain a presence in the lives of

their grandchildren. Unfortunately, the disputes that led to the divorce are often projected onto parents who were only interested in the welfare of the family.

Midlife children and their parents. Relationships between midlife children and their parents have changed in recent decades due to increased longevity and changed economics. During the recent economic crisis, a large number of adult children moved home to aging parents, thereby creating challenging family dynamics. At the same time, increasing life expectancy makes it likely that parents and their children will grow old together. One possible outcome from that reality is that children will experience increasing difficulty in helping their parents in old age when they themselves need increasing care and support.

In midlife, children are likely to re-evaluate the contributions of their parents. Having experienced some of the difficulties of life themselves, they are at this point more likely to appreciate the strengths and contributions of their mother and father. For many children, the quality of the relationship improves as parents are impacted with ill health and loss of vigor. As the tensions of adolescence and conflicted early adulthood ease, the parent-child relationships often become stronger, creating mutually beneficial emotional support and bonds. As aging progresses, a reversal in aid frequently occurs, with children providing more assistance to parents, while parent to child assistance declines.

Friends and the passage of time. Some friendships pass the test of time, but many do not. However, as time passes and an awareness of mortality intrudes, friendships that are valuable are maintained and superficial relationships fade away. Women friends experience more intimacy than men, as typically emotional support is valued and women discuss their feelings with each other. Men tend to have more shallow relationships, as their conversations focus on external topics like sports and politics. The number of friends decline for both genders at midlife since people do not want to invest time or effort into relationships that are not family or among the most rewarding friendships. Loving family and friends are both vital to well-being. Family is a source of ultimate security against the misfortunes of life and intimate friends are a source of long-term emotional support essential to happiness. The greatest support of lasting happiness is assured when the spouse is also considered the best friend.

Caregiving

Caregiving for aging parents is a major challenge and a milestone in midlife. Children who live near their parents are most likely to offer practical assistance. Research also shows that it is typically the daughters that step in and help with all the practical questions of daily care and looking after the health issues of their parents. In some cases, ill health becomes catastrophic and terminal and the whole family is required to help. Families where the siblings were close growing up are more likely to come together at such a time and offer mutual assistance.

With gender roles changing, men participate more in caregiving today than in the past. In the beginning of parental infirmity, caregiving tends to be shared along traditional gender lines, with daughters providing more help with cooking and household care and men running errands and attending to repairs and upkeep. However, caregiving still remains in most families a greater challenge for female members, especially when illness is chronic and constant attention is required. Large numbers of women have to quit their jobs, and many suffer later from depression caused by the overload of multiple responsibilities (Giele, 1982).

The support of other family members and friends is very important in reducing the isolation experienced by caregiving women. Where there is a financial need, support by others in the family can help reduce the strain experienced by caregivers. If possible, caregiving should be shared so the caregiver can continue some part-time work. Employment that is enjoyable can help lift the burden of social isolation experienced by active caregivers when they leave permanent full-time employment. In Denmark and a few other countries, society arranges for housekeeping care at no cost for the elderly. However, in most countries, caregiving is totally the responsibility of surviving family members. Most elderly do not want to go into a caregiving facility, as these are often seen as end points for those waiting to die. Such facilities are also prohibitively costly for many people.

Positive coping and cognitive reappraisals

In midlife, people face many challenges that must be resolved successfully in order to survive and prosper. Some challenges are more unique to this time period. The support of family and friends are very important in preventing stress and research shows that people who receive less support from family or friends are more likely to develop chronic stress-related diseases. We are potentially our own best friend and can learn to cope with stress at least partly by changing our perceptions of the situation. Healthy coping can involve the use of humor and seeing the positive side of challenges. Studies in personality suggest that there are greater overall levels of agreeableness and less neuroticism in midlife, as people have settled many of the issues that were obstacles in their youth and as young adults. Cognitive appraisal theory suggests that to cope with stress, people need to deliberatively change feelings and cognitions, as well as the way they perceive the world. This deliberate change can be accomplished through conscious cognitive reappraisal of the stressful event. It is important to remember that, regardless of stress level, generally the sky is not falling (Uchino & Birmingham, 2011).

Midlife is for some people a time of loss. Although loss may invite negative feelings, it is healthier to focus on what can actually be changed. The loss of a job, for example, may be totally independent of worker performance and reflects larger economic issues of employer greed over which the employee has no control. Loss outside a person's control should not be allowed to affect self-esteem or beliefs in self-efficacy. Midlife challenges can nevertheless consume a

significant amount of energy. People can help themselves by making conscious attempts to create a better balance between professional and personal life. As in all points of life, it is important in midlife to rest and to engage in pleasurable activities. To maintain well-being, each person also needs to accept the reality that life will always be incomplete. Nevertheless, midlife is also a time that motivates change, while it is still possible to achieve realistic personal goals and keep a healthy lifestyle.

Summary reflections

Midlife is a time of peak performance and optimal well-being for most people. At this point in life, the vast majority of people have established a personal identity and an ideology that guides daily life and future plans. Midlife is a time of increasing role complexity as people try to balance obligations to parents with promoting their children on a path to success. It is also the time when chronic disease makes an initial appearance and many physical changes remind the midlife person of mortality. When reviewing their achievements, many people in midlife are motivated to change. Fortunately, there is still time in many lives to make positive changes in lifestyle for a long-term impact on health and well-being. Women are more affected by accumulated stress from multitasking family and employment obligations compared with men.

Negative changes in health and physical functioning is the downside of midlife. However, midlife is also enriched by previous experiences that facilitate better decision making. As children leave home, parents experience more freedom to travel and can enjoy creative aspects of life. A healthy response to midlife is to engage in generational activities by guiding and mentoring the coming generation. Midlife can be a time for transformation and positive changes in lifestyle and relationships. People who choose generativity as a response to midlife are typically well adjusted and have successful families and close friends.

Physical aging and the loss of youth is a reality that must be accepted. Some of the negative physical changes, such as weight gain, are caused by diet and passivity and can still be reversed for better health and well-being. Many people in midlife will, at least for a short time, engage in denial of aging, with men taking on energetic masculine activities and women asserting their femininity and sexual attraction. Midlife stressors include physical appearance changes, the health of parents, increased caregiving and dissatisfaction with work. Research shows that daily stressors and increased role complexity can cause more overload than major life events like the loss of a loved family member. Successful midlife is found in discovering meaning and purpose in life and by contributing to others.

It is important, however, to stress that midlife challenges are not precursors to lasting emotional turmoil or crisis. For most people, midlife is a calm and happy time. While some people experience regret from making poor choices in relationships or careers, midlife can also be a time for positive change.

Negative lifestyles that bring on chronic disease, such as smoking or drinking to excess, can still be altered to benefit well-being and longevity. A wise person understands in midlife that not all desires or goals can be reached and that life will always be incomplete. People who experience crisis do so primarily from personality issues; for example, neurotic people are in a lifelong crisis. Despite common concerns, midlife is not a time for cognitive loss, since learned higher order cognitive skills can be applied to a variety of situations.

Most challenges of midlife are about work and career choices. Women follow a different trajectory in life as they seek to balance commitment to family and employment. These existential commitments leave many women impoverished when divorced, and they experience more stress from relationships. Men worry more about finances and occupational stress. However, women rate their sex lives better the longer they have been married, and those who are happy in midlife are likely to stay married permanently. When older people think back to their 40s, they remember them as the very best time period. With life experiences banked, many problems that were obstacles in youth or young adulthood are now easily disposed.

Positive and supportive relationships are a source of well-being for people at midlife. Most midlife people consider family interactions to be the most satisfying and important for the enjoyment of life. Relationships do change over time, bringing new challenges and requiring readjustment. Children leaving home, getting married and divorced and parents aging together changes the roles midlife children play in the family and in other relationships. The mobility of modern society makes it difficult to maintain family networks and mutual support. Yet, it is in midlife that people share relationships considered most important in guiding children and fostering a happy home environment. In midlife, many of the older generation are still alive, promoting a sense of family identity and continuity.

Sibling's relationships also change over the course of life as they gradually establish their own families. When sibling marriages take place, there is a renewed interest in the extended family life. Later, when parents need caregiving, siblings may again reach out to help each other. However, it is late in life before siblings establish the intimacy of childhood and youth. The quality of friendship changes in midlife. Friendships that have value are maintained but superficial relationships fade away. Women foster more intimate relationships with their friends, whereas men's interactions tend to be more superficial. Friends can be a source of long-term emotional support essential to happiness. Lasting happiness is best promoted in the fortunate case where the spouse is also the best friend.

Becoming grandparents is eagerly anticipated by many midlife couples, as grandchildren bring hope and a belief in family continuity. Since longevity has expanded in recent decades, life brings on the possibility of influencing grandchildren across a significant number of years. There is mutual pleasure in indulging grandchildren who reciprocate with unconditional love. The strongest long-term relationship is between midlife children and their parents.

For the first time in human history, there is now the possibility of children and parents growing old together. With the struggles of youth and young adulthood behind them, children in midlife have more sober and supportive views of the role played by their parents across the lifespan. Caregiving of parents is still a major challenge in midlife and daughters tend to be more thoughtful and involved in the care of their aging parents.

Midlife challenges can be difficult but rarely bring emotional turmoil. Conflict in marriages has occurred with more frequency in recent decades and for the less committed, or those experiencing bankrupt marriages, divorce is possible. However, with positive attitudes, divorce can be a new beginning. Children leaving home are a significant positive milestone, which offers families new opportunities for growth and freedoms. Death of parents is a grievous loss and one of the most traumatic experiences of life. However, the quality of family relations matter in coping with death as families who foster supportive relationships suffer less from traumatic loss. Midlife challenges are often connected to work since it is the time of the most intense professional activity. Modern society requires constant adaption to change in work, which mandates relearning and adjustment. Although gender roles are converging, for most women parenthood and family are the most important aspects of selfhood, whereas for men work remains the primary source of satisfaction and identity.

11 Death and dying

Denial and acceptance

All who live will eventually die. Human beings have had an awareness of death for probably hundreds of thousands of years. The Earth and all that belongs to earthly existence are also slated to die along with our sun. The billions of stars in the Milky Way will, over the course of enough years, burn up their nuclear fuel and expire as well. Nevertheless, human beings have throughout recorded history tried to escape from the inevitability of dying. Denying death has taken many forms. For example, the Pharaohs of Egypt believed they would journey to the afterlife with enough provisions to continue living in style. Scandinavians believed that all good Vikings would meet in Valhalla where they would spend a glorious afterlife drinking mead and generally enjoying themselves. However, paradise as described, and what actually takes place in the afterlife, seems obscured in myth and religion. Typically, the oblique picture drawn of the afterlife depends on what is valued in the culture, and therefore largely reflects cultural deprivations. Arabian culture envisions an afterlife that is green and wet since that is valued in the arid homeland. Other traditions believe reincarnation and karma will continue to follow a soul until the person has lived a life free from flaws and sin, and can merge their individual personalities with the great, silver sea. Even in modern religions, there is nothing known about the afterlife but religious leaders still pontificate about all the benefits of living with god. The absence of knowledge and information about the afterlife does not prevent substantial proportions of humanity from believing that they will rise again in some form after death. In this second to last chapter of the book, we shall examine death and dying research and what we know about the process.

Culture plays a role in people's conception of death. In the United States and to a lesser degree in Europe, death is obfuscated and a taboo subject to be avoided at all cost. Old people are generally not seen on television, and there is constant validation of youth in programming. Television and other media continuously promotes youth and use young people to sell products to a consumer society. Old people are often isolated in nursing homes or retirement communities where they don't remind the rest of society that life is temporary. Religions contribute to the obfuscation of mortality by reminding people that life does not end and a pleasant afterlife awaits believers. At the same time,

the medical community is doing all that is possible to delay death by extreme and "heroic" actions that prolong a life that is, for many, both painful and of low quality. When it comes to burying the dead, all attempts are made by the funeral industry to make the dead person look good and lifelike. The denial of death is also supported by most cultures that promote the idea of dual existence and that human beings possess both a body and a soul. From the duality of existence, it is believed that when the body dies, the spirit lives on in another form. In that manner, most societies avoid accepting the finality of death and dying.

In most developing societies, death is a daily companion. In countries suffering from famine, death occurs among both young and old. Wars have created millions of totally random victims that no euphemisms can hide. In collectivistic societies, dying people stay at home and die in familiar surroundings. It is not uncommon to see babies die from malnutrition and various infectious diseases take a toll. On the other hand, in the United States, many children grow up never seeing death until they become adults. Since most cultures are both death avoidant and denying, there is little or no preparation for the inevitability of the end of family and other relationships. These cultural frames explain why some people fear death, while from other cultural viewpoints, the end of life is welcomed as an alternative to endless suffering.

For reasons of evolutionary adaptation all humans fear death

Without any evidence-based conception of resurrection, the "afterlife" remains unknown and unknowable. Philosophy and religion have struggled to understand the meaning of death, overlooking the obvious point that death is a normal part of biological existence. In most societies, death is a taboo subject, which increases the dread and fear associated with this "enemy of human happiness". Modern medicine has, in recent decades, been in constant battle to defeat death to the point where many people live out a terrible end existence in hospital beds, tied to machines and tubes. Hospitals and doctors can keep a person alive but, in the end, not really living in any meaningful way. American culture is not unique in viewing death as taboo, but it goes to some extreme in denying reality. For example, American society use a euphemism that obscures the reality of death, describing the dead person as "passing" into another existence or saying that dead people have gone to "meet their maker". The funeral industry encourages further delusions in denying death by creating a lifelike corpse through the application of makeup, embalming and the use of caskets that supposedly last thousands of years. The corpse in the minds of many is preserved so the individual can rise again in the great resurrection.

Death and dying used to be a more common sight in the West in the recent past, and it still is in many parts of the world. In the past, a family member that died was laid out in the familiar surroundings of the home, and children and adults both had the opportunity to examine the corpse and accept the finality of death. Today in the Western world death is more likely to occur in

institutional settings like hospitals or nursing homes, and few people live out their final days in the comfort of their homes. It can be argued that this lack of personal experience with death only adds to the mystery. When death is not seen or discussed, the dread and fear of death rises since the biological process is not understood.

Modern medical advances can prevent many sudden causes of death today, such as strokes and heart attacks. By the same token, many people die incrementally as they battle chronic illnesses like cancer, diabetes and cardiovascular illness. These medical advances also support the denial of death and obscure the reality of the finality of living. On the more positive side, a long dying process can also allow time for more thoughtfulness, so the patient can make appropriate decisions for the care of family, seek forgiveness from others and say goodbye. With enough time to contemplate, many dying people for the first time also confront the meaning of life.

It is a hardwired human trait to avoid or seek to escape from that which is feared. Since humans instinctively fear death, they also studiously avoid talking or thinking about their own mortality. Religious people feel it is unnecessary, as faith and good works will yield immortality. Atheists have a steeper mountain to climb since they believe that death is the loss of the self. For atheists, the entire struggle of life and achievements of selfhood disappears at the moment of death. In general, religion offers no comfort to people who assert that an afterlife must be supported by evidence-based science. Rejecting the concept of a mysterious afterlife, the healthy atheist comes to terms with the inevitability of death and tries through creative activities to leave a trace of achievements and some immortality in nurturing family, society and culture.

Thinking and talking about death is not morbid, but rather the opposite. Denial and the dread of death together prevent people from living life to the fullest. It is when people remain ignorant of the biological facts that the fear of death subverts human happiness. It is when people know and accept the finality of death at the deepest psychic levels that the specter and fear can be managed. In the end, people probably die the same way they lived: some with courage and others with fear or with mixed emotions. However, life is better understood as a temporary treasure, and people live better and at a higher level when unafraid. Acceptance of the finality of death also allows people to make decisions and prepare better for a good death or it allows a person to help some loved one overcome anxiety associated with dying (Patricelli, 2007).

Vignette: The unexpected can happen

> Some people in Bulgaria are convinced that the Black Sea got its name because of occasional tumultuous weather that can rapidly change a tranquil day to a black and deadly sea. My experience there one summer day supported the assertion that everything we value in life can be overthrown at a moment's notice. My friend and I were sitting on a ship's deck in the harbor that had been converted into a restaurant. It was truly an idyllic

scene as we enjoyed a meal with a little calm wind from the ocean. It was getting late in a partially cloudy, but sunny afternoon. However, we enjoyed a good seafood dinner and commented on the unique and beautiful scenery. Not far from the ship, an old man was steering a small motor boat out of the harbor toward the ocean and a fishing trip.

Then it came, first a little blow that rocked the parasol, a small pause and then a gigantic blast of wind that moved the tables and chairs. Within seconds, we were in the midst of a hurricane. Holding hands, we jumped for our lives onto the harbor dock and ran for safety. Eventually, we reached a restaurant where some candles were lit for illumination. Of course, the electricity in the city was out and it was now completely dark. As we were totally soaked, we undressed and used the table cloths as togas. Later in the evening, the wind weakened and using cigarette lighters we made our way to our hotel past fallen trees and debris. The next morning, the town looked like a war zone. The old man in the sea was never seen again.

Death anxiety

Many people experience a persistent discomfort when contemplating their own death and the process of dying. Death anxiety is a feeling of dread and apprehension when thinking about not being alive. The death anxiety is related to a number of other psychological dimensions including the fear of being harmed. Even unicellular organisms have receptors that can detect potential harm and mechanisms that improve survival. Likewise, in humans, there are situations that put life at risk and threaten survival whether from accidents or war. Psychologists have tried to understand death anxiety. For example, Erikson thought that death anxiety occurred as a consequence of the individual failure to achieve ego integrity. The solution to this last crisis of human adaptation is, from his perspective, resolved by making lasting creative contributions and finding meaning and purpose. It is common that people in the last stages of life review their experiences. In these life reviews, some people see themselves as having lived life to the fullest and are content, whereas others feel the anguish that life was a series of missed opportunities. Old people that have developed ego integrity suffer less from death anxiety (Langs, 2004).

From the perspective of terror management theory, death anxiety is not only recognized as real, but as the most profound source of motivation and creativity. Many human behaviors and accomplishments can be seen as attempts at managing the terror associated with the awareness of personal annihilation, thereby keeping death anxiety regulated. Cultural beliefs and rituals also function to regulate and manage terror. For example, the common belief that even though the individual dies the family, society and nation lives on serves to reduce and manage the terror of personal death. Achievements and relationships that are lasting provide meaning in life and help control fear. From the beginning of recorded history the cultural narrative about death sought to allay anxiety by painting the afterlife in terms of glory or cultural survival.

Many people fear not death itself, but separation from loved ones or anticipate an unpleasant afterlife. Some people's fear of death increases as they think about the ache of separating from family, friends and the relationships that provided essential meaning in their lives. It is difficult for people to understand and accept that death brings an end to the most cherished relationships and that it is inevitable and final.

The terminally ill often fear the suffering and physical pain that can be part of the dying process. For parents or caregivers, dying is a threat and a worry when thinking about what will happen to beloved family members. In reviewing their lives, dying patients are also often upset that their plan for life was not to be completed and that they will leave much business undone. However, death leaves all people with a feeling of incompleteness that there is still unfinished business or much that could have been done better in life (Kubler-Ross, 1969).

Death anxiety and the dread of dying can be understood as an evolutionary deeply hardwired genetic trait universally shared by all humans, which, in the past contributed to survivability and therefore to the possibility of leaving offspring. Early humans in the very primitive past who did not fear death or took precautions when threatened did not survive for long. Indifference to death contributed to shorter lifespans that, in turn, made it less likely for such individuals to reproduce and leave their genetic code. The dread of dying is probably an evolutionary adaptation that improved chances of survival in the pre-historical past and is common to all life. Religion can at least be partially understood as a reaction to hardwired death anxiety and is used by many people as a means of death-related terror control. Over the course of human history, organized religious thought was the natural outgrowth of being thrown into life where little is known and much is unknown. The evolution of religious thought and practices can be observed as various religious communities emerged out of other religions that preceded them, forming branches of evolution similar to the dispersal of other cultural traits.

The effect of religiosity

Can religion be a mitigating factor that helps reduce death anxiety? That positive outcome depends on the type of religion and the level of devotion by the believer. Religion for the sake of conformity to social standards probably does not reach the deeper levels of the self or influence the narrative about death and dying. However, the deeply devoted believer, as measured by regular attendance at religious devotions, has lower levels of death anxiety. Nevertheless, beliefs and attitudes about end of life issues are difficult to measure since hope is associated with beliefs in the afterlife. For that reason, when survey participants respond to questions about death and dying, they may not respond with complete veracity, but rather with what they hope to be true.

On the other hand, for true believers, religion may increase anxiety since religion also teaches the possibility of a painful afterlife for the sinner. When

the accepted image of god is harsh and unforgiving and requires absolute submission, it is unlikely that the believer can ever honestly confront death anxiety. A cross-cultural study comparing samples from the United States, Turkey and Malaysia found that religiosity was correlated with increased fear of death. When religion sets high standards for life and living and when that is associated with the promise of the sinner going to hell for transgressions, religious beliefs may well produce morbidity and death anxiety. Some believers seek to overcome the fear of death by actively seeking death, as Muslim fundamentalists do in the jihadist's wars. In a similar way, young people directly confront death anxiety by engaging in risky and "death defying" behaviors. The feeling of control over death anxiety comes from habituation when fears associated with high-risk behaviors are confronted routinely and the person doesn't actually die (Ellis, Wahab & Ratnasingan, 2013).

For most people in the world, religion is the major rock that they lean on when facing death. However, if the individual and family have not been religious in the past, but in the face of approaching death seek religious explanation and comfort, then late in the day forced religiosity may not be helpful but can increase morbidity. Children may become frightened by new "spiritual" explanations that had not been part of the daily narrative in the past since depending on age children may understand the explanation literally. Telling a child that the death of a sibling is god's will may produce more fear than reassurance as it raises the possibility that the child might think that god will also take him or her sooner rather than later. Adults often seek to soften the blow of death in children by using euphemisms and words of religious comfort. However, when these comforting explanations are combined with the obvious contradiction of caregivers themselves expressing intense grief, the child may become both more anxious and more confused. For example, if it is a good thing to be in heaven, why is everyone so grief-stricken? It is important to remember that children also need to express grief when they accept the reality of permanent loss and need the reassurance that life will continue.

Developmental factors and death anxiety

Death anxiety occurs very early in development as children observe death around them, for example, when animals, grandparents and older relatives die. Children as early as age four report fears of death and it remains the most common anxiety producing thought, at least through adolescence. However, the level of death anxiety depends on the adult explanations offered as comfort and the trauma experienced through loss of beloved and significant relationships from among family and friends. When children are provided a mature biological understanding of death, for example, that all livings organism die to make way for new life, such explanation decreases fear. However, fear is increased when death becomes obscure and mysterious. Since denial is the common human reaction to death in all cultures, death anxiety is culturally deeply rooted in most societies in the world.

In young adulthood, death anxiety increases and becomes more salient. Anxiety peaks in midlife from age 40 to about 65 when compared with all other age groups. One might think that death anxiety would be highest among people who are biologically closest to death. However, counterintuitively, older people have less fear of death. It is perhaps in this older age group that people have lived the longest with death anxiety and the reality of approaching death is gradually accepted. Also, older people have accomplished important developmental tasks and many have perhaps achieved ego integrity and found meaning in the journey of life. Older people who are more acceptant of the normal biological course of events have often achieved many important objectives and lived life well.

The role of gender and family relationships in acceptance of mortality

Females experience more anxiety in life stemming from greater gender-related insecurities. The relationship between gender and death anxiety is strong for very obvious reasons. Women are the givers of life and invest their greatest energies in children and families. Because of that heavy investment in life and their caring roles as protectors of children, death is a salient threat to women's feelings of the importance of life and relationships. The death of a child is shattering to both parents, but the investment of a mother in her child is at a deeper level than the father. As relationships are of greater importance for women, they experience higher levels of death anxiety as women especially worry about close relationships and intimate partners. However, the gender differences in death anxiety is a matter of degrees, as men also deeply feel the loss of loved ones and anticipate with dread the loss of parents and significant others. Attachment in families plays a role in acceptance of mortality because families that are close and lend mutual support deal better with the aftermath of death than families that have unresolved conflicts and have drifted apart (Langs, 2004; McDonald & Hilgendorf, 1986; Ellis, Wahab & Ratnasingan, 2013; Slaughter & Griffiths, 2007).

Managing death anxiety

All humans experience death anxiety as it is universally a part of the evolved and hardwired reaction to threat that was adaptable in the course of human evolution. As human beings, we only know this life directly and any other "existence" is experienced vaguely from evolved beliefs. Even the most deeply religious person may have doubts about another reality based on beliefs (and not evidence based) and feel anxiety at approaching death. Believers who accept that they were sinful in life may have the anticipation and worry of an unpleasant afterlife. However, death anxiety might be reduced if people would think of death as a natural biological process and that the moment of death is experienced as nothing more than shutting off the lights in the living room.

It is important to remember that the terminally ill feel less threat if they are resting at home. It was common practice in even the recent past that family members died at home surrounded by loved ones. Most people want to die at home if possible and death-related anxiety is reduced by familiar surroundings. From a broader perspective, death anxiety can be managed over the lifespan through the contribution of lasting work or other creative activities and the nurturing of family ties that supports beliefs that some part of life continues despite death.

Acceptance of your own death

Facing death is probably the most difficult personal task in life and yet it is inevitable. There are many issues that come to mind when considering the end of life. If the patient is dying from a terminal illness, there will be concerns about the possible pain to be endured and the general degradation of life that illness brings. Terminal illness can produce feelings of helplessness, worry about being eventually unable to make important end of life decisions and, of course, concern about the well-being of loved family and friends left behind. Death is the great unknown, as no living human being has ever experienced death except vicariously.

At some level, all people experience death anxiety. The religiously minded believer may fear a punitive afterlife because of a sinful existence. The fear of a punitive afterlife varies with the conception of deity as a god of vengeance or as a protective father in heaven. Nevertheless, most religions have a place for sinners, whether it is hell or continuous karma and reincarnation. For people who engaged with life and worked hard to understand and develop both knowledge and the self, it is difficult to accept the loss of all the learning acquired and that, in time, all traces of one's existence will disappear. Regardless of religious or philosophical worldview, approaching death is an event difficult to reconcile. Nevertheless, our greatest gift to generations that follow is to die with dignity, leaving memories for descendants that are devoid of bitterness or fear.

On the positive side, a gradual approaching death provides the opportunity to review life and decide on priorities and what needs to be done. For example, younger people with limited weeks or months to live will ask for time to travel more or accomplish activities that were undone. On the other hand, older people facing death may seek to find the meaning of life by contemplation, meditation and other inner satisfying activities. Other terminal patients will focus on unfinished business and want time to set their affairs in order. For some terminally ill people, there are financial decisions to complete and interpersonal conflicts to resolve.

Acceptance of death is a personal struggle where the patient will experience and move through several stages. The most famous stage theory on dying was outlined by Kubler-Ross (1969), where reactions to imminent death were summarized as denial and isolation, anger, bargaining, depression and finally

acceptance. When initially learning that death is imminent, many patients are shocked and simply deny that death is going to happen. Some terminally ill people may think at this initial stage that they are having a bad dream and all will soon be well again. Of course, when a person is terminally ill, denial can be adaptive for only a short time. When symptoms intensify and there is no escape, the related issues of making financial arrangements and end-of-life decisions are brought to awareness.

As the awareness of the imminence of death becomes clear, many patients become angry at the injustice of what is happening. The patient may ask, "why me?", and some will think that they deserve better having lived a good life. For some terminally ill people, the anger becomes self-directed as the patient questions past health-related behaviour and regrets past decisions. On the other hand, the anger may also be directed at the deity that the individual worshipped and the patient may question why such bad things happen to good people. The anger stage is a particularly difficult time for the patient's friends and family, as well as doctors and nurses, as the anger may be displaced toward those that are close to the dying person.

The next stage is bargaining with higher powers for survival and a different diagnosis. Many dying patients decide at this point to give the "higher powers" a last chance to redeem the unfairness and they try to bargain a way back to better health and life. The terminally ill may reason that perhaps death can be delayed if the dying patient will resolve to live better or to give to charity or offer money to build religious edifices. By pleading with the higher power for additional time and making promises in return, the dying person tries to extend life, pleading for even a few extra weeks to reform undesirable behaviors.

However, there is no data-based evidence that any "higher power" listens to prayers and eventually the dying person realizes that there is nothing that can be done – that death will happen and is imminent. For the terminally ill, this awareness brings on the stage of depression and the grief that is felt in the anticipation of no longer being able to enjoy a normal life and the deep sadness that all personal relationships that matter will end. The dying person may now resort to silence and spend time grieving and regretting and feeling helpless in the face of the termination of life. Many patients in this stage will experience issues related to inadequate nutrition and sleep, and they will begin to withdraw from relationships. Self-blame will be present for some who rightly or wrongly believe they are partially responsible for the diagnosis.

Kubler-Ross believed that a patient at this stage should not be falsely cheered as the depression is both real and necessary in order to face death. Then, finally after the passage of time, the patient will move into the stage of acceptance. After having experienced the real loss and grief that the end of life will bring, the dying person finally accepts that death is inevitable and that there is nothing more that can be done to delay or stop the process. Acceptance, according to Kubler-Ross, is the final stage of rest before death and at this point the patient again engages with others, perhaps planning for what comes after his or her death and related end-of-life decisions.

Kubler-Ross's theory has been both criticized and misunderstood. For example, research has not demonstrated a five-stage sequence for patients coming to terms with personal death. Another criticism is that the stage theory is too general and not found to be invariable in research. Apart from the reactions described in the Kubler-Ross stage theory, there are many other aspects of the dying patient's life that may influence feelings and attitudes. Support from loved ones is important for the dying person and helping the terminally ill is also important for survivors to resolve their own grief and sense of loss. Acceptance of death also depends on whether the patient dies at home or in an institutional setting like a hospital or nursing home. The type of terminal illness may also have an impact, for example, diseases of the central nervous system interfering with the patient's ability to understand the end of life process. It is doubtful that Alzheimer patients go through similar stages as suggested by the Kubler-Ross theory, although depression may be present as the patient becomes somewhat aware of personal deterioration.

In short, there is no evidence that patients go through the stages in the order specified by Kubler-Ross. A dying person may experience all five stages simultaneously and others may fail to experience any of the stages. Some dying patients will hang on to life regardless of the obvious reality of their terminal situation. It is thought by some researchers that the harder the dying patient denies the inevitability of death, the more difficult it is to find a dignified and peaceful death. Human beings are complex and some critics have charged that although true in part, the five-stage theory cannot help us understand the full range of responses when facing death. Certainly, depression should not be seen as maladaptive when dying, but rather as a normal response to great loss and what loss is greater than that of life itself?

For these reasons, many psychologists suggest that the five stages should be thought of as potential reactions to the unpleasant reality of leaving life and all that that means. In terminal illness, reactions will vary, depression may occur at one stage and at other points there will be acceptance. Patients even at the brink of dying may still deny the reality and others will vacillate between hope, anger and acceptance. Perhaps dying is too unique an experience to fit into stages as described by Kubler-Ross. Depending on one's life and relationships, individuals will have different challenges at the end of life in dealing with unfinished business in completion of selfhood and in settling intimate relationships.

It should be noted that Kubler-Ross herself never thought of the five stages as ordinal and sequential. Her observations were that many patients went through the stages but backtracked to issues that were not finished or skipped some stages completely. Some patients she noted never pushed past denial and lived with that until the end. However, the research does show that meaning and purpose in life makes a difference when facing death. Patients who found most purpose and meaning in reviewing their lives also experienced least despair in the final stages. On the other hand, the terminally ill for whom life was meaningless just wanted to hasten death (Kastenbaum, 2004; Kubler-Ross, 1981; McClain, Rosenfeld & Breitbart, 2003).

Vignette: Approaching death does not change who we are: Laughing with Carl

Carl was a great guy, but he had arrived at a point where independent living was no longer possible. He and his wife had lived in retirement in Northern California and both could clearly see the end was approaching. With no relatives in California, his son brought him to Oregon and managed to place him in an assisted living center and enroll him in our hospice program. Consequently, he became my client as I was assigned to visit and provide family relief. Like most members of the hospice, he enrolled too late and was very sick. He had only been at the assisted living center a short time when I visited one afternoon. We started talking about his life and experiences and he was very open and wanted to share. He told me a particular story of his apprenticeship as a tool maker. It seemed he had a rather overbearing and at times nasty boss. One day, Carl was assigned to cut back a portion of the tool according to precise settings. After a few minutes, the boss came by and immediately began berating Carl's technique. The boss took over the task and with great vigor and without paying attention to Carl's measurement began cutting. The result was that he cut beyond the line required measurement. After a few minutes, they measured the tool together and could see that the vigor applied had ruined the tool beyond use. It was a moment of embarrassment and chagrin for the boss. For Carl, it validated his careful measurement and adjustment applied and that the boss's bad behavior was unjustified. At this point in the storytelling, Carl laughed heartily at what was a pleasant memory. After a while we finished the conversation and said our goodbyes. I had hardly arrived at the house when I got a call from the assisted living center. Carl had died in peace minutes after I left.

Finding the good death

Facing death is difficult, especially when a promising life is cut short. It is well to remember that life is for the living and that even dying people in their final weeks and days should experience their environment as normally as possible and in the comfort of familiar surroundings and loving relationships. It is a time when many personal offenses and wounds can be healed and forgiven, which is a great gift to those left behind. However, preparations for one's own death should be taken early in life by creating a meaningful developmental path and achieving personal satisfaction in meeting important goals. Having lived a meaningful life that ends with ego integrity makes it somewhat easier for the patient to overcome despair, although not without sadness, it is possible to face the reality of our mortality. For dying people with a religious worldview, the final days are not a time to doubt hopes. For the atheist, dying is easier when remembering and accepting the common human tragedy of life and by having sympathy for all who face existential despair. We are all "thrown" into life, yet born with a capacity for reason and self-insight. People who have

invested much time and energy in understanding the reality of life perhaps find it difficult to accept the limited utility of what is accomplished in mortality. However, acceptance of death conforms to the larger reality that all life has expiration dates and will end. For example, our solar system along with the Milky Way will eventually burn through its nuclear energy and the light will be extinguished.

To come to an acceptance at the end, it is wise to develop coping skills throughout life. People largely face death in the same way they faced life. To the degree possible, encourage the dying person to participate in normal life as the end approaches. If the dying person enjoys close relationships, the caretakers need to find ways to continue nurturing the connections that matter in life. Dying patients should also be encouraged to use intellectual skills and learn when possible since that produces personal satisfaction. Dying people feel more alive when they engage in life and continue to study and develop insights. Perhaps keeping a diary of thoughts might be helpful to loved ones or alternatively respond to a need to talk to the children in the family and tell them what is known about family history. Finally, to the degree possible, seek a dignified and peaceful death with acceptance. The example of a peaceful end is among the great gifts the terminally ill can leave family and friends.

The death of our loved ones

While people can be indifferent to the death of strangers, the death of a beloved friend or family member is very difficult to accept and process. There is no greater loss experienced in life than the death of a person who is loved. The loss of a child is especially catastrophic and brings in its wake profound grief. It is best for the terminally ill to accept the inevitability of death as that might allow for better and more honest interactions with loved ones, which can promote the sharing of important information. People who find it important can also leave instructions for the immediate aftermath, including what happens to the body, whether by burial or cremation. With sufficient time, the terminally ill person can communicate and review life experiences with close family and friends and reminisce about happier times. A dying person who is aware of the terminal outcome of the illness may also understand better what is happening in their bodies and communicate more clearly their needs to medical staff.

How a survivor feels about the imminent death of a loved one depends on many factors. If the loved person is dying from a long and debilitating illness, the survivor may feel some relief that the suffering will be over soon, but of course that feeling is mixed with grief, sorrow and other emotions. What a survivor feels is largely defined by the relationship to the dying individual and whether there are still unresolved conflicts or amicability between them. A child dying may elicit different reactions as the full impact of the unfairness of life is felt and parents look desperately for answers while feeling both anger and hopelessness.

People experiencing the death of a loved person may find themselves going through similar reactions as the stages proposed by Kubler-Ross. Some survivors will be inclined to simply deny that the loved one is dying. When the loss is imminent, depression may follow with a similar bargaining with "higher powers". Close family or friends who are religious may devote prayer and promises to a deity in the hope that a reformed life will save the beloved. After death has occurred, family and friends will experience many common grief reactions, which include depression. Survivors may also experience sleep changes and a loss of appetite as they gradually come to terms with the finality of their loss.

If there is acceptance among survivors and in the patient that death is imminent, it is important that communication does not become morbid. Life is for the living and conversations with the terminally ill should focus on happy past events like important accomplishments in work or contributions made to the family and the success of individual members. The dying process can also be the time to tell the patient appreciative words, particularly if the dying person sacrificed time and effort for others. It is a balm for a dying person to hear that the efforts made were meaningful and contributed to a happier life and development.

The final conversations

It is important to communicate with the dying person in the final stages of life. Since the person is probably lying prone on a bed, it is best to touch the patient and communicate at eye level if possible. At this stage, the dying person may be very tired so it is a time to be sensitive and not stay too long when visiting. If there is still unfinished business, the dying person should be supported and encouraged to express feelings about relationships and the impending death. The terminally ill person needs support and is helped by the expression of positive affection. Perhaps there are salient friends or family members that the dying person would like to see who could be contacted. Since it is not possible to be sure about the stages of acceptance in the dying person, caretakers should not create more anxiety by insisting that death is inevitable. Rather, the family circle and friends should support the dying person's narrative of life, and to the degree possible, reminisce together. Finally, it is helpful to discuss any unfinished business that the patient wants to talk about. Perhaps the patient wants to discuss the outcome of his illness or talk about relationships. From the hospice experience, it is clear that the thoughts of the dying are not directed toward lofty religious views and outcomes, but rather are focused on family and those who impacted their lives.

Working through grief

A survivor is left in a complex emotional state in the aftermath of the death of a loved person. People grieve in different ways; some survivors are very

expressive and cry and vent their distress openly. Others keep grief repressed, the result of which is to extend the grieving period. Suppressing feelings, however, does not resolve grief as that takes time and only by acknowledging and experiencing personal grief will the recovery be shortened. The amount of grief and severity of loss experienced is directly linked to the intimacy of the relationship. The loss of a loved person is the most difficult life task to work through and dealing with grief is hard work. In the aftermath of death, a grieving person may experience many emotions, including, initially, a state of numbness and disbelief that life could be so cruel to separate people who love each other. Prolonged grief can contribute to long-term sadness and despair. If the dead person filled an irreplaceable place in life, loneliness in survivors is a frequent outcome. The desire to be reunited and pining for the beloved person can often lead to denial of death expressed in various ways, including seeing the dead person in dreams or hallucinations. Some grieving survivors try to obtain further understanding of death and are therefore open to messages from religion that offers hope and reunion in the future afterlife.

Grief is an intensely painful emotional experience that requires work and time to ameliorate and resolve. In the grieving process, memories of the lost relationship often plays a recurring role when the survivor thinks of past events. The daily routine has been changed forever for the survivor, and significant places and objects that recall what is lost will occur frequently in the weeks and months that follow. A necessary step toward the resolution of grief is the acceptance that the world has changed permanently and the relationship can never be recovered. Gradually, the grief recedes and becomes less intensive when compared to the first days or weeks after the death occurred. As the loss becomes less acute, the individual begins to return to daily activities. In the case of the loss of a spouse, some survivors will try to reduce loneliness after a sufficient amount of time in grieving and new relationships might be sought and established.

Feelings of profound loss are never resolved completely and sadness may be experienced repeatedly over the course of what remains of life. Some societies try to help the grieving process by putting a deadline on grief. For example, in Denmark the grieving parents used to wear a black armband for one year, and after it is removed survivors are expected to return to a more normal life and activities. It is normal for survivors to gradually experience more positive thoughts and activities and over time the grief becomes more manageable. The dead person is especially missed when survivors engage in activities that used to be part of normal life. For example, Christmas, New Year's or other holidays are often a depressing time for those left behind as it will remind them of the importance and happiness associated with the dead person. If the relationship was deeply meaningful, grief will never end completely and the survivor just learns to accept that reality and live with the loss until the end of life.

If grief is suppressed, it can, in the long run, lead to severe depression and feelings of hopelessness and even suicidal behavior. Part of grief work is to

resolve survivor feelings of guilt in the desire to return to a normal life. Some survivors think that the desire for normality is a betrayal of the loved person that they feel is worthy of so much more grief. While denial can initially help a survivor get through the day, over time, the grieving person must find new ways to exist and participate in normal life and hopeful activities. At this point, some diversion might be helpful, for example, taking a trip to a sunny place or leaving on an interesting journey to unknown parts of the world (Dunne, 2004).

When children grieve

Grief is at best a very difficult process for adults. Children are, however, even more vulnerable and find the loss of family members or friends not only painful but often confusing. It is important that adult survivors communicate openly and honestly with children who have experienced a traumatic loss. There is a temptation for adults to soften the blow by using euphemisms such as she "passed to a better world", or "he went to sleep in the arms of Jesus"or she "is now in Paradise". When a person is dead, it means more than going away; it is the end of that relationship that no amount of desire or wish fulfillment can change. If children think that the loved one has just "departed", then the related belief that the dead person might return can cause confusion, especially in little children. Although language should be calibrated according to children's understanding, it is important to convey that the beloved family member will not come back.

It is a positive factor that children see adults grieve because it helps them understand that the loss is real. The risk of not being honest is that the ambiguity may contribute to prolonged grief in children and be a barrier to a return to normal daily life. As much as possible, the child should experience little disruption to daily routine since it is reassuring to the child and to the understanding that life can still be happy at some point. It is a difficult balance for parents to help children understand the reality, but not burden them too much with their own personal grief or raise questions for which they have no answer. Very young children find it difficult to comprehend the permanence of loss, but by the age of nine or so, children understand that there is no return to the previous life. It is also very important that children understand that they did nothing to contribute to the death of the loved family member or that the dead person died because they were naughty. Time and comforting love and the presence of caretakers are the best medicine for grieving children.

It is good to keep in mind that children, depending on age, cannot always articulate what they want to know about death. The experience may be overpowering and anxiety producing for some children. In those cases, the parent can offer age-appropriate answers to what might be common issues that children deal with in the aftermath. The answers provided probably depend on the family's religious traditions and beliefs. Many religions advocate the existence of heaven and hell as real places where the soul is assigned depending on good

works and sins. Some parents also believe in reunion after death and may share that information. There are, however, some religious and secular people that do not believe in the existence of an afterlife. Regardless of beliefs, parents need to be sensitive to the child's grief and provide answers based on knowledge of the child. When parents don't believe in an afterlife, they can comfort the child by saying that the person "lives in our hearts and is never forgotten". The role of the parent is to give what support they can to the stability and well-being of the child and reduce trauma as much as possible. In that regard, it is of great support for the child to continue normal routines and to live normally as much as possible.

Children's perception of death is influenced by their developmental stage and the cultural context in which they live. Very young preschool children will think that death is a temporary state that can be easily reversed. That view is supported ubiquitously by television that shows animation characters repeatedly "die" only to be resurrected in the next scene. Children brought up in families believing in reincarnation will also be disposed to see death as very temporary, although the dead person will be absent from their lives as he or she lives on in another body and life that karma permits. At some point between age five and nine, children come to a realization that death is final, although some escape is still thought possible. Children look around and see animals die, experience death in the family and come to accept that all will die. However, as Freud said, while children may believe that others die that does not necessarily translate to acceptance of one's own death.

However, at about age ten, children comprehend that death is final and no ingenuity can help them escape it as it is irreversible. Young children may say wistfully, "we will all die someday", if they have seen their pets die. That realization encourages some children to explore the meaning of life and examine religion and philosophy for a perspective. Some teenagers who are fearful of death will take chances in extreme sports or other activities, where they confront high risks and think they can control death. In being death-defying, teenagers seek to overcome fears by demonstrating to themselves that they can control potentially disastrous situations. In Denmark, some years ago, teenagers defied death by hanging by their fingers on the ferry railing when crossing the sea to Norway. In fact, some children lost their grip and died. It is not difficult to understand the meaning of such extreme behavior as being motivated by the desire to gain control over the fear of death.

Children are individuals and all do not react in the same way. Children also live in different social contexts – some develop in societies where death is visible and common and others in cultures where the old and dying are put out of sight. Some children will ask questions about the death of a beloved grandparent, others will just fantasize about death and act out questions or fears in play activities or bottle up feelings inside. Children inherit different central nervous systems and some are very sensitive to threat and others less so. These individual differences lead to different personality traits and ways of perceiving and dealing with the fears associated with dying and death.

We can be an example to our children by showing them that it is alright to grieve and mourn. When someone dies, children also have to come to terms with the loss and adults should show them that it is acceptable to cry and feel sorrow. Grieving is a normal human process, and it is only when facing and accepting the loss that children can begin to heal. Some grief may be residual and not dealt with fully until children are able to understand the meaning of death. In some cases, grief that is experienced when the child was very young might not be fully resolved until adolescence.

Whether children should be participants in the process of grieving prior to death requires age appropriate decisions. If the child is close to the dying person, it might be helpful to both the child and patient to have visits. However, a child should never be required to participate unless a desire to see the dying person is present. In any event, it would be necessary to discuss in advance the physical changes that might have occurred in the dying person as a result of illness and to prepare the child for some of these changes. Most children will experience grief and can process it better if they are allowed to participate and can say goodbye to the loved person in their own way. Children should always be reassured that life will continue and their well-being will be looked after. Part of grief processing is perhaps to memorialize the loved person who died and children can help in various ways with some making their own book of memories or by planting a flower or tree. It is important that children be allowed to grieve and say goodbye over a period, but then return again to normal life and boundaries as early as possible.

Vignette: A child's perspective on death in the family

Depending on a person's worldview, it can be argued that life is essentially tragic. When a child dies, the sense of loss is even more traumatic and lasting for both parents and siblings. The author of this book first experienced death at age seven when his grandfather died. When he returned home from school, he saw a handwritten note from his brother that read "come over to our grandparents' house, grandfather died". Upon arrival, he was ushered into the bedroom where his grandfather's corpse was laid out on the bed, white as chalk. The boy was urged by his aunt and other relatives to kiss the grandfather, but the situation was too frightening. A day or two later, the father talked to the boy and told him he could attend the funeral, but he was not to laugh or act inappropriately if he saw adults cry. The funeral took place in the living room of the grandparent's small home where the family gathered around the casket and said their final goodbyes. When the casket was closed, the grandmother and the youngest daughter expressed their deepest grief with loud crying and wailing. Despite this traumatic experience, the boy as he grew older was always grateful that he was present and could say his own goodbye and that he saw with his own eyes what had happened to the grandfather.

Several years later, the boy was engaged in a football game with the neighborhood boys when he was called home. When he entered the house, he observed several relatives present and a sad silent atmosphere. His father picked him up on his knee and said "your brother is dead". The brother suffered from an incurable brain tumor of the type that will be discussed later under the right to die with dignity vignette. The chief surgeon had called the father aside at the hospital and told him that his son was going to die. The tumor was inoperable and if the boy lived it would be for a short time and he would lose all ability to speak, understand and suffer greatly before death. The surgeon told the father that, therefore, the doctors had decided to do what they were not permitted to do under law and end the boy's life. This became knowledge to the rest of the family at a later point and the family never second-guessed the doctors' decision. If anything, the doctors were held in high esteem by the family for the courage shown, and for making a decision that the parents could never have made. This time, the now ten-year-old boy walked with the family behind the casket to the cemetery while the city bells rang and at his mother's urging said a few words as the casket was lowered. This was how death was experienced in Denmark some 70 years ago. It was traumatic and the sorrow of these losses followed the family for the remainder of life. But at the same time there was no neurotic response as all was clear and nothing was held back from children of age.

Explaining death to children

To avoid traumatizing children when talking about death and dying, adults could gradually and over time note how death takes its course in nature. Seeing dead animals is how many children learn about death and we can explain that all animals and humans die so new life can emerge. Life continues because after personal death other people are born and have room to live. At times, children may hear the news about the death of some prominent person and that occasion can offer another opportunity to give children a simple answer about death because it is better to answer children's curiosity when emotions are low and death does not intrude directly. Young children don't need complicated explanations, but simple understandable description of biological death. For example, very young children could be told that when people are dead they no longer eat or breathe or feel anymore. A dead flower does not bloom, but disappears and allows other flowers to grow in the coming spring.

Children tend to be direct and don't carry the sensitivity that adults have learned from socialization. A parent might be asked that if everyone dies when will you die? Remember with that or a similar question, a small child's perception may be that death is temporary, but nevertheless, the loss of a parent can be frightening. It is important to reassure the child that death is not expected and even if death arrived in the family, there would be many others who would look after the child, for example, grandparents, uncles and aunts. If

small children have a misconception about death derived from hearing adult euphemisms that describe death as a form of sleep, some children may be afraid of sleep or taking naps. If that confusion occurs, children need the reassurance that people wake up after restful sleep and are not dead.

Assessment of life and aging

Perceptions about the aging process and the quality of life in old age may well color beliefs about the end of life medical options and other end of life decisions. The Pew Research (2013) sampled opinions about quality of life and not surprisingly found that they depended on the respondent's place in the life cycle. Older people generally didn't feel that their lives were better today compared to a decade earlier, with just 30% saying their lives had improved. On the other hand, 66% of younger adults see their lives as better today as compared to the past. Likewise, older adults are less optimistic about the future with only 19% of the respondents that are 75 or older thinking life will improve, whereas 71% of those younger than 50 are optimistic. While this refers to estimations of the quality of life on average, for personal predictions the results differed as 81% of all adults in the survey expressed satisfaction with their individual lives. Not surprisingly, health estimation is negatively related with age (the higher the age, the poorer the health estimate) and may be a major factor in opinions related to end of life decisions and physician-assisted suicide.

The survey examined the opinions of what makes for a better quality of life in old age. At the top of the list is the ability to communicate or talk with others (49%), getting some enjoyment from life (44%) and living without debilitating chronic pain (43%). Also mentioned as salient to good quality old age was intact long-term memory and feeling that what one did in life was worthwhile. The most important characteristic overall for all age groups was the ability to communicate with others. Undoubtedly, the prospect of Alzheimer's or other disabilities that inhibit or prevent communication is feared at least partly for reasons of the resulting memory loss, isolation and loneliness that would occur (Pew Research, 2013).

Denial and the futility of extended end of life medical interventions

In the last few decades, there is an increasing awareness in the West that dying patients are subjected to too many medical procedures that do not alter or ameliorate the outcome, but rather rob the terminally ill of dignity and a peaceful end to life. Increasingly, terminal patients end their lives in uncomfortable circumstances being connected to machines and being offered drugs that alter their consciousness and the ability to make final decisions. In many cases, medicine in Western culture makes the end of life far worse by not respecting the process of aging and the inevitability of death. For many people, death is experienced

foremost as a medical experiment where doctors conspire with their patients in the quest to avoid death. Futile life extension is a great cost to society and to families, and the resources could be better used for more life-enhancing functions rather than for medical interventions that often cause extreme pain and suffering and that still end in death. Adding to patient discomfort, the end of life frequently arrives in the depressing conditions of hospitals and nursing homes and not at home where patients want to be (Gawande, 2014).

Death is a taboo subject even for medical personnel. The typical medical procedure today is to discuss all the options and side effects of treatment and then allow the patient and family to make end-of-life decisions. Medical doctors who deal daily with death and dying are of course under stress and it is easier for them not to make the painful decisions required by medical knowledge, but rather let the patient to be totally responsible for outcomes. However, perhaps it would be better if the doctors inquired from the patient what is most important for them to do in the remaining time left and then try to fit medical care to those wishes. There are terminal ill patients who choose to not undergo extreme medical care knowing that it will just futilely extend life, in the hope that their final days will be better and more peaceful. Regardless, end of life decisions support the general rule that all decisions in medicine are trade-offs. Patients who seek a longer life often experience more pain whereas the terminally ill who decide to pass on extreme medical interventions might have a shorter life but also experience a more serene death while preserving personal dignity.

Some dissident medical experts argue that doctors neglect and abandon their duties when they don't try to prevent patients from pursuing futile medical interventions that only prolong existence but with painful consequences. Elderly patients from nursing homes or other institutions are often admitted to hospitals with infections like pneumonia. The doctors treat the infections, and being fragile, the patient might acquire other viral or bacterial infections in the hospital that also must be treated. The end result does not benefit the patient, because while the antibiotic medicine may contribute to a longer existence, it also results in a very poor quality of life. Death avoidance at all costs produces extreme discomfort in patients who often die using respirators in intensive care as victims of medical interventions that had no chance of working.

Even when patients are old and will manifestly not get better, the family often will not accept the end of life for the patient. The family may pressure doctors for some miracle outcome and request medical interventions that offer no hope of returning the patient to health. Dissident doctors, that are part of the "medical futility" movement, argue that doctors should for moral reasons withhold interventions that only prolong the suffering and the dying process. For example, infections that bedevil the elderly are what people have died from for generations, because death from infection is often the final stand of frail individuals as the body's vital organs and defenses cease to function. Nevertheless, patients and their families often demand interventions that have

little chance for success and doctors who agree co-conspire in the denial and avoidance of death.

It would be more helpful to patients if doctors talk about end of life issues and the social support available to keep terminally ill patients away from hospitals and at home where they are more comfortable. More end of life support should be incorporated in the medical system to train doctors in pain prevention and palliative care for patients who have no or little quality of life left. The "medical futility" movement argues that doctors have a duty on moral grounds to be courageous in making sure that appropriate care is provided to their patients, and when warranted on medical and moral grounds, to refuse demands for medical interventions that they know will not work and are futile (Lerner, 2014).

Making decisions about the end of life

Research on death and dying in the United States has also focused on public opinion about various end-of-life decisions. Americans, like most people in the developed world, are living longer, and one-third of the population are 85 years or older when they die. The downside of the populations becoming older is an increase in various age-related diseases such as Alzheimer's and dementia. That statistic can be compared with 1968 when the 85-plus seniors were just 12.6% of all deaths (Gao, 2014). The fact that people are living longer contributes to ongoing discussions and opinions about end-of-life treatment since so many terminally ill people end up in institutions tied to machines and tubes. A 2009 Pew Research study showed that Americans strongly favor the right of patients to decide if they want to be kept artificially alive through medical interventions; 84% of the respondents agreed that medical treatment that only served to keep a terminally patient alive can be stopped if that is the desire of the patient (with only 10% disapproving).

However, there is a huge difference in what people allow for other people and their own preferences for end of life medical interventions. Only a small majority (53%) say they would stop medical intervention if suffering from a terminal illness and in severe pain. The results support the presence of substantial death anxiety because 34% said they would ask for all possible medical treatment to prolong life even if they are terminally ill and in pain. The survey revealed some religious differences since seculars and non-evangelical respondents were more in favor of patient's right to die and to terminate treatment.

Death is a sober subject and it is understandable why many people delay discussion and postpone making the necessary decisions. Despite the broad discussion in the media of "living wills", the purpose of which is to give doctors instructions about the use of life-extending machines and resuscitation in terminal cases, only 29% of the respondents said they had written a living will. Not surprisingly, age was a factor because 54% of respondents aged 65 or older had written down their instructions. It is, of course, very helpful to

surviving family members to have unambiguous wishes about end of life decisions because the patient may be unable to communicate at that stage. Large majorities believe that the closest family member should decide whether medical treatment should be continued in terminal and hopeless cases when the patient is unable. That, however, can also be a problem because not all families discuss end of life preferences. Nevertheless, the survey results suggest that most older Americans communicate their wishes to their adult children. The results also revealed a gender difference where females are more likely to convey medical decisions and daughters are more likely to reach out to understand parental wishes (Pew Research, 2009, 2013).

Recent research (Pew Research, 2013) found most respondents again agreeing that there are circumstances under which a patient should be allowed to die (66%); however, a minority (31%) continued to insist that medical professionals should take all measures to save the life of a patient regardless of the stage of illness and pain. This minority opinion requiring doctors to take all measures to save a terminally ill patient has grown 9% since 2005 and 16% since 1990. That change in opinion is probably because more people have taken a stand in the past few decades, as death and dying have been in the news with several terminally ill and hopeless cases being tried in the courts by contenders on both sides of the issue. The increasing support requiring doctors to take all possible measures to prolong life may also be partly due to the engagement of religious conservatives in the debate and the rallying of their supporters to the idea that only god can take a life, even in hopeless cases. When thinking about personal death opinions shift somewhat, with about 57% saying that they would tell their doctors to end medical interventions if their condition was hopeless and they were in great pain. Still, about a third of the respondents (35%) would hang on to life and demand that their doctors do everything possible to keep them alive, even if their condition is hopeless and they are in great pain. Again, the results allow only speculation, but it seems reasonable to think that death denial and death anxiety plays a role in the desire to avoid the termination of life under even these extreme circumstances (Lerner, 2014).

Thinking about the end of life

The average life expectancy in the United States is now 78.7 years and society is dealing with an aging population where those who are 65 or older have tripled over the previous century. Still, the results of surveys show limited preparations by older people for the end of life and for evaluating the medical decisions that may be required. Because of death-related taboos that exist in most parts of the world, people often delay or avoid thinking about the end of their lives. In the 2013 Pew Research Report, a quarter of the respondents have given little or no thought to end of life decisions and wanted to leave all such decisions to doctors and other medical professionals. Among respondents age 75 or older, only 47% have given much thought to end of life medical

treatment with the results about the same as in 2005. Of those who have thought about end of life medical treatment, only 35% have put their wishes into a document like a living will or letter to a family member.

Not surprisingly, respondents who have higher education and income tend to communicate more of their wishes for end of life treatment. Preparations are naturally related to age as healthy younger adults are less likely than older respondents to think about the issues related to medical treatment and other end of life decisions. Further, younger participants would feel robbed by a life cut short and not surprisingly would be less likely to stop medical interventions. In the age group from 18 to 29, 54% support the patient's right to die under some circumstances, whereas 43% say that the medical doctors should do all that is possible to save their lives. A hard core in all age groups (from 22–24%) would ask their doctors to try everything to save their lives in even dire and painful circumstances.

There are also significant differences between ethnic groups in choices for medical treatment at the end of life. For example, two-thirds of white respondents over 65 say they would want the option to die if faced with a terminal illness that also involves great pain. By contrast, the results show that a majority of black people (61%) and Hispanics (51%) asserted that they would request their doctors to take all measures to save their lives even in the face of incurable illness and great pain. Why such dramatic ethnic differences? Perhaps conservative churches play a larger role in the minority populations claiming that only god can take life. It is also possible that an irrational and non-biological understanding of death prevails to a greater degree in minority populations, and therefore, higher death anxiety. If the prospect of an unpleasant afterlife for the sinner is part of the narrative about death in churches supported in minority groups, that fear might encourage respondents to hang on to life as long as medicine can provide some sort of existence.

Most people face the end of life through the death of close friends or relatives who are terminally ill. In many of these cases, the issue of withholding treatment arises when prolonging life only extends the suffering. Respondents supported the idea that a close family member should be allowed to make decisions (78%) in cases where the individual didn't leave a written will or document that expressed their wishes and was unable to communicate. A majority (57%) supported the idea that infants that are born with life-threatening physiological problems get all possible treatment, but the minority (38%) supported the rights of parents to refuse treatment.

As the cost of medical treatment and drugs has spiraled in recent years, the expense of dying is a salient issue for many people. When the respondents were asked whether today's medical treatments create as many problems as they solve, 72% agreed. A smaller minority agreed that medical treatments allow people to live longer and with a better quality of life, but they think there are still times when a patient should be allowed to die rather than continue treatment (Pew Research, 2009,2013).

Denial and living a life of few regrets

Facing the end of our days is difficult since life is all we know. It is a tragedy that humans evolved such a high sense of vulnerability and awareness of death. Most people will at least at some point in life deny the reality of death. Freud maintained that no one believes in their own death and that people are in denial all their lives. There are many ways of denying death. Some people deny by becoming fanatically religious, whereas other control fears by actually seeking death like the IS terrorists. Many people in modern societies seek escape by allowing themselves to drown in drugs or other obsessions. However, denial can also take the form of a hoped-for afterlife that requires good works.

Intelligent and rational people can feel death anxiety like everyone and dread the inevitability of what is to come. Those among the terminally ill who expect an unpleasant afterlife because of sins or karma find it difficult to reconcile themselves to the personal ending of life. Yet, life is what life is. As noted previously, perhaps it would be helpful to think of death as just a biological process where we figuratively turn off the light. In that process, there is nothing to fear. Of course, death means separation from those we love and in that there is certainly human tragedy. There is no solution for that existential problem but our anticipated loneliness can be partially overcome if we live a life that is supportive of others and of few regrets. It is always timely to say I am sorry, I forgive you, forgive me and thank you for everything.

The hospice movement: Overcoming taboos and death denial

It is important to remember that although dying, most people still want to retain autonomy and make final decisions regarding both life and death. Patients suffering from incurable, painful and imminent death with worse to come in the near future may decide to end suffering by euthanasia or doctor-assisted termination of life. We have seen this in recent years in vigorous public debate on issues related to the personal termination of life (Kalish, 1985; Kastenbaum, 2004).

Current research yields little agreement on what constitutes a good death. A review of the literature, however, suggests major criteria that include core themes of "successful" dying. These include control of the dying process, pain free status, elements of spiritual support, emotional well-being, completion of life tasks, treatment preferences, upholding dignity of the dying, supportive family, relative quality of life and a functional relationship with a hospice. Among these core themes, control of the dying process, pain-free status and emotional well-being are deemed the most important. Nevertheless, the study revealed differences between the surviving family and the dying patient. For example, for the family, life completion had the highest ranking, whereas the dying rank spirituality higher. These discrepancies could serve to stimulate discussions between the dying patient and the family because divergent

perspectives may encourage a different emphasis on end of life care. A good death must, of necessity, always be from the patient's perspective (Meier, Gallegos, Thomas, Depp, Irwin, Dillo & Jeste, 2016).

People who are terminally ill don't necessarily fear death as much as the pain that might precede dying and the worry of becoming a burden on their families. As noted previously, many patients in the West die in hospitals tied up to machines and largely end their days isolated from loved ones. However, most dying patients want to end their days at home in normal familiar surroundings. Hospice is an alternative to the medical model that places the dying patient and family at the center for palliative care. As a movement, hospice has grown in recent decades in the United States and Europe to serve patients that are diagnosed as having less than six months to live. The focus is not on heroic medical measures, but on palliative care to control pain and support the family. Today, most insurance plans and government medical programs support hospice, which is not only more positively humane, but also far less expensive than hospitals. A comprehensive array of services are available that include medical assistance (again primarily control of pain), but also support with spiritual or emotional needs if the dying patient desires such services. The service is available in the patient's home, but also, in some cases, in hospice centers that care for the dying.

The existence and support of hospice is motivated by the desire of the vast majority of terminal patients to die in familiar surroundings and to be relieved of avoidable pain and suffering. Hospice handles doctor appointments and visits by nurses and offers counselling support and respite services. Upon request, hospice will offer relief time for caregivers so they can shop or generally get a break from the daily watch over the ill patient. Relief support is offered by volunteers who have been trained to handle patients, for example, if they require movement in bed and to offer a willing and supporting ear should the dying patient want to talk. Hospice works within the framework of the wishes of the patient about the preference to stay at home or, in some cases, in hospice locations. In that way, hospice offers support so caregivers are not completely stressed out from daily care and 24-hour support services are provided as needed. Terminal illness is not only a stressful condition for the patient, but also for family and friends, who may not know how to proceed or handle an immobile patient. Hospice with a staff of trained nurses and volunteers can supply the needed support. As most patients in the United States are religious (but not all), an associated pastor or minister is also available for counseling. Typically, hospice support is believed to be for the six-month period that follows the doctor's terminal prognosis. However, not all patients die as predicted and hospice is, of course, flexible. In a few cases, the doctors get it wrong and the patient is then taken out of hospice care and returned to regular medical support.

Most patients enter hospice too late when there is only a few weeks of life left. At that point, the patient is deep into the dying process and the respite provided is not as effective as if the patient and family had long-term support. The reason for the delay into hospice care is most likely death denial

since when entering hospice the patient must acknowledge that there is a short time left of life and be required to refuse resuscitation efforts and be offered only palliative care. The nurses who visit frequently help the patient manage their medications, give injections as needed and monitor the medical process. Perhaps of greatest importance is that hospice nurses also teach caregivers how to look after the terminal family member. In addition, hospice provides certified nursing assistants that attend to the personal hygiene of the patient including bathing, changing bed linen and otherwise support the patient.

A description of hospice care in the US

The central values of hospice assert that all patients have the right to die with dignity, and if possible, pain free. At the same time, hospice acknowledges the important role of families and provides essential hospice-related support. The objective is palliative care for the patient and no attempt is made to offer medical services designed to return the patient to health. In addition to regular visits, a hospice nurse can be summoned 24 hours a day. The team includes a personal doctor as well as the medical director at the hospice, nurses, home aids and social workers. In addition, trained volunteers are brought along to care for the patient and provide relief for the family.

Dying may be the time when the patient questions values and meaning in life, and volunteers can help support the patient with the common emotional and spiritual issues that are part of dying. Palliative drugs are provided and special services like physical therapy can be offered to provide relief and a better quality of life for as long as possible. If pain is intense or if caregivers need a break, short-term nursing care may be provided in hospitals or nursing homes. However, the aim is to return the patient to familiar surroundings as soon as possible. After death has occurred, bereavement counseling can also be offered to survivors.

Dying is a biological process and if the approaching signs of the end are known and understood, the fear related to death can be controlled. No one can predict the actual moment of death; however, in many cases it becomes evident from biological and behavioral changes that death will occur within a few hours. The dying person will no longer take food, but may drink a little water or other liquid. The patient will also find it difficult to stay awake and is usually in bed. Weight loss is associated with some illnesses, such as cancer, and it is noticeable. When patients are near death, they have cool hands and discoloration where the body is resting on the bed. As the end is approached, patients will often breathe unevenly and at times stop entirely for a few seconds and at other times begin to breathe rapidly. Some patients show jerking motions and suffer what might appear to be a seizure. However, at that stage, the patient is unlikely to be aware of any discomfort. Such seizures can be treated with rectal medications.

Patients who rely on opioids must continue the dosage because stopping can create discomfort. As death is approaching, many patients develop very noisy breathing sometimes called the death rattle. Repositioning on the bed can help

in some cases. It is the common medical opinion that the patient is unaware and is experiencing no discomfort at that point. If the condition is unnerving to the family, breathing and other issues can be controlled with medication (Hospice, 2014).

What do the dying talk about near death?

When death is approaching, most hospice patients are not concerned about lofty religious thoughts or philosophical issues. At the end of life, it is the personal relationships that matter. That perspective was based on the author's hospice care service over a six-year period. In life, as in dying, there are four phrases that matter most and that can help the patient find a peaceful death. These phrases also matter most in mental health for both the living and the dying; they are: "please forgive me", "I forgive you", "thank you" and "I love you". These are the most salient and powerful words in life and the pathway to emotional health. Few people are lucky enough to steer a path through life without interpersonal conflict, but practicing these phrases is a conscious way of living that permits a person to be at peace.

In hospice settings, patients often express deep regret over the things that were not said and things they wished they had expressed. Many patients have a need to express feelings and find reconciliation with others before it is too late. The quality of life of the dying will improve and living with a terminal illness can be eased and transformed by these simple phrases. Reconciliation often comes with such simple words that help heal otherwise complex relationships. Healing is based on the knowledge that the most important aspects of life are not possession of things, but relationships with others. It is also a healing balm to the family to know that they had the opportunity to make things right as they said these simple expressions with the dying and loved person.

Many people have experienced slights and hurt in their relationships and these experiences are not forgotten as death is approaching. Most patients want an opportunity to put such resentments and conflicts to rest as they are now seen as small by comparison to the value of the relationship. If possible, these expressions of reconciliation should be practiced sooner rather than later because human life is short. The depth of grief might be softened with the knowledge that attempts at reconciliation were practiced in a reciprocal way before the death of a family member. When these principles of reconciliation are practiced the dread of dying can be eased as relationships that matter most to the dying person and his or her family are reconstituted (Beck, Freeman & Davis, 2006).

A palliative nurse who worked with the dying and counseled them in their last days observed their most common regrets. One regret that surfaced repeatedly with great clarity was the wish that they had had the courage to live a life true to themselves and not to conform to the life that others expected. As dying patients approach death, they understand the lost opportunities and dreams that remained unfulfilled. Most dying people also come to a realization

that it was the choices they made that prevented a more fulfilling life. Another common regret is that the patients worked too hard to achieve and, especially men, wished in retrospect that they had worked less and attended more to their relationships with children and spouses. The treadmills of work and achievement motivation rob many people of what really mattered in the end: their relationships. Dying people also realize with regret that there is really nothing they can do at that point to alter life in a more favorable direction. Another regret comes from yielding to the common desire to suppress feelings in the pursuit of social and personal acceptance. Many patients express regret that they suppressed their feelings to get along with others and settled for a mediocre existence rather that the goals to which they aspired.

Many terminal patients have deep feeling of regret about lost friendships. The dying at times feel that they did not invest enough time and effort to preserve these valuable relationships. In the final weeks of life, these significant friendships come to mind, but often too late to reach out. Often, people devote their lives to professional advancement and achievement to such a degree that they forgot about their friends or took them for granted until they lost touch. It is said that friends are missed by nearly everyone in the final days of a terminal patient. Finally, a very common regret is that the dying did not lead happier lives. Many terminally ill come to realize that happiness was also a choice that often was sacrificed in favor of habits and comfort. People feared the change that might have brought greater contentment and instead chose to live habitual lives (Steiner, 2012).

Our thoughts at the approaching end

At the end of life, all debates about religion, philosophy and science fade into the background. What matters in the minds of the dying is the condition of close relationships. The dying think of family and friends who contributed to their lives. It would be easier for the dying if these relationships were healed and amicable and sufficient time had passed for any hurt to fade into the distance. A good death is a death with few regrets. Religion as a personal experience may bring some measure of comfort to the last days of believers. It is not for science to comment on the veracity of religion except to say if beliefs bring succor to the aching heart, it has value to that person. Most people on earth have vague feelings that life has some meaningful explanation. Perhaps it is the mother's tongue in memory assuring the child that all will be well that sustains hope. Dying people calling for their mother is perhaps the quest for that reassurance learned as a child that after the travails of life all is well.

The moral right to end life with dignity: Physician aid in dying

Significant majorities of American respondents believe in the moral right of patients to end their lives when they suffer from significant pain and in hopeless

conditions (62% approval). That approval rate declines to 38% when respondents are asked if someone has the right to commit suicide when "life has become a burden". The public, however, remains divided over the right for patients to receive aid in dying, the so-called physician assisted suicide. Overall, 66% of respondents in 2014 believed that people should have a right to end their lives if suffering from painful and chronic conditions and 56% believed that those suffering from incurable diseases also have a right to end their lives. In general, there is rising support for these rights compared to surveys done in 1990 and 2005. The greater support comes from the fact that more people are taking a position as the death and dying issues are debated publicly and some personal cases have been discussed in the media for a long time.

Religious conservatism plays a large role in beliefs about the morality of physician aid in dying. Other groups who oppose the moral right to terminate life include the medical establishment represented by the American Medical Association. Some disability advocates also oppose physician aid in dying because they think it is the start of a slippery slope where, eventually, handicapped people might be encouraged to die. Many conservatives believe that the legalization of physician-assisted termination of life will lead to abuses, and nearly half of evangelical Protestants and African-American Protestants reject the idea that patients have any rights to suicide. However, the religiously unaffiliated and mainline church members, when presented with hopeless and painful conditions, are more likely to endorse the moral right to suicide or physician assisted end to life (61% approval).

It is worth noting that the increasing liberal opinion about physician aid in dying is not isolated from other social movements and developments in society. In the 1960s, the civil rights movement and the movement for gender equality caused many people to rethink personal freedom and individual rights to determine their lives. Opinions about the morality of ending one's life given the conditions of chronic illness and great pain also vary by race and ethnicity. Generally, white people are more inclined to justify the rights of patients to end their lives compared to black and Hispanic people (Blendon, Szalay & Knox, 1992; Masci, 2013; Pew Research, 2013; Rachels, 1986).

Advocates assert that dying people ought to have autonomy over their own lives. If society is compassionate, it would not allow people with terminal illness to suffer needlessly, but allow the dying to make their own choices. Physician aid in dying does not devalue human life, on the contrary, it promotes human dignity and autonomy by letting the dying person exit with some dignity and with mental faculties intact. Rather than spending the last months in doctors' offices or hospitals, the dying would be free to consider what is important and meaningful in their lives.

What has caused a lot of rethinking about the end of life issue is that 80% of American deaths, as noted, take place in sterile institutions like nursing homes or hospitals. In modern societies, death does not come when biological fate decides, but rather when the respirator is unplugged, the feeding tube is shut off and when resuscitation attempts fail. Death often occurs after "heroic"

measures by doctors that served no useful medical purpose and only prolonged suffering. End of life suffering is often so great that the difference between living and simply being kept alive is obscured.

Mercy killings or euthanasia is not something new as it has been accepted in various cultures. The term is a Greek word meaning a "good death". In Athens, it was routine to kill deformed infants, and in the United States, juries have, at times, refused to declare a spouse guilty when he or she ended the life of a partner who suffered greatly and whose outcome was terminal. No one knows the exact number of physician assisted terminations of life that have occurred in the past. Depending on the law, some deaths are scheduled by doctors or the dying patient who has recognized and demanded an end to suffering.

Whether providing drugs to end life is a slippery slope that could eventually evolve into a Nazi-like morality of condemning social "undesirables" to their deaths is an important ethical consideration. However, the slippery slope argument is largely spurious, especially if it is the patient who decides when and how life will end. Under current Oregon law that allows physician-assisted suicide, the patient must be both competent and have requested the death. Furthermore, the patient must be suffering from a severely painful illness with less than six months to live as certified by two doctors. A law enacted in 1997 in the state of Oregon permitted physicians to prescribe a lethal dose for certain types of terminally sick patients. However, the patient must have the mental capacity to give informed consent and not suffer from psychological depression. Depression can be treated, therefore, it is important that psychological issues are ruled out as a motivator for ending life (Rachels, 1986).

Finally, in Oregon, although the physician provides the prescription, the patient must take the lethal dose without assistance. Today, in addition to Oregon, Montana, Vermont and Washington have legalized physician assistance in dying, allowing doctors to prescribe lethal drugs to patients suffering from debilitating and terminal illness. From 1997 to 2012, 673 patients have died in Oregon from lethal medications offered under the law and hundreds more since and in other states. A number of countries outside the United States now have similar laws supporting the right of patients to end their lives if suffering is unbearable, including Belgium, Columbia, Luxemburg, the Netherlands and Switzerland. In the United States, many patients obtained the lethal prescriptions but never used them. For these patients, the prescription gave them a sense of peace and the feeling that they had some control over the amount of suffering they had to endure and how they could end their lives with dignity (Lipka, 2014).

Beautiful Brittany Maynard, age 29: The human face of death with dignity

Brittany Maynard, a young woman from California, developed an aggressive and inoperable brain tumor in 2014 and was told she had only a few months

of life left. She had just been married when the news broke, and if life was fair, she would have had everything good to look forward to, including the building of a family and other life choices. Instead, she was told that her condition was terminal and there was nothing doctors could do for her other than provide less than adequate pain medication. More frightening to Brittany was the sure knowledge that her mental condition would also deteriorate as the tumour spread in the brain and destroyed precious memories and the ability to make decisions. Brittany lived in California, which did not allow physician aid in dying, so in 2014 she moved to Oregon where such cases are covered by Oregon's Death with Dignity Act.

Knowing the pain and mental deterioration she would suffer, her decision to end her life was supported by both her husband and also tearfully by her mother. Her young age made the decision wrenching, but she saw no options for a serene death except by taking advantage of the mercy offered by Oregon's law. In interviews, videos and news programs, Ms Maynard spoke of her relief that she could die peacefully rather than without hope waiting for the tumor to do its deadly work. She released two videos through the "Compassion and Choices" organization that advocates for laws that allow physician aid in dying. Being so young and beautiful (but still showing ravages of previous medications on her face), Brittany engaged the public mind in the United States as none had before, with 13 million views of her video on YouTube. In her final days, Ms Maynard advocated strongly for death with dignity laws to be passed in other states, saying in interviews that she would like all the people to have access to health care that included the option of dying when death is imminent and the pain unbearable.

In her last weeks, she and her husband enriched their lives by visiting as many sites as possible, including the Grand Canyon and other locations that mattered to her. During this period, Ms Maynard was able to enjoy some quality time with her family. In early November 2014, while lying peacefully in her sunny bedroom, where she had intended to die in the company of her husband, mother and others, she took the dose of legally prescribed barbiturates and died. Supporters felt that her story would have an impact that could revive and pass aid-in-dying legislation in other states. Her story has influenced public opinion and legislatures in the United States are now evaluating the needed legislation.

Summary reflections

Culture plays a role in the conception of death and societies differ in accepting the finality of the end of life. The United States and Europe are less reconciled to the end of life than other societies and often obfuscate death. Denial of death is facilitated by youth culture and the segregation of the old, who are often isolated in retirement institutions. The medical community conspires with patients to banish death using extreme medical measures that only prolong suffering and create a low-quality existence at the end of life.

Denial is also facilitated by worldwide religious beliefs in dual existence that serves to deny the finality of death. Many religions believe that when a person dies, the soul survives in another place, and eventually resurrection will bring soul and body back together. Life has taught us that death is more acceptable when it can't be obfuscated, for example, when it is a daily occurrence in war or famine. All humans fear death; however, there is nothing to fear because dying is just a biological process about which there is nothing mysterious.

In recent decades, issues about end of life decisions have been broadly discussed in the United States and Europe. Death is more likely to occur today in institutionalized settings where the terminally ill die by incremental degrees. While the religious find some comfort in the dual soul theory and believe in immortality, atheists have a steeper mountain to climb since death is considered a total loss of self. Some atheists come to terms with death by leaving traces of achievements that are lasting and by nurturing family, society and culture.

However, in all societies, the dread and apprehension about approaching death is ubiquitous. It is helpful to understand that this human trait probably is an evolutionary adaptation that became part of the genetic code because it improved chances for survival and leaving offspring. The level of death anxiety is also related to the failure to achieve ego integrity as discussed in Erikson's stage theory. From a more positive perspective, terror management theory suggests that death anxiety is a profound source of positive human motivation that encourages individuals to leave lasting contributions to society. Although people are largely unconscious about the role of terror management, anxiety about death and the temporality of existence removes human inertia and motivates the creation of many of the cultural and intellectual underpinnings of society. Is religion helpful in reducing death anxiety? That depends on the type of religion and believer. Death anxiety is likely present if the afterlife is feared or may be perceived as unpleasant because of sin. If the religion believes in a punitive god, then the thoughts of an afterlife can create more intense death anxiety.

Developmental factors play a role in death anxiety. Death outcomes intrude early in life as the child observes pets or family members die. Anxiety associated with death increases in adolescence and peaks in middle age. People who have not completed the important developmental task of establishing ego integrity by middle age feel more anxiety. Children need a mature biological explanation of dying and that all living organisms die to make room for the next generation. Females have greater death anxiety, which is probably built on their heavy investment as creators and protectors of life. Research also supports the idea that families that are close and supportive cope better in the aftermath of the death of a loved person.

Acceptance of personal death is the most difficult task in life and yet it is inevitable. The dying worry about the degradation of life at the end and corresponding feelings of helplessness and being unable to make important end of life decisions. Death is the great unknown, but despite ubiquitous worries, there is no evidence that there is anything to fear. Is there a positive side to

dying? A chronic terminal illness often provides the necessary motivation and time to finish important tasks. It is also possible to give and seek forgiveness. Stage theories that are considered invariant have not proven valid. Rather, the stages of Kubbler-Ross should be thought of as potential human reactions when facing the end of life. While prayer and meditation may improve mental health and outlook, there is no data-based evidence that higher powers listen, so bargaining will probably not work. However, people who found purpose and meaning in life feel least despair in the final stages.

The death of loved ones is also wrenching. However, if there is acceptance in the patient and family, it is possible to have honest communication at the end of life and together review important life experiences. It is encouraging for the dying to reminiscence about happy times and important life accomplishments. If the patient is suffering from a long and painful illness, then survivors might have mixed emotions of both relief and sadness. When dying, the patient yearns for a resolution of remaining conflicts and has a desire to establish an amicable atmosphere. Regardless, it is important that the communication with the patient does not become morbid. Rather, it is a time when the exchange of appreciative words will provide some residual joy for the patient in the midst of loss. It is natural for people of old age to make assessments of their lives. Health is inversely related to age and that is probably why mortality is thought about with greater frequency as we get older. People who experience a satisfactory life review face a more serene end to their lives. For older people, the most important quality of life is the ability to communicate, still get some enjoyment from life, control chronic pain and retain memories important to the journey of life.

Denial of death, particularly in the Western world, is aided by useless medical interventions. Life is prolonged by many new instruments, however, these medical interventions tend to be futile since they also prolong pain and discomfort and still end in death. All medical interventions are trade-offs. Patients who are willing to endure pain may get a longer life, but at the cost of considerable misery.

When loss is profound, the desire to be reunited with the dead person often results in hallucinations or seeing the dead person in vivid dreams. However, healing from grief requires acceptance that the personal world has changed forever and that it is not possible to recover the relationship. If the relationship was intimate and meaningful, a profound sadness can follow the survivors with feelings that are never resolved completely. A profound loss involves two types of grieving, for the happy associations of the past that will never come back and for the actual loss of the loved person.

When children grieve, it is important to communicate honestly about the traumatic loss. They often have the opportunity of observing grief in adults that allows them to better understand what has happened. The risk of not being honest is prolonged grief as children try out different hypotheses about the meaning of death. Keeping to a normal routine and participating in everyday life reduces the trauma and is supportive to the child by confirming that

despite grievous loss, normal life continues. A risk factor for parents is the idealization of the dead child when it creates unreasonable expectations for surviving siblings.

The public survey results reported in the chapter provide insights about the presence of death anxiety. It is instructive to learn that roughly one-third of respondents ask for all possible medical interventions to save their lives, even if the illness is terminal and they are in great pain. Death denial and anxiety must play a role in the desire to avoid death in all circumstances. Delaying decisions required about the end of life is another denial mechanism because relatively few respondents have a living will that would instruct the family and doctors about the desire for resuscitation efforts in terminal cases. Most Americans convey informally their wishes to family and females are more likely to establish communication with parents about final wishes. Although only about 35% place their wishes about the end of life into a document, people who are highly educated or of older age think more about and accept death. There are some curious differences between majority white populations and minorities. The greater denial of death among black and Hispanic people is probably related to the influence of more conservative churches.

The hospice movement was established to overcome death taboos and denial. Another motivation for establishing hospice is the fact that most dying happens in hospitals or medical centers when patients would actually like to be in their familiar environment. Hospice is an alternative to the medical model because it places the dying person and family at the center of palliative care. Typically, hospice supports the patient after he or she receives a diagnosis of less than six months to live. It is a team approach that aims at supporting the right of the terminally ill to die with dignity and involves nurses, a personal doctor, home aids and social workers. While the focus is on palliative care, hospice also offers support for emotional and spiritual needs, counseling when needed, attending to the personal hygiene of the patient and occasionally relief for caregivers. After death has occurred, some bereavement counselling is offered if helpful.

How do we know when death is near? While no one can predict the exact time of death, certain biological and behavioral changes indicate that death is imminent. The patient will typically begin to refuse food and drink only a little water. That is normal and the patient should not be harangued about eating when fasting is a normal preparation for the end of life. The patient may also have difficulty in staying awake, show discoloration on parts of the lower body and breathe unevenly. These changes must be accepted on the road to a serene death.

What is important and what do terminal patients talk about in the final phases? A dying patient is no longer interested in the great events of the world, at the end of life it is relationships that matter. For a peaceful death, reconciliation and expressions of loving feelings are essential. Terminal patients have regrets. Many regret not taking a stand in life and lacking the courage to live true to themselves. Many also gain the insight that it was the choices they made

that prevented them from enjoying a more fulfilling life. Terminal patients also regret that they did not choose to be happier. Some regret a life absorbed by work and achievements where relationships took second place. Others regret that they repressed their views and feelings to get along with others. Often, lost friendships come to mind and then the desire to know what happened to friends of long ago.

The chapter concludes with an evaluation of the moral right to end life when the patient is terminal and in great pain. Public opinion research shows rising support for these rights, both in the case of chronic painful illnesses but also for those suffering incurable diseases. The medical establishment and advocates for the handicapped oppose physician assisted termination of life for fear that these rights will be misused. Conservatives of many persuasions argue that only god has the right to end life. That is an obfuscation and a failure to face the reality of the catastrophic outcomes that are threatening some of the terminally ill. For some patients, ending their lives is the only rational course, particularly when illness threatens to rob the mind of the patient and prevents communication and decision making in the final months and weeks.

12 Living a long and healthy life

Socio-economic status and positive human psychology

An individual's optimal health is the complex outcome of several important factors. All humans inherit basic genetic information from their parents, which includes the possibility of genetic disorders as well as markers for a long life. In recent times, genes that predispose women to breast cancer have been identified and some women have opted for breast removal as a prophylactic. Although a new development, it is also now possible to remove segments of the genetic material linked to specific disorders. Current research also supports the finding that genetic material can also be altered by exposures to viruses, drugs and radiation. Some poisons are so severe that they damage epigenetic information that is then passed on to the next generation. The US armed forces poisoned the land, waters and people in Vietnam with Agent Orange and the effect has been multigenerational damage to health. Biological and genetic disorders have created a new interest in nanotechnology as a means of correcting dysfunctions at the point of origin. Can medical technology also be used to alter human genetic material and create a new type of human being with significant genetic advantages? It seems possible, although such an intervention gets close to the creation of optimal human beings through the practice of eugenics. Some stakeholders think that possibility is a slippery slope, offering some people health advantages over others.

In modern times, the biological model of health dominated thinking and research. Illness was thought to be the outcome of something that had gone wrong with the body. For example, some people inherited a predisposition for cancer and others the likelihood of high cholesterol that, in turn, contributed to cardiovascular disease. As a result of the biological emphasis, drug therapy was seen as the answer for most illnesses. Infectious diseases were the major killers throughout human history including tuberculosis, smallpox, polio and typhoid fever. Serious current infectious diseases, such as AIDS, are caused by the behavioral choice of unsafe sexual practices and, in the past, also by blood transfusions. Although the potential remains today for deadly infectious diseases to once again become contributors to mortality in developed countries, the dissemination of infectious diseases remains primarily problems in poor and developing countries.

Environmental factors, especially during the formative years, influence health. Impoverished physical environments characterized by inadequate hygiene and nutrition are adverse to good health. Social factors that affect health outcomes in modern times include the presence and absence of government support for health care and the level of medical expertise available in a given society. Life as a fetus is a salient environmental factor because the mother's blood is interchanged with the infant with lifelong consequences. The infant is given a more or less burdensome start depending on the degree to which the mother could maintain a good and healthy lifestyle with proper nutrition and where she refrained from adverse choices like smoking, alcohol and other negative factors.

We have little control over the environmental factors that frame our childhood and no control over our genetic inheritance. What we do control to some degree as adults is what is commonly called lifestyles. In recent decades, people in the developed world have become more aware of the relationship between lifestyle factors and health. Lifestyles that have a direct impact on health and longevity center on exercise as part of daily living, achieving essential sleep and rest, enjoying good nutrition and avoiding the abuse of drugs. Lifestyle factors are choices that people who live in fortunate socio-economic circumstances can make and are directly related to longevity. In fact, the majority of deaths in the developed world today are the outcome of risky lifestyle factors. For example, the leading causes of death in the Western world are cardiovascular disease and cancer, which are in turn related to smoking tobacco, fat rich diets and too little physical exercise. Stress produced in modern competitive societies is the primary outcome of risky lifestyle choices where people seek escape through drug abuse and other unhealthy behaviors. Learning to live with stress in a healthy way is of great consequence to good health outcomes and longevity.

The biopsychosocial model of health

In recent decades, researchers have gradually acknowledged that biological, psychological and social factors all play interrelated roles in illness and health. People inherit both positive and negative health-related genetic factors that creates a predisposition for certain types of illness or, in other cases, resistance to disease. At the same time, behavioral choices also matter. Early aging, illness and death in developed countries are today the outcome of lifestyles that point to inadequate nutrition, excess alcohol and drug abuse and competitive stressful living. Social factors also contribute to disease and health in complex ways. For example, a supportive family can help determine better outcomes for a patient in a variety of diseases. More broadly, social support is a critical factor in recovery or where that is lacking to a poor prognosis. However, social and family support is limited by the socio-economic status of the family that determines accessibility to medical care. Despite a supportive family, some medical therapies worldwide are only available to the rich, an undeniable fact of profound moral and ethical implication. The interrelatedness of biology,

psychology and social factors in determining health is called the biopsychosocial model (Engel, 1977).

Human health is a complex outcome of biology, psychology and social determinants. For example, biological predispositions for illness have a greater impact on health when there is no access to medical care and, therefore, is linked to socio-economic status. The three aspects of health vary in the degree to which people have control or can modify the outcomes. For example, some biological conditions can be modified by an early awareness in the patient or family that, in turn, is enabled by critical thinking and education dependent on the family's socio-economic status. Lifestyles that cause the majority of illnesses in developed nations can be modified and changed.

Understanding that the biological, psychological and social determinants of health are interrelated is a relatively simple proposition, but developing research programs that illustrate these relationships and their relative contribution and at the same time offer therapeutic advice is a steep mountain to climb. How is it possible to develop assessments of the three contributors to health when they correlate in complex ways? Still, in a finite world, knowing something about the contributions of each health factor would be important in order to prioritize where to focus attention and interventions. Outlining the linkage between the three contributors is difficult and health researchers are in the early stages of research and theory. Consequently, prioritizing health interventions is still a difficult challenge yet to be solved. The complexity of the biopsychosocial model is probably the reason why most health research still has an individual focus. For example, Suls and Rothman (2004) found that 94% of studies into health conditions involve only psychological variables with minimal attention directed to socio-cultural factors. Examining the three domains of the model in some integrated fashion is still a task for the future. Nevertheless, the research literature strongly supports the role of psychological factors in medical conditions, for example, chronic depression appears reliably as a precursor in the occurrence and outcomes of cardiovascular disease (Hatala, 2012).

Behavioral choices also affect medical outcomes in various ways. In some cases, the emotional reactions associated with stress produce changes in biological systems as in the case of cardiovascular disease. Behavioral choices can be risky to health or can offer protection. For example, the type of diet consumed over time directly affects well-being. Culture is also a factor in health outcomes and many health-related beliefs have negative consequences. In some cases, cultural beliefs may exacerbate illness by promoting misconstrued ideas about disease. A health-related belief that urges women not to eat during pregnancy (because there might not be room for the baby to grow) is an example of a cultural narrative with specific adverse consequences. However, overall, there are few adequate ways that explain why or how socio-cultural variables influence physiological pathways leading to disease and death. Finally, when considering the biopsychosocial model, it is important to remember that any therapeutic action will have simultaneous consequences for all three contributors, whether it is a supportive word or therapeutic drug (Baum and Poslunsny, 1999).

Health and the inconvenient truth

What is not addressed in the individualistic focus of medicine is the inequality of the broader socio-economic environment that requires social action and just solutions. The profound ill health of hundreds of millions of people around the world must be laid at the feet of unjust socio-economic systems. The failure of researchers to point to this inconvenient truth means that at best they and other experts deal with biological and psychological contributors to illness and, in passing perhaps, the influence of family and social support. Creating more equity and equality in the world requires political decisions, and it is much more difficult to change society than change individual behavior. Nevertheless, the major killers today, such as obesity, are from relatively recent changes in social nutrition and decreased physical activity in the developed world. When systemic social causes are related to broadly occurring illness, society must take up a discussion about the poor trade-off that came with socio-economic development. Meanwhile, social injustice remains the elephant in the room with profound health consequences.

Vignette: Pushing tobacco in developing countries

Tobacco smoking has thankfully declined in the developed world over the past few decades. It has become socially unacceptable to smoke nearly everywhere and some companies demand no smoking by employees on company time. It was not always this way. A few decades ago, tobacco smoking was seen as a rite of passage into adulthood. The outcome was millions of people dying from the carcinogens consumed. I remember the resistance to eliminating tobacco from our lives. For example, I was on a flight from Sofia to Moscow on one occasion. I requested non-smoking seating; however, as I soon learned, that had unique parameters. Evidently, the political bureau of the Party, after staying up all night and after much discussion, decided that the left side of the airplane was smoking and the right side, non-smoking. As a consequence, I sat right across from a Russian heavy chain smoker who generously let me inhale his second-hand smoke for the entire trip. In Western Europe, smokers were likewise unwilling to create smoke-free zones. On a ferry from Holyhead to Dublin, we had clearly defined non-smoking areas, but the smokers could not care less and smoked freely wherever. I think we have come a long way since those days toward a smoke-free workplace and life. However, as it is all about money, the tobacco companies have changed tactics. As they have seen consumption decline in advanced economies, they have been busy promoting the poison in the developing world. I remember well when the billboards promoting Marlboro and other tobacco products were erected in Southeast Asia. Today, in Vietnam, smoking among young people I think is at as high a level as that experienced previously by the youth in Europe. As nicotine is among the most addictive drugs, it is a hard row to hoe to create a smoke-free world. It would take the combined efforts of government, educators

and health-minded organizations to resist the efforts to maintain tobacco as a normal recreation with no ill consequences.

Socio-economic status: The primary cause of health and illness

People who have the misfortune to be born into poverty face a cascade of health problems not encountered by their wealthier fellow citizens. For example, differences between racial and ethnic groups in the United States in self-reported health status significantly favor white people by two to one over black and Hispanic people. In turn, the poor health outcomes of minorities are likely explained by the lower socio-economic status of these groups. For example, five times as many adults who live in poverty compared to respondents at the highest income level reported their health as only fair or poor. This trend in health disparity is likely accelerating as income inequality has also significantly increased all over the world over the past few decades. Despite improvement in the overall average life expectancy, differences in socio-economic status remains the major contributor to ill health in society. These differences in experienced health are avoidable and reflect an unjust and unfair society. Level of income had direct effects on mortality in a national representative sample of the United States and the relationship of income to health has also been documented in other countries. The socio-economic disadvantage of the poor is present from birth. Infants born to mothers with little income and education are more likely to be born prematurely and have a low birthweight. Because stress is a natural outcome of living in poverty, escapist behavior and deleterious lifestyles are also more common among the poor, including smoking, unhealthy diets, physical inactivity and drug abuse (Braveman & Egerter, 2008; Kramer, Sequin, Lydon & Goulet, 2000; Tovian, 2004).

It is clear that health is an outcome of a complex combination and interaction of socio-economic factors. Poor access to medical services, less education and poor physical environments are varying aspects of socio-economic discrimination that affects the large majority of the world's population. Ethnic discrimination in many countries also contributes to ill health, again, because it is linked to low socio-economic status. For example, African Americans have a higher mortality rate than white people for 13 of 15 leading causes of death. Although there are possible biological (genetic) differences that may contribute to mortality, it is also true that the majority of African Americans suffer from deprived socio-economic conditions that impact health and well-being. Ethnic and racial minorities in the United States experience higher rates of poverty, crime and lower levels of education. Even differences within ethnic groups can best be explained by socio-economic advantages or disadvantages. Lifestyles that reflect these socio-economic differences and deprivations impact health by creating higher levels of stressors for people living in poverty. In developed countries, about 25% of the population suffer from some mental illness, which accounts for more illness than any other group of disabilities (Henderson,

Baum & Sutton, 2005; National Center for Health Statistics, 2004; Reeves *et al.*, 2011; Smedley, Stich & Nelson, 2003; Yali & Revenson, 2004).

An important population study in Glasgow (Glasgow Centre for Population Health, 2013) examined the effect of psychological, social, biological and behavioral determinants of ill health between population groups that differed in socio-economic status. The research showed that people who live with economic deprivations are more likely to develop coronary heart disease and diabetes and other chronic health problems. Poor health is associated with disadvantaged socio-economic circumstances and that increases the propensity for a variety of chronic diseases. The relationship between measures of socio-economic standing and mortality is a striking reality found consistently in this study.

Past research has also demonstrated a relationship between socio-economic status and ill health. Each improvement in income, occupation, education and overall wealth is also associated with improvements in health. Research shows that it is not just differences in health care that produce disparities in outcomes since the socio-economically deprived still suffer more ill health even when medical care is approximately equal. It is important to recognize that the impact of poverty occurs from the very beginnings of life as demonstrated by higher rates of premature birth and lower birth weight of babies born into poverty. Behavioral differences in smoking and alcohol abuse are linked to poverty and are most likely responses to the increased stress impacting people living with poverty. There is also significant research that points to accelerated aging in poverty stricken populations (Adler & Ostrove, 1999; Adler & Stewart, 2010).

The physical and psychological environment of poor neighborhoods matters to health. When ghetto conditions are unsafe or have uninviting environments, the physical activity of residents are markedly restricted, which contributes to poor health. Poor neighborhoods pose more social threats, crime and an ever-present potential for interpersonal conflict. Murder rates and assaults statistics demonstrate the danger of living in poor and frustrating economic conditions. Poor socio-economic status creates a permanent perception of threat and anxiety in inhabitants that promotes escapist activities and dysfunctional family life. Children born into poverty rarely experience the positive support of a normal family circle, although good mothers work mightily to compensate. In recent decades, we have also learned more about the effect of poisonous environmental conditions associated with poverty on potential changes in the genes. The scientific field called epigenetics has demonstrated that poisonous physical environments can change genetic information and that these disadvantages to health can be carried to the next generation.

The built environment includes all buildings and other stationary aspects of the physical environment that can affect health outcomes. For example, the quality of homes and educational buildings in a community and the parks and other locations for recreation and shopping areas are all part of a person's built environment. If a neighbourhood is deteriorating, it is more likely to create

interpersonal stress and anxiety with long-term health consequences. The built environment is totally dependent on people's socio-economic status as the poor simply don't have the resources to live in more wholesome and healthy environments.

Life expectancy is naturally related to environmental quality. Individuals and groups with long subjective life expectancy have a stronger interest in the future, and therefore invest more resources into improving the environment. People born into the misfortune of low socio-economic status are concerned mainly with surviving the day. They have little energy left over and few resources to think about the future or to devote efforts to the improvement of health-related aspects of the built environment. This outcome can be changed at both ends. If longevity can be improved, more people will be concerned about the future and consequentlyenvironmental quality. At the same time, it is also likely that if environmental quality is improved, people will live longer and healthier (Mariani, Perez-Barahona & Raffin, 2009).

There is overwhelming evidence that socio-economic status affects health outcomes over the total lifespan, creating better health for the few and worse outcomes for the many. Therefore, whatever steps are taken to improve health, society must address the fundamental causality of social class and inequality. The variables associated with socio-economic class profoundly affect longevity. Longevity is a measure of the socio-economic disparities related to health within a country and explains health differences between nations. For example, there is a 20-year gap in life expectancy between the richest and the poorest counties within United States. In the final analysis, the health inequality associated with longevity reflects significant socio-economic differences between classes of people, and specifically between people living in poor and rich nations. It is not surprising because disparity in wealth impacts access to quality health care. For example, people in Mozambique have a life expectancy of only 51 years and 75% of the population live in poverty on less than one dollar a day. Mozambique has only one doctor per 20,000 people, whereas in the United States, 54 doctors on average serve 20,000 inhabitants. Furthermore, people living in wealthy countries benefit from advances in medical technology and better management of chronic diseases compared with poor countries (Marmot, 2005; Murphy & Bennett, 2005; Watson & Bamford, 2011).

Fundamentally, socio-economic status is an index of human rights. Human rights as defined by the UN includes civil, economic, political and cultural rights and freedoms based on human dignity and value. These rights also include the possibility of attaining the highest standards in physical and mental health. A study in China demonstrated the relationship between the specific human rights of adequate nutrition, good housing, education, social security, health care and clean air environments as related to longevity. The research demonstrated that extended exposure to good human rights environments also predicts that people will live healthy and long lives (Brown, Qui & Gu, 2012).

Inequality and investments in health care

Health is defined by the World Health Organization as a state of complete physical, mental and social well-being and is not merely the absence of disease. However, poverty exposes victims to risks associated with environmental pollution and other life stressors. For the fortunate in society, supportive social networks, meaningful and well-paid work, good nutrition and access to medical care help reduce health risks. Despite enormous spending on health care, the US ranks relatively low in positive health outcomes compared to other developed nations. Many millions of people in the United States have no health insurance and see a doctor only for acute emergencies. Racial and ethnic minority identification is also associated with lack of medical access. There is more than ample research evidence that racial and ethnic differences in health care and mortality are explained by socio-economic status (Taber, Chriqui, Quinn, Rimkus & Chaloupka, 2016).

Socio-economic class affects health outcomes by producing disparities in access and use of health care. Factors like obesity are also more prevalent among the poor due to inadequate nutrition and the fast food revolution. Although the role of socio-economic status is complex, poverty is linked to a variety of health-related variables including disadvantages in behavioral habits and risky decision making. Biologically negative health outcomes begin prenatally because of the mother's lack of good nutrition and then accumulate over the lifespan. Children growing up with higher socio-economic status have better nutrition, easier medical access and more economic resources, including more attractive and safer neighborhoods.

Employment and unemployment are key indicators of socio-economic status and contribute to overall well-being and illness. Without work, the necessary income is not available to secure housing or obtain the transportation essential to find a job or otherwise cope in modern society. Employment is still a key provider of health insurance for a large but decreasing segment of the population. With employment, there is at least the possibility to pay for elementary medical care. In the United States, many millions of people are without the necessary insurance to get medical care, especially for long-term chronic health problems. Workers in certain age groups who are unemployed are twice as likely to suffer from heart attacks or strokes. The mediator is the stress and anxiety associated with being unable to meet personal or family minimal income for living (Gallo, Bradley, Falba *et al.*, 2004).

Generally, people with high socio-economic status have better and more secure employment and have health insurance and other resources to combat ill health. Socio-economic security, in turn, produces psychological consequences in higher self-esteem, greater resilience in dealing with adversity and coping with stress. Victims of lower socio-economic status, on the other hand, are more likely to experience disruptive family life, more unemployment and fewer psychological and social resources to cope with adversity.

Infant mortality is a significant indicator of the overall health of a country, as it measures many other factors, including the overall socio-economic situation, but also maternal health care, quality of health services and public health intervention. US infant mortality is higher than most other developed nations. Public health intervention and policies are obviously of greater importance than the relative wealth of a country since Cuba, a relatively poor country, has lower infant death mortality compared to the US and also a higher literacy rate. The disconnect between health investments and population health in the United States compared with other countries is broadly discussed and evaluated (Centers for Disease Control and Prevention, 2008, 2011; MacDorman & Mathews, 2008; MacDorman, Hoyert & Mathews, 2013). It is sobering to also note that disparities in wealth have increased significantly in the past few decades in the United States and elsewhere (Ricci & Zachariadis, 2013; Minino, Heron, Murphy & Kochanek, 2007).

There are significant disparities in health between racial minorities compared to the majority white population in the United States. Racial and ethnic differences in health are linked directly to low education and income that contributes to behavioral risk factors. Since relative wealth of social conditions must be considered fundamental to personal health, a focus on biomedical interventions will have only limited success in reducing or limiting health disparities between racial and other underprivileged groups. Education is known to influence health disparities and must be considered a principal component of socio-economic status. Health disparities persist, pointing to socio-economic status and education, even when studies control for more immediate causes of death including gender and age. That socio-economic status remains the principal component of good health can be observed by comparing white people at the top with those at the bottom of the socio-economic ladder. White people at the top of the socio-economic status pyramid continue to improve their longevity, whereas those at the bottom are declining in life expectancy (Braveman, Cubbin, Marchi, *et al.*, 2001).

Education and longevity: Living well and long

To find the key to eternal life is beyond the role and capacity of science. However, research does speak of living well and achieving longevity within the limits established by inherited genes. Recent research has established that education plays a large role in longevity across countries. Education is most likely related to a population's ability to understand and apply health related ideas and research. For example, educated people are more likely to accept the biological basis of infectious diseases and take proactive steps in hygiene to avoid transmission. Educated individuals are also likely to serve as information sources and spread important health information to the rest of the community. Higher levels of education have been found to play a significant role in understanding differences in longevity between countries in the world.

Research reveals a large and consistent relationship between level of education and many measures of health. The death rate is starkly different between the more educated people compared with those less educated. For example, individuals with less than 12 years of education have a death rate that is 2.5 times higher than those with 13 or more years of education. Educated people are better informed about the consequences of deleterious lifestyles and are, therefore, less likely to smoke or abuse alcohol. Educated people live more healthy lives and importantly, because of their socio-economic status, have better access to medical care. Furthermore, in self-reports, participants that are more highly educated acknowledge better subjective health, less anxiety or depression and have lower morbidity from the major modern killers of cardiac disease, strokes and diabetes. To the extent that it affects critical thinking, education may have additional health benefits by producing more insightful evaluation of health-related decisions that influences well-being. Nevertheless, educational development is, in most cases, a direct outcome of a person's socio-economic status that, for example, determines the accessibility to quality educational institutions.

Education, especially that of the mother, has beneficial effects on other members of the household and therefore benefits the whole community. The importance of the mother's education for health has found support in both developed and developing societies. The beneficial effects of education involve primarily health habits transferred from parents to children. Overall, the research points to the crucial role played by educational policies in raising the average education of a population and, at the same time, encouraging the transmission of healthy behavior practices within the family.

Life expectancy at birth has increased significantly in European countries. The contributing factors include rising living standards, education and improved lifestyles, reflecting information on diets, exercise and the moderate use of alcohol. Longevity would be relatively meaningless if not associated with health and well-being; however, the same factors that contribute to a long life also contribute to having more healthy years. Socio-economic factors are the key index needed to understand longevity because higher national income and higher spending on education are associated with both healthier years and longevity. The projected European life expectancy in 2060 is 84.6 for men and 89.1 for females (OECD, 2012).

However, genetic inheritance plays a role in setting the upper limits of longevity. Genetic contribution to people with exceptional longevity is greater compared to the general population as several genes have been identified as associated with exceptionally long lives. In the general population, lifestyle factors play a larger role and people with exceptional longevity do not differ from others in having achieved healthier lifestyles. Evidently, the specific longevity genes offer some protection against the consequences of poor health choices. Subjective estimates of longevity may also be a contributing factor since people who expect to live long invest more in the future and in a better-quality living environment (Rajpathak, Yingheng, *et al.*, 2011).

The immorality of health as an outcome of socio-economic advantages

Despite the overwhelming documentation of the negative impact on health caused by social inequality, there is no discussion in the health-related literature about the immorality of socio-economic unfairness. It is clear that socio-economic inequality within society and between countries produces collateral damage to the health of billions of people throughout the world. Socio-economic status predicts health and longevity and low status creates difficult conditions for human life, even prenatally. The immorality of socio-economic unfairness is obvious, but the task of creating equitable social conditions is a great challenge for the future. As a consequence, health conditions today depend primarily on policies of governments, the level of democracy and an informed population that supports policies that reduce disparity between the rich and poor. Statements about the importance of policies that reduce socio-economic disparity should be repeated often and find their way into health textbooks and government discussions.

Lifestyle: Choices for healthier living and longevity

Health psychology can assist in encouraging better overall well-being by focusing on the lifestyles that are now responsible for most deaths in the developed world, and increasingly, also in developing societies. Lifestyles are not necessarily consciously chosen, but often adapted from general social and cultural pressures. The effect of conformity on lifestyles needs further research and discussion. Nevertheless, healthy lifestyles are also based on informed choices and decisions. Attention will now be directed to lifestyles that contribute to ill health or conversely has the potential of increasing longevity and well-being.

Exercise: The key to healthy living

Recent decades have seen a significant increase in the promotion of physical exercise to achieve and maintain good health. Today, young people in particular have an increasing interest in jogging and other fitness activities. Exercise is trendy in the developed world and so popular that it has supported a new clothing and footwear industry worth billions of dollars. Infectious diseases have largely been removed from the battle maps of medicine in the developed world, causing only 1% of the deaths that occur before age 75. However, lifestyle factors have sadly replaced infectious diseases as major killers for both chronic and degenerative diseases, such as coronary heart disease, obesity, diabetes and some cancers. In the United States alone, these illnesses cause great human suffering and affect 90 million citizens. Research has established direct links between low levels of physical activity and high mortality from chronic diseases (Berryman, 2010).

All types of exercise are beneficial to health. Weightlifting might improve strength and bone health and gardening can strengthen many muscles that otherwise are not used daily. However, cardiovascular health is primarily sustained by regular exercise found in walking, jogging or swimming that helps stimulate heart and lung function. People who exercise somewhat strenuously have a lower risk of heart attacks and are more likely to be alive thorough their adult middle years compared to sedentary survey participants (Lee, Hsieh & Paffenbarger, 1995). The health community has generally agreed that adults can get many of the health benefits of exercise by engaging in moderate physical activity three times or more per week. For example, walking briskly, cycling, swimming with moderate effort or playing various sports meets physical activity goals. For older adults, heart rates can also be raised and strengthened by home repair, mowing the lawn and the many activities associated with garden care. Research has also found support for the role of exercise in mental well-being. For example, exercise reduces depression and anxiety and improves the self-concept (Blair, LaMonte & Nichaman, 2004; Phillips, Kierman & King, 2001).

Comprehensive reviews of the research literature conclude that physical exercise interventions alleviate anxiety and mood disorders. A significant segment of the world's population suffers from anxiety and depressive disorders with substantial cost to personal lives and society. Anxiety disorders are the most common mental health problem affecting people. At any point, a third or more of the population are victims of anxiety whenever surveys have been performed. Exercise has been demonstrated to be at least as effective as pharmacotherapy for depressive and anxiety disorders. Recent research efforts continue to demonstrate the importance of physical exercise to mental health and well-being as it is highly effective and obviously low in cost, except for the individual effort required. At the same time, lack of exercise is related to many chronic diseases and contributes to mortality for some cancers, diabetes and hypertension (Rethorst, Wipfli & Landers, 2009; Swan & Hyland, 2012).

Recent research in neurosciences demonstrates the benefits of exercise not only on overall health but also on cognitive functioning. Results clearly show that voluntary exercise improves brain functioning, stimulating neurogenesis, increases resistance to brain damage and improves learning and mental functioning. Brain changes that occur as a result of exercise benefit brain flexibility and plasticity. Overall results suggest that exercise provides an efficacious means of benefitting brain functioning and is particularly beneficial to middle aged and older people. People become more sedentary in middle or old age; that is also often the time when the brain faces serious challenges from neurodegenerative illnesses like Alzheimer's disease. Exercise has been shown to enhance learning and contribute to healthy cognitive functioning in aging populations (Cotman & Berchtold, 2002).

The aging process is historically related to a loss of well-being, gradual decline in cognitive functioning and an overall increase in concern about health and chronic illness. As noted, when adults move into middle age, there

is a gradual tendency to decrease physical activity. Despite the evidence that physical activity is important to cardiovascular and overall physical and mental health, the overall decline in activity has not been reversed. Research supports the conclusion that among the various lifestyle factors, physical activity is the strongest predictor of health in older adults (Khoo & Müller, 2013).

Diet decisions: Partially voluntary in advanced societies but still dependent on socio-economic status

To some extent, people in modern societies can moderate what and how much they eat. That choice is, of course, not true in countries where the people suffer from famine or chronic malnutrition. However, in the developed world, the problem is not the absence of food, but what is eaten and how much the diet is dependent on fast food culture. In the United States, most adults are overweight or obese. Since 1992, a food pyramid guide has been available to recommend daily servings of food. The emphasis in healthy diets is on eating more bread, cereals, vegetables and fruit and less meats, fats, oils and sweets. However, as research produces new findings, the recommended food intake changes and it has become more complex. In recent times, the link between dietary patterns and cardiovascular disease has been established. Coronary heart disease is largely caused by unhealthy diets and other lifestyle factors. The diets that are associated with lower risk for heart disease are based on plant food and include abundant servings of fruit, vegetables, grains, nuts and seeds. What is commonly called the Mediterranean diet and certain vegetarian diets reduce the multiple factors associated with cardiovascular disease. In some cases, the adoption of healthy diets reduces the needs for drug therapy in patients suffering from hypertension and high cholesterol levels (Wardlaw, Hampl & DiSilvestro, 2004; Fleming, Holligan & Kris-Etherton, 2013).

Most mothers would rather buy good food than medicine. In fact, good nutrition is one of the least costly, but most effective, ways to decrease the burden of many chronic diseases including the health risks associated with obesity. Obesity is related to diabetes, hypertension and cardiovascular disease and is a serious health problem in the developed world, with more than 60% of adults in the United States overweight or obese (National Center for Health Statistics, 2004). The rate of obesity has doubled in the United States since 1900, probably due to consumption of food high in fat content and declining exercise. Again, the socio-economic status is implicated in diet as obesity is six times more prevalent among poor women compared to women with high incomes. Culture and ethnicity may also play a role as African American and Latino women in their twenties increase in obesity at a faster rate compared to their white counterparts, and Latino men become obese faster than white and African American men. There is undoubtedly also an inherited component to obesity that is passed through generations. Nutrition research is thought to hold the key to increased knowledge about obesity and offers a promise to influence global health in a positive direction. Nutrition has generally

been thought essential for growth and development. However, recent research shows nutrition is also important in maintaining good health over the long run and in promoting longevity (Ohlhorst, Russell, Bier, Klurfeld, *et al.*, 2013).

To live long and healthy is a natural desire of most human beings. Research has shown that avoiding malnutrition, but reducing food intake, can ameliorate age-related diseases and promote longevity. Most humans would find it difficult to follow extreme dietary restrictions, nevertheless, human subjects who voluntary undertake severe food restrictions without malnutrition score lower than controls for multiple risk factors for both cancer and cardiovascular disease. Some research has shown that leaner men live longer and as body mass increases so does the risk of mortality (Williams, 2005; Fontana & Partridge, 2015).

Concerns with diets have caused many girls and women to become obsessed with the idea that thin is beautiful. Anorexia nervosa is an eating disorder brought about by persistent efforts to become thin by starving. The feminine fashion image promoted by American media today with worldwide reach undoubtedly contributes to the number of young women who become anorexic. The anorexic woman has an intense aversion to gaining weight and because of perceptual distortion actually sees herself as overweight even when extremely underweight. Although the disorder can be found in young men, it typically starts in young women in the early teenage years after experiencing a disruptive diet and some life stress. Anorexic women come from upper income families and tend to be competitive with very high standards. They are extremely concerned about the perceptions of others and are stressed when unable to reach their expectations for achievements. As Western media reaches global audiences, it seems very likely that cases of this disorder will also occur in developing countries (Hsu, 2004).

Bulimia nervosa is another eating disorder where the individual is obsessed with body weight, but cannot control it by starvation. Often, these primarily young women are depressed and suffer from a strong fear of becoming overweight. The bulimic patient will typically go on eating binges followed by purging with self-induced vomiting or by using laxatives. However, unlike anorexics, who are obviously thin, bulimics maintain their body weight and are often difficult to diagnose. Most bulimics are adolescent girls who feel pressure to diet in order to be thin, and they tend to be unduly concerned with their body and unhappy with their body image. Bulimic girls also tend to have low self-esteem and display symptoms of depression. The influence of the media is widely recognized today and some European countries have ordered fines for professional models that are consistently below normal healthy weight (Stice, Presnell & Spangler, 2002).

Positive health outcomes: Diet and exercise

Lack of exercise and poor nutrition remain the main contributors to ill health in the twenty-first century. It is important to remember that even moderate

exercise can produce many health benefits. Establishing a regular program of walking, jogging or gardening can benefit human patients suffering from many diverse health issues. Exercise is not just beneficial to the outcome of chronic diseases that take most lives, but is also a key to strengthening and maintaining thinking processes, mental health and well-being.

In many, but not all countries in the world, the environment offers some choice between healthy and unhealthy diets. It is wise to follow diets that are low in fat, including saturated fat, and low in cholesterol. Unfortunately, many tasty foods are not good for health, especially menu items found in fast food restaurants like hamburgers and chicken fried in fats. Although ice cream and bacon can be enjoyed occasionally, they should be avoided as daily fare. Keep in mind that the cholesterol that contributes to cardiovascular disease is found only in animal meats and products so an easy guide to better health is remembering to reduce consumption of these types of food. Whenever possible, enjoy fruits in place of snacks that are unhealthy and consume plenty of vegetables that are not overcooked. Nutrition research supports the advice that the sugar found in soft drinks and pastries, and salt that is used to excess in processed and other foods, should be reduced and used in moderation. Reducing weight in obese people is a mega-million-dollar industry in the West. However, at the end of the day, in addition to personal metabolism, it is calorie in and calorie out that determines obesity. The food servings at restaurants in the United States are much too large for dietary needs, so it is good advice to eat half and take the rest home. Finally, exercising regularly helps a person to stay fit and increases the calories burned.

Sleep: Resetting your brain for better health

Health scientists have, in the past, thought of sleep as the third pillar of good health. However, today, experts in neuroscience suggest that sleep is the single most important factor in cleaning the brain of emotions for better health. On average, people in the United States sleep significantly less than they did a century ago. Economic upheavals and the sheer pace of socio-economic development contribute to people getting less sleep than recommended by research. In one study, 40% of adults reported drowsiness during the day, a pattern thought to start early in our competitive society. The optimal amount of sleep recommended for adults each night is seven hours. Most adults in the West get less with deleterious effects on the optimal indicator of good health: longevity.

Although longevity has improved over the past few decades, some suggest that these gains are starting a downturn under the weight of ubiquitous sleeplessness. Sleep is of such vital importance that changes in sleep patterns can promote negative effects on well-being and brain function. One rigorous study by the American Cancer Society examined a million healthy men and women. Results showed that participants who met the norm of seven hours of sleep were more likely to be alive at the conclusion of the six-year study. Another study in Finland followed a very large group of twins over 22 years.

The results showed that those who slept less than the recommended seven hours were more likely to experience poor health and die compared with those who slept more.

Neuroscientists used to believe that the brain just needed the downtime of sleep to rest, but recent research suggests that a lot of brain activity takes place during sleep. In deep sleep, toxic material is washed away, which is one reason why lack of sleep leads to more rapid aging of the brain. Cycles of dream sleep is especially important in processing emotions attached to various activities so it is possible to recall without associated powerful feelings. When dreams separate out the emotional components, it is possible to recall even traumatic events without actually reliving these as many do traumatically in the case of delayed stress syndrome (PTSD). Dream sleep becomes a form of overnight therapy. More dream sleep soothes and flattens traumatic memories after about a week, a process that probably fails in PTSD. Researchers are thinking now about links of sleep disorders to mental illness as a fertile focus of future studies (Park, 2017).

Human psychology: Optimism and a hardy personality

More recently, the research on positive psychology has demonstrated an important role for temperament and personality in healthy living. Some people are inherently more optimistic, which produces many benefits to mental health but also useful physical outcomes. Happiness is treated separately in the literature and has many benefits by producing behavior that leads to a healthy life and is a causal role in mitigating illness. Personality research has, in recent decades, focused on the so-called Big Five. Among these central traits, conscientiousness has been found to have a powerful effect on health decisions and therefore on longevity.

Positive emotions lead to well-being and longevity

There is good evidence that mental distress has a negative effect on physical health, but can mental well-being conversely have a positive effect on outcomes? Can positive emotions produce better physical health with lasting benefits? Since 1946, the World Health Organization has defined health as a general state of physical, mental and social well-being; it is therefore a positive state of being and not just the absence of disease. Do the positive emotions of happy people help them cope better and live longer? Research supports the contention that happiness contributes to longevity in healthy populations. While positive emotions may not cure a serious or fatal illness, it does appear to offer some protection against falling ill in the first place. There are numerous cross-sectional studies on the relationship of happiness to physical health. These correlations appear to be primarily the result of the causal effect of happiness on health. The effect of happiness on longevity is considerable and it is estimated in the literature to range from seven and a half to ten years.

Vignette: A beautiful girl in Vietnam

> During my early visits to Vietnam, I could see how the people were struggling with the aftermath of the war and associated poverty. When I had opportunity, I shared some of my income, particularly as the dollar then had value. One day, I sat in the lobby of my hotel just relaxing on the couch. The windows were open and a cool breeze came through and felt very refreshing. All at once, I heard a beautiful voice singing directly behind me. As I turned around, I saw a lovely Vietnamese girl holding her baby and looking directly at me as she sang. Was I hallucinating? The experience was so overwhelming, since she was obviously sharing a moment of beauty with me. The song lasted a few minutes and when completed, I turned around to find her face again, but she was gone. Hoping to catch her, I walked out of the lobby and we met face to face. I put my hands together in the form of an offering and encouraged her to take a small amount of money. However, she just looked at me with large and innocent eyes as she declined and just continued walking down the small street until out of sight. It became clear to me as I thought about it that she just wanted to share a beautiful moment with me, a stranger, and there was no other transactional purpose. It did, however, become a transformational moment for me as it started my lifelong love affair with the Vietnamese.

Happiness can protect a person from falling ill through the protective effect of positive emotions on autonomic reactions. Unhappy people are chronically activating the "fight or flight" response that results in higher blood pressure and has a negative impact on the immune system. However, happier people also live healthier lives resulting in better behavior choices. Being more self-efficacious and more open to the possibilities of life, happy people make better and more reliable choices that promote health. Better decision making translates into better marital, occupational and behavior choices. For example, while moderate drinking does not indicate unhappiness, heavy drinking is a reflection of deep dissatisfaction that has consequences for both mental and physical health. There is a relationship between happiness and a healthy physical environment found primarily at higher levels of socio-economic status. For example, the quality of housing is related to happiness independent of other factors such as marital status.

Since happiness is related to health, what can society do to increase happiness? An important factor that impacts happiness scores is improving the liveability of society by creating better macro-social conditions. In one study, happiness scores varied from the lowest scores, found in Tanzania, to the highest happiness scores in Denmark. People are happier in materially richer countries that practice democracy and freedom of choice. Happiness and therefore health can be promoted by policies that aim at establishing decent standards of living in societies where people don't experience the threat of oppression and where the voice of ordinary people matters (Veenhoven, 2005, 2008; Zautra, 2003).

Other reviews suggest that optimistic emotions, even when unrealistic, have positive consequences affecting the onset of physical illness. Although the pathways are not clearly understood, it appears that positive emotions have some physical protection benefits, perhaps through strengthening the immune system. Positive people may also develop better coping strategies. A psychologically positive outlook on life acts as a stress buffer so that the happy individual is less likely to develop the many chronic illnesses associated with the stress of living in modern competitive societies. Society would be well served by promoting social well-being policies given the high costs of illness and early deaths. Well-being is not just an individual goal, but in order to be achieved, must include economic and political objectives as well. Health from the perspective of positive psychology must, of necessity, be multidisciplinary, taking into account the individual, but also social, institutional and political spheres (Vazquez, Herves, Rahona & Gomez, 2009).

Happiness is a deep personality trait that helps the individual cope well with adversity. Life is difficult for all humans, and for some people, it is very hard with the tragic impact of disease and early death. Since it is not possible to divorce ourselves from tragedy, happiness must have something to do with how people handle adverse events and the hardiness of personalities. People develop varying ways of coping with stressful life events that either undermines or is beneficial to health. The autonomic nervous system is engaged whenever stress is experienced and people develop lifelong coping patterns that either elevate or control these responses that, in turn, affect health outcomes. In one longitudinal study done with Catholic nuns, researchers found a very strong association between positive emotional content of autobiographies and longevity 60 years later. These findings are consistent with other studies that show that optimism is associated with longevity. Of course, optimistic people also face tragedy in life, but they have the ability to accept it and regroup with hope for the future. Future research may illuminate the underlying physiological and brain processes that are associated with happiness (Danner, Snowdon & Friesen, 2001).

Happy family and long life

It has been understood by experts that people embedded in strong family relationships eat healthier and generally practice good health habits that contribute to longer lives. The relationship between happy family ties and longevity is well established. Unfortunately, the opposite is also true. People with few or negative family relationships experience shorter lives. Researchers speculate that the increased longevity in happy families is related to the sense of responsibility and meaning happy families inspire. Happy sibling relationships also affect longevity. Close sibling relationships produce better mental health outcomes and fewer depressive symptoms. Sisters have a special positive impact, as siblings so endowed report feeling less lonely or fearful and experience more happiness. These findings are especially true for spouses. For

example, on days when spouses have pleasant and positive conversations they feel more intimate and less lonely. Sharing something positive with a partner influences health and just feeling a partner is responsive is linked to overall health (Sifferlin, 2017).

Psychological traits and longevity

Locus of control is a personality factor related to health. Some people believe that the outcomes of life are the result of their own decisions and they possess an internal locus of control. Others believe that fate, chance or authority determines what happens in their lives, and therefore, have an external locus of control. This trait is important because large proportions of untimely deaths that occur in developed societies are largely caused by lifestyle factors that are modifiable. People's perception of control is related to many other investments they make related to health, for example, whether to pursue educational achievement. For example, unemployed internal locus of control – people who believe in successful outcomes look more intensely for work compared to people with an external locus of control. Self-efficacy is a factor that is important in a world of rapidly changing job markets. Recent research demonstrated strong evidence for a relationship between an internal locus of control and eating healthier, smoking less and not drinking to excess (Cobb-Clark, Kassenboehmer & Schurer, 2012).

The ability to regulate impulses and exercise control over thoughts and emotions is a key to a healthier life. Self-control involves the desire to change the personal narrative leading to achievement in science, the humanities and more broadly in life. It is by means of self-control that people learn to adapt to environmental challenges. Early experimental studies demonstrated that children with self-control at age four, who waited and resisted temptation to immediately consume, but then received a double treat of marshmallows, went on to become successful adults. Self-control is likewise possible for addicts. However, some research shows that self-control gets depleted by use, leaving a person with less will power. That is probably why it is more difficult to resist temptation in the evening after practicing self-control all day. However, like physical muscles, mental muscles do not just get fatigued with use, they also increase in strength with practice. Research supports the idea that exercising self-control on a regular basis builds up a person's capacity to use this character trait when required. This suggests that quitting addictions can be accomplished by strong will power. In fact, maintaining the habit of smoking today, in the face of social discouragements and medical advice, requires very strong will power. That same will power can be put to use to end addictions as well (Baumeister, 2015).

Conscientiousness is defined as the tendency to follow social rules to control impulses, make plans for the future and be goal directed. Fundamentally, conscientiousness is about the ability to delay gratification required to reach worthwhile goals. Researchers have concluded that longevity is the single best

measure of the health of a population. At the same time, conscientiousness is shown to predict both health and longevity in a variety of populations and over time. Conscientiousness is a core and robust personality trait with important consequences for health-related behaviors. For example, children and adolescents who develop conscientiousness smoke less and eat healthier food compared to their peer control groups.

Genetic predisposition however, can override good decisions based on the conscientious personality trait. For example, genetic determinants play a role because we know that some children are more likely to be impulsive and do not evaluate long-term consequences of health-related behavior. Early environmental stress can also be an important factor regardless of a person's conscientious adherence to healthy behavior with the negative effects accumulating over the lifespan. Conscientiousness also interacts with other personality traits that impact decisions for health or unhealthy behavior. For example, personality traits like extraversion, neuroticism and agreeableness have been found to interact with an impact on health (Friedman, Kern, Hampson & Duckworth, 2014).

Bogg and Roberts (2004) suggest that the accumulated evidence reserves a powerful role for conscientiousness in health outcomes. They raise the question of how this optimal trait can be fostered in the family and society and for the need to incorporate conscientiousness with other personality dimensions in research on health. Early research included a large number of overlapping personality traits, but these findings have been brought together under the cover of what is called "the Big Five" (extraversion, agreeableness, conscientiousness, emotional stability and openness to experience). Conscientiousness has repeatedly been shown to be related to longevity and lower levels of conscientiousness, on the other hand, have been linked with higher mortality in longitudinal studies.

Health and human happiness

Human happiness is partly the outcome of the average socio-economic status of society that promotes or negates well-being and security. In addition, some people have the good fortune to inherit a positive temperament and hardy personality traits that help overcome the ubiquitous tragedy and trauma of life. Some people find comfort in ritualized religion that confers feelings of security and hope beyond human existence. Other people have, in the past, coped with even the most despairing circumstances without supporting religious beliefs. An awareness of the certainty of tragedy does not require that an individual be overcome by hopelessness. For example, if one is not blessed with optimism as a personality trait, it is still possible to substitute that misfortune with existential courage, accepting that which cannot be denied or changed, but supporting all health promoting activities in the self and others. Seeking out the relationship of little children can produce joyful experiences regardless of where one finds oneself on the mortal journey.

Summary reflections

Optimal health is the outcome of several important factors including genetic predispositions, developmental exposure to viruses and drugs, environmental hazards, healthy or unhealthy lifestyles and the quality of medical care. Health or illness in past centuries were primarily the result of infectious diseases and other biological complaints. These issues still have serious consequences for the health of people in developing societies, but lifestyles are the major contributor to ill health in developed countries. The environment in all societies frames the health prospects of a child, especially the quality of nutrition and medical care. Negative lifestyles are escapist responses caused by an overly competitive world where the majority also suffers from poor socio-economic status. Serious chronic illness like cancer and strokes occur from the interaction of the person with his or her biological, psychological and social environment. Human health is the outcome of the complex interactions of these determinants.

Nevertheless, the major focus of health research is primarily on psychological variables with little attention paid to socio-cultural factors. Still, psychological factors have been found to be reliable precursors in various diseases, although we know little about the specific physiological pathways that lead to disease. Despite the strong emphasis on psychology, there is little doubt that socio-economic status is the primary cause of health and illness throughout the world and between classes within society. People who are victims of low socio-economic status encounter in their lives a great many negative stressors that are linked to illness. When self-reporting, people with low socio-economic status are much more likely to claim poor health compared to the wealthy citizens of a given country.

This must be a concern to both professionals in health practices and to the larger population since income inequality is increasing along with health disparities within society and between poor and rich countries. The relative poor health of ethnic and racial minorities is primarily linked to their lower socio-economic status. Inequality impacts life from the very beginning through the inadequate prenatal services offered to poor women, injurious nutrition and other developmental factors. The poor live in deprived environments with constant threat and anxiety, with crime and interpersonal conflict always present. The built environment of the poor is likewise a discouragement to healthy lifestyles since walking or running and other outdoor exercises that help elevate cardiovascular health is difficult to continue on a regular basis in ghetto conditions. High socio-economic status is related to better lifetime nutrition, easier access to medical care and safer neighborhoods. With continued socio-economic inequality present in the world, public health interventions matter. Even poor countries like Cuba that invest in public health can have better outcomes, for example, in infant mortality, compared to its much richer neighbor the United States.

Education is important to good health. The death rates are starkly different between people with greater education and those who have less. Education

is primarily linked to health via access to medical information. Nevertheless, education is also an important index of socio-economic status and income. An additional benefit is the cognitive advantages that come with better education. Higher levels of education affect critical thinking, which encourages better health-related decisions and behavior. It follows naturally that education is also related to longevity. Educated people are better able to apply health related ideas and research to their own lives and often serve as a conduit of information to the rest of the community. In particular, the information conveyed from mother to child has lifelong positive consequences for good health. Some research also shows that higher spending on education is related to longevity.

The socio-economic advantage of the few, which is the primary contributor to good health, is unfair to billions of poor people worldwide. However, the task to create more equitable social conditions is becoming increasingly difficult as economic disparities are widening within societies and between poor and rich countries. Making progress toward better overall health in society therefore depends on government policies, especially the level of funding for health research and services for the poor. Beneficial policies, in turn, depend on the level of democracy and level of education in society. An informed population will be more likely to reduce the extreme disparities we observe today in income, education and in health.

Lifestyle is the major health-related factor in our modern competitive world. Exercise is the single most important lifestyle contributor related to health and longevity. Infectious diseases play a small role in the developed world where chronic and degenerative diseases are the major killers that cause great human suffering. It is well to keep in mind that all types of exercise are beneficial. For good cardiovascular health, sustained exercise as found in walking, jogging or swimming is essential. Exercise is not just vital to physical health since research also shows it plays an important role in mental health and well-being. Further, exercise is important to cognitive functioning, which assists lifelong learning and plasticity.

In the developed world, most people can exercise some judgment about what and how much to eat. Still, there are many areas of the world that suffer from famine or malnutrition. In the developed world, people often eat too much and have adopted diets with a large component based on the fast food culture that creates obesity. Coronary heart disease is largely caused by unhealthy diets combined with other lifestyle factors such as physical inactivity. A healthy diet must be plentiful in fruits, grains, nuts and seeds and go easy on fats and red meat. Obesity is a precursor of many chronic diseases like diabetes, and good nutrition could save the individual and society from heavy dependency on pharmaceuticals. Some research shows that leaner men live longer and reducing food intake without malnutrition may contribute to longevity. Food disorders occur primarily in countries under the influence of the glamour media that emphasize thinness for girls and women. However, that image is becoming ubiquitous in a connected world.

Human psychology contributes to health and illness. Research shows that positive emotions are linked to well-being and longevity. Improvement in health is a causal effect of happiness, probably via the autonomic nervous system (less arousal of fight and fight responses) and improvement of immune protection. Unhappy people are chronically in a state of fight and flight with long-term consequences on blood pressure and the immune system. The answer to chronic illness is adopting healthier lifestyles. Society can assist by improving liability and by creating better macro-social conditions. Happiness is higher in richer countries that practice democracy, freedom of choice and decent standards of living.

Research on positive psychology has many implications for health. The locus of control research demonstrated a relationship between believing in an internal locus and beliefs in self-control in making healthy lifestyle choices. Poor lifestyles cause untimely deaths, ill health and misery for millions of people around the world. Having an internal locus of control encourages the pursuit of education and important life goals, which are all related to good health. Likewise, conscientiousness, which involves the ability to follow social rules for impulse control, predicts both health and longevity. Conscientious people make plans for the future and are goal directed, which are both important to the mastery of the social environment. The important question is how can family and society foster these important psychological traits that have such great benefits for health and longevity?

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Index