Corey L.M. Keyes *Editor*

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## International Contributions to the Study of Positive Mental Health

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# Prologue

There is a new generation of research in which scholars are investigating mental health and human development as not merely the absence of mental illness but also the presence of subjective well-being. Subjective well-being is a fundamental facet of the quality of life that can be assessed externally and objectively or internally and subjectively. From an objective standpoint, other people measure and judge another's life according to criteria such as income or educational attainment. Individuals who are wealthier, have more education, or live longer are considered to have higher quality of life or personal well-being. The subjective standpoint emerged shortly after World War II as an important alternative to the objective approach to measuring individual's well-being. Subjectively, individuals evaluate their own lives as evaluations made, in theory, after reviewing, summing, and weighing the substance of their lives in social context. In short, subjective well-being is an evaluation or declaration that individuals make about the quality of their lives in terms of how they feel about their lives and how well they see themselves functioning in life.

Research has clearly shown that measures of subjective well-being, which are conceptualized as indicators of mental health (or "mental well-being"), are factorially distinct from but correlated with measures of symptoms of common mental disorders such as depression. Despite countless proclamations that health is not merely the absence of illness, there had been little or no empirical research to verify this assumption. Research now supports the hypothesis that health is not merely the absence of illness but also the presence of higher levels of subjective well-being.

In turn, there is growing recognition of the personal and social utility of subjective well-being, both higher levels of hedonic and eudaimonic well-being. Increased subjective well-being has been linked with higher personal and social "goods": higher business profits, more worker productivity, and greater employee retention; increased protection against mortality; increased protection against the onset and increase of physical disability with aging; improved cognitive and immune system functioning; and increased levels of social capital such as civic responsibility, generativity, community involvement, and volunteering.

This edited volume is my humble attempt to bring together for the first time the growing scientific literature on positive mental health that is now being conducted

in many countries around the world. My hope is that this volume will provide students and scholars with an invaluable source for teaching and for generating new ideas for furthering this important line of research so that the promotion and protection of good mental health becomes a truly international endeavor.

Atlanta, GA, USA Corey L.M. Keyes

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# Chapter 1
# Promoting and Protecting Positive Mental Health: Early and Often Throughout the Lifespan

**Corey L.M. Keyes**

Ancient civilizations conceived of well-being—synonymous with "good health"—as one of the highest goods in life (Sigerist 1941). Well-being was not merely an end, but it also was a means to creating and sustaining a good society. Today, mental as well as physical health are considered forms of human capital because studies consistently link the presence of mental illness and chronic physical disease to high levels of social and economic burden to society (i.e., disability, premature death, and direct and indirect costs). Health—not solely industriousness—is now viewed among the greatest sources of the "wealth" of a nation, for it is tied to the growth and development of nations (Berger et al. 2003; Bloom and Canning 2000; Sullivan 2004).

Mental illness has always been seen as problematic but not as a public health issue or impediment to the development of nations until 1996, when the World Health Organization published the results of the first Global Burden of Disease study. This study estimated the total contribution of 107 acute and chronic medical conditions and illnesses by including disability in the equation to calculate disability life-adjusted years (DALYs). The DALY reflects the total number of years in a population that were either lived with disability or abbreviated prematurely due to specific physical or mental conditions. Depression was the fourth leading cause of disease burden, accounting for 3.7% of DALYs in 1990, 4.4% in 2000, and projected to be 15% of DALYs by 2020 and to be the leading cause of burden to all nations by 2030 (Ustun 1999; Ustun et al. 2004). As such, the debate is over as whether mental illness is a serious public health issue—it is.

The biggest issue facing governments around the world is what can and should be done to reduce the number of cases of mental illness and those suffering from it. Most governments choose the de facto approach of providing treatment to more individuals (Chisholm et al. 2004). All evidence points to the fact that the de facto

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approach of talk or drug therapies is not reducing the prevalence, burden, or early age of onset for mental disorders (Kessler et al. 2005; Insel and Scolnick 2006). Albee (2006) reiterated that "public health teaches us that no mass disease or disorder has ever been controlled or eliminated through individual treatment" (p. 449), a point he delivered to the US Congress in his 1959 (Albee 1959) book on behalf of the Joint Commission on Mental Health and Illness which informed the creation of the National Institute of Mental Health.

A viable alternative is mental health promotion, which seeks to elevate levels of positive mental health and protect against its loss (Davis 2002; Jané-Llopis et al. 2005; Keyes 2007; Secker 1998). Whereas treatment targets those with mental illness and risk reduction prevention targets those vulnerable to mental illness, mental health promotion targets those with good mental health and those with less than optimal mental health—i.e., all members of a population.

To make the shift toward mental health promotion requires overcoming the bias to focus exclusively on the presence and absence of mental illness rather than also the presence and absence of mental well-being. This is an unfortunate bias in the scientific and policy community, which is the assumption that individuals who are not ill are therefore healthy. This assumption is false according research on the two- (or "dual"-) continua model of health as applied to mental illness and mental health (Keyes 2005a, b). The study of the two-continua model has led to advances in understanding how to best measure the presence and absence of good (or "positive") mental health (hereafter referred to only as "mental health") that is comparable to the measurement of mental illnesses. It has also confirmed the long-standing notion that mental health is a complete state, not merely the absence of mental illness but also the presence of sufficiently high levels of well-being that constitutes the condition Keyes (2002) calls "flourishing" mental health.

## Subjective Well-Being: Mental Health as "Something Positive"

The quality of an individual's life can be assessed externally and objectively or internally and subjectively. From an objective standpoint, other people measure and judge another's life according to criteria such as wealth or income, educational attainment, occupational prestige, and health status or longevity. Nations, communities, or individuals who are wealthier, have more education, and live longer are considered to have higher quality of life or personal well-being. The subjective standpoint emerged during the 1950s as an important alternative to the objective approach to measuring individual's well-being. Subjectively, individuals evaluate their own lives as evaluations made, in theory, after reviewing, summing, and weighing the substance of their lives. In short, subjective well-being is an evaluation or declaration that individuals make about the quality of their lives (Diener et al. 1999; Keyes et al. 2002).

Well-being has been a paramount concern of thinkers since ancient times as witnessed in much of Greek philosophical writings. It became a topic of scientific inquiry during the 1950s when interest in fostering a better life was facilitated by

the Zeitgeist following World War II. The world's recovery from the manifold devastation—physical, psychological, social, and moral—of the world war encouraged a commitment to social welfare, the diversity of people and viewpoints, and a greater appreciation of the individual. This atmosphere manifested itself in philosophical (e.g., phenomenology and existentialism), sociological (e.g., symbolic interactionism), and psychological (e.g., cognitive psychology) movements that focused on the centrality of the individual's perceptions and viewpoints and the importance of personal meaning and concerns about life. Subjective well-being therefore emerged as a scientific field in the late 1950s when social scientists developed indicators of quality of life to monitor social change and to improve social policy as well as pursue a humanistic scientific agenda.

Humanistic writings emphasized several concerns and constructs that buttressed the study of subjective well-being. In reaction to Orthodox psychoanalysis, humanistic scholars scientifically catalogued the individual's capacity for positive adjustment through the development of positive characteristics such as maturity, ego strength, generativity, and virtues (see, e.g., Erik Erikson's writings). In reaction to behaviorism, humanistic writers welcomed introspection and subjective appraisal as meaningful data. Humanistic social scientists also sought to understand whole lives by asking people how their lives looked to them and how they felt about their own lives. The humanism exemplified through the study of subjective well-being was distilled by Gordon Allport (cited in Severin 1965), who pronounced that "it is not enough to know how man reacts: we must know how he feels, how he sees his world, … why he lives, what he fears, for what he would be willing to die. Such questions of existence must be put to man directly" (p. 42).

During this same historical period, the US Congress passed the "Mental Health Act" that earmarked future funds for the creation of a "National Institute of Mental Health" (NIMH), which came into being at the end of the 1940s. It is almost ironic that the Joint Commission on Mental Health and Illness, which served as the advisory board for the creation of the future NIMH, may have planted the intellectual seeds of the two dominant streams of research on subjective well-being today. This commission, chaired and dominated by psychiatrists, requested several topical reports ranging from the state of mental health services to epidemiology of mental illness. Though clearly in the minority, several Ph.D.s, including M. Brewster Smith (1959), were responsible for two separate reports on mental health, both of which reported on the status of theory and research on subjective well-being.

The first publication was Marie Jahoda's (1958) now seminal volume on positive mental health. This volume reviewed the personality and clinical psychology literatures regarding dimensions of psychological well-being (e.g., purpose in life, personal growth, and self-acceptance). The second volume, in terms of its publication, was Gurin, Veroff, and Feld's (1960) book on the state of American's mental health. This volume featured subjective well-being as through individuals' assessments of their satisfaction and happiness with life and domains of life.

The overwhelming odds of psychiatry pitted against mainstream social psychologists in the mid-1940s played history's ironic cards: The Mental Health Act of 1946 gave way in title only to the National Institute of Mental ***Health***. In practice

and programs, the NIMH remains committed to the promotion of America's mental health through the study of the etiology and treatment of mental ***illness***. Although subjective well-being did not become part of this nation's mental health agenda, the impetus to launch the NIMH may have been responsible for planting the seeds of the study of subjective well-being as it appears today (Keyes et al. 2002).

Since Jahoda's (1958) and Gurin et al.'s (1960) now seminal reviews of elements of "mental health," social scientific scholars have spent the past 40 years moving forward the nascent agenda of mental health via the study of subjective well-being. In the 1980s, two seminal journal articles brought the study of subjective well-being and its two traditions into the mainstream of social science. The first was Ed Diener's (1984) review article of the state of the first generation of research and theory on subjective well-being, which had focused squarely on hedonic (i.e., happiness, life satisfaction, or affect balance) well-being. The third was Carol Ryff's (1989) article that operationalized the theory of psychological well-being outlined in Jahoda's (1958) volume.

## *Feeling Good About, and Functioning Well in, Life*

The study of subjective well-being has been divided into two streams of research, one that equates well-being with happiness as feeling good and the other with happiness as human potential that, when pursued and developed, results in positive functioning in life. The streams of subjective well-being research grew from two distinct ancient philosophical viewpoints on happiness—one reflecting the Epicurean view that believed happiness was about feeling positive emotions (i.e., hedonic) and another reflecting the Aristotelian (and Socratic) view that happiness was about striving toward excellence and positive functioning (i.e., eudaimonia—pronounced "you-day-monia") as an individual and as a member of society (i.e., as a citizen).

The hedonic tradition that embodies human concerns with maximizing the amount or duration of positive, pleasant feelings while minimizing the amount or duration of negative, unpleasant feelings. The hedonic tradition is reflected in the stream of research on subjective *emotional* well-being (i.e., happiness, satisfaction, and affect balance). The second is the tradition of eudaimonia that animates human concerns with developing nascent abilities and capacities toward becoming a more fully functioning person and citizen. This tradition is reflected in the stream of research on subjective *psychological* (Ryff 1989) and *social* (Keyes 1998) well-being that reflect how well individuals see themselves functioning in life, striving to achieve secular standards of excellence such as purpose, contribution, integration, intimacy, acceptance, and mastery.

Social scientists have devised self-report measures to unveil people's views of the quality of their lives. Although research shows that people use multiple criteria to evaluate their subjective experiences, there are two general lines of research that have evolved. According to one line of well-being research, evaluations of the degree of positive feelings (e.g., happiness) experienced and perceptions (e.g.,

satisfaction) toward one's life overall constitute subjective well-being (Gurin et al. 1960). A second stream of well-being research specifies dimensions of positive functioning in terms of psychological well-being (Jahoda 1958; Keyes 1998; Ryff 1989; Ryff and Keyes 1995) and social well-being (Keyes 1998). Overall, subjective well-being consists of two broad domains—emotional well-being and positive functioning. These domains, their conceptions, and the quality of their measures will be reviewed in this section.

## *The Hedonic Tradition: Feeling Good About Life*

Emotional well-being is a specific dimension of subjective well-being that consists of perceptions of avowed happiness and satisfaction with life and the balancing of positive and negative affects. Whereas happiness is based upon spontaneous reflections of pleasant and unpleasant affects in one's immediate experience, life satisfaction represents a long-term assessment of one's life.

Single-item measures of life satisfaction are adaptations of Cantril's (1965) self-anchoring scale, which asks respondents to "rate their life overall these days" on a scale from 0 to 10, where 0 meant the "worst possible life overall" and 10 meant "the best possible life overall." Variants of Cantril's measure have been used extensively and have been applied to the measurement of avowed happiness with life (Andrews and Withey 1976). Multi-item scales of life satisfaction and happiness also have been developed and used extensively (Campbell et al. 1976; Larsen et al. 1985). Most positive and negative affect measures tap the frequency with which a respondent reports experiencing the symptoms of these affects. For example, individuals often are asked to indicate how much of the time during the past 30 days they have felt six types of negative and six types of positive indicators of affect: "all," "most," "some," "a little," or "none of the time." Symptoms of negative affect usually include feeling (1) so sad nothing could cheer you up, (2) nervous, (3) restless or fidgety, (4) hopeless, (5) that everything was an effort, and (6) worthless. Symptoms of positive affect usually involve feeling (1) cheerful, (2) in good spirits, (3) extremely happy, (4) calm and peaceful, (5) satisfied, and (6) full of life (Mroczek and Kolarz 1998).[1]

## *The Eudaimonic Tradition: Functioning Well in Life*

A variety of concepts from personality, developmental, and clinical psychology have been synthesized by Ryff (1989) to operationalize psychological well-being. In contrast to hedonic measures of subjective well-being, psychological well-being

[1] In my own research, I have not included the measure of negative affect to assess emotional well-being, because my research seeks to connect positive mental health with mental illnesses like depression, where negative affect (e.g., depressed mood) is part of its assessment.

requires individuals to self-report about the quality with which they are functioning in their lives (not feelings or emotions toward or about life). Each of the six dimensions of psychological well-being indicates the challenges that individuals encounter as they strive to function fully and realize their unique talents (Ryff 1989; Ryff and Keyes 1995). The six dimensions encompass a breadth of well-being: a positive evaluation of oneself and one's past life, a sense of continued growth and development as a person, the belief that one's life is purposeful and meaningful, the possession of quality relations with others, the capacity to manage effectively one's life and surrounding world, and a sense of self-determination (Ryff and Keyes 1995).

*Self-acceptance* is the criterion toward which individuals must strive in order to feel good about themselves. Such self-acceptance is characterized by a positive attitude toward the self and acknowledging and accepting multiple aspects of self, including unpleasant personal aspects. In addition, self-acceptance includes positive feelings about past life. *Positive relations with others* is the possession of, or the ability to cultivate, warm, trusting, intimate relationships with others. A concern for the welfare of others and the ability to empathize, to cooperate, and to compromise are all implied aspects of the ability to develop warm and trusting interpersonal relationships. *Autonomy* reflects the seeking of self-determination and personal authority or independence in a society that sometimes compels obedience and compliance. The abilities to resist social pressures so as to think or behave in certain ways, and to guide and evaluate behavior based on internalized standards and values, are crucial in this domain.

*Environmental mastery* includes the ability to manage everyday affairs, to control a complex array of external activities, to make effective use of surrounding opportunities, and to choose or create contexts suitable to personal needs. A sense of mastery results when individuals recognize personal needs and desires and also feel capable, and permitted, to take an active role in getting what they need from their environments. *Purpose in life* consists of one's aims and objectives for living, including the presence of life goals and a sense of directedness. Those with high purpose in life see their daily lives as fulfilling a direction and purpose and therefore view their present and past life as meaningful. Finally, *personal growth* reflects the continuous pursuit of existing skills, talents, and opportunities for personal development and for realizing one's potential. In addition, personal growth includes the capacity to remain open to experience and to identify challenges in a variety of circumstances.

Whereas psychological well-being is conceptualized as a primarily private phenomenon that is focused on the challenges encountered by individuals in their personal lives, social well-being represents a more public experience that is focused on the social tasks encountered by individuals in their social structures and communities. Social well-being consists of five elements that indicate whether and to what degree individuals are functioning well in their social world (e.g., as neighbors, as coworkers, and as citizens) (Keyes 1998). Social well-being originates in the sociological interest in individuals' anomie and alienation in society, which were classic themes in the writings of Emile Durkheim and Karl Marx. Drawing on these theoretical roots, Keyes (1998) developed multiple operational dimensions of social well-being that represent the challenges individuals face as members of society, groups, institutions, and communities.

*Social integration* is the evaluation of the quality of one's relationship to society and community. Integration is therefore the extent to which people feel they have something in common with others who constitute their social reality (e.g., their neighborhood), as well as the degree to which they feel that they belong to their communities and society. *Social contribution* is the evaluation of one's value to society. It includes the belief that one is a vital member of society, with something of value to give to the world. Social coherence is the perception of the quality, organization, and operation of the social world, and it includes a concern for knowing about the world. *Social coherence* is analogous to meaningfulness in life that involves appraisals that society is discernable, sensible, and predictable.

*Social actualization* is the evaluation of the potential and the trajectory of society. This is the belief in the evolution of society and the sense that society has a potential that is being realized through its institutions and citizens. *Social acceptance* is the construal of society through the character and qualities of other people as a generalized category. Individuals must function in a public arena that consists primarily of strangers. Individuals who illustrate social acceptance trust others, think that others are capable of kindness, and believe that people can be industrious. Socially accepting people hold favorable views of human nature and feel comfortable with others.

In the eudaimonic stream of research, confirmatory factor analysis models have revealed strong support for the proposed five-factor theory of social well-being (Keyes 1998), and the proposed six-factor theory of psychological well-being is the best-fitting model in representative sampled of US adults (Ryff and Keyes 1995). Moreover, the constructs of social well-being and psychological well-being are correlated but empirically distinct, as reported in my doctoral dissertation. That is, the scales of social and psychological well-being correlated as high as .44, and exploratory factor analysis revealed two correlated ($r = .34$) factors with the scales of social well-being loading on a separate factor from the items measuring happiness, satisfaction, and the overall scale of psychological well-being.

Measures of social well-being also represent distinct latent factors from traditional measures (happiness and satisfaction) of emotional well-being. Measures of emotional well-being (positive and negative affect, life satisfaction) are factorially distinct from the measures of psychological well-being (Keyes et al. 2002). In fact, McGregor and Little's (1998) factor analysis also yielded two distinct factors that reveal an underlying emotional factor (including depression, positive affect, and life satisfaction) and an underlying psychological functioning factor (including four of the psychological well-being scales: personal growth, purpose in life, positive relations with others, and autonomy).

## *Subjective Well-Being: Is It More Complex Than Feeling Good?*

The description of the traditions, or streams, of research on well-being suggests that there is more to well-being than happiness or feeling good. This question was investigated in adolescents in 2002 by administering a more comprehensive assessment

of subjective well-being that included emotional (items 1–3 below), social (items 4–8 below), and psychological (items 9–14 below) well-being:

1. Happy
2. Interested in life
3. Satisfied
4. That you had something important to contribute to society
5. That you belonged to a community (like a social group, your school,[2] or your neighborhood)
6. That our society is becoming a better place for people like you
7. That people are basically good
8. That the way our society works made sense to you
9. That you liked most parts of your personality
10. Good at managing the responsibilities of your daily life
11. That you had warm and trusting relationships with others
12. That you had experiences that challenged you to grow and become a better person
13. Confident to think or express your own ideas and opinions
14. That your life has a sense of direction or meaning to it

The above set of items was included in the 2002 Child Development Supplement (CDS) of the Panel Study of Income Dynamics (PSID). All families participating in the PSID in 1997 with children between the ages of 0 and 12 years old were asked to complete the CDS, resulting in a sample of 3,563. Out of all CDS families interviewed in 1997, a total of 94% of the children had parents who had remained active in the PSID as of 2001 ($n = 3{,}271$), and these children were reinterviewed during the fall of 2002 and spring of 2003, resulting in a sample of 2,907 children and youth ages 5–18. All youth ages 12 or older at that time were administered the comprehensive assessment of subjective well-being.

The measures of subjective well-being were administered by audio computer-assisted self-interview. Youth read each question and listened to each questioned read to them through headphones and responded directly into a computer laptop. Youth were asked when, in the past month, they had felt or experienced the following, either "never," "once or twice," "about once a week," "two or three times a week," "almost every day," or "every day."

With a sample size of just over 1,200 adolescents, confirmatory factor analyses were performed on the CDS subjective well-being items to test various theories about the latent structure of this measure. The best-fitting model to the data (i.e., the correlations among the well-being items) was a three-factor model. That is, items measuring emotional well-being, psychological well-being, and social well-being are reflections of three distinct, but correlated, latent factors (Keyes 2005b). The two-factor model in which the items of psychological and social well-being

[2] The difference between the adult and adolescent version of the MHC-SF is that the reference to "your school" in question 5 is omitted for the adult version.

belong to a separate (i.e., eudaimonic) latent factor from the items measuring emotional (i.e., hedonic) well-being was superior to the single-factor model. Thus, superiority of the three-factor model of the aforementioned two-factor model suggests that the domain of positive (i.e., eudaimonic) function consists of two sides: a psychological form of functioning well in life and a social form of functioning well in life.

The correlations between the three latent factors were similar to the observed bivariate correlations between the subjective well-being scales. There is a slight tendency for a stronger correlation between the scale of emotional well-being and psychological well-being than between either of these two scales with the scale of social well-being. However, all correlations—both latent and observed—are modestly strong (i.e., no lower than $r = .57$) but not extremely high (i.e., no higher than $r = .71$), as would be expected from the confirmatory factor analysis results that supported the three-factor model. The internal reliabilities of the scales ranged from .78 (psychological well-being), .80 (social well-being), to .84 (emotional well-being).

The scales of subjective well-being in youth exhibited good construct validity. All three scales of subjective well-being correlated most strongly and positively with the global self-concept scale by Marsh (1990). This scale measures how much time youth ("never," "rarely," "sometimes," "most of the time," or "always") feel (1) "I have a lot to be proud of," (2) "I can do things as well as most people," (3) "I'm as good as most other people," (4) "Other people think I am a good person," (5) "When I do something, I do it well," and (6) "A lot of things about me are good." The global self-concept scale, which can be construed as a measure of confidence, correlated between .44 (with social well-being) and a high of .54 (with psychological well-being). Thus, youth who report greater levels of each component of positive mental health also tend to report more self-confidence.

The scales of subjective well-being also correlated modestly with a multi-item measure of self-determination, which is a reflection of the positive developmental outcome of competence. To measure self-determination, the youth in the CDS indicated how much of the time—"never," "rarely," "sometimes," "most of the time," or "always"—the following described them: (1) "I stay with a task until I solve it," (2) "Even when a task is difficult, I want to solve it anyway," (3) "I keep my things orderly," (4) "I try to do my best on all my work," and (5) "When I start something, I follow it through to the end." The scale of self-determination, which can be construed as an indicator of competence, correlated between .35 (with social well-being) and a high of .46 (with psychological well-being). Thus, youth who report greater levels of each component of positive mental health also tend to report more competence in terms of more self-determination (i.e., efficacy).

The CDS study measured perceived closeness to significant others and a sense of school integration, both of which are proxies for the positive outcome of connection. Youth were asked how close they felt toward six individuals—mother (or stepmother), father (or stepfather), sibling, friends, teacher, or other adults outside of school. Youth indicated whether they felt "extremely," "quite," "fairly," or "not very" close to each of the six individuals. A total score was constructed by measuring the

number of individuals of the six toward which a youth felt either "quite close" or "extremely close." A higher score on this variable means that youth felt closer to more significant others. The CDS study also measured school integration, asking youth to indicate how often ("never," "once or twice in the last month," "about once a week," "two or three times a week," "almost every day," or "every day") they felt (1) part of their school, (2) close to people at their school, (3) happy to be at their school, and (4) safe at their school. A higher score on the school integration scale means that youth felt more integrated in their school—i.e., more frequently happy, safe, connected to, and close to people at their school.

The measure of perceived closeness correlated .29 with emotional well-being and .31 with psychological well-being and with social well-being. The scale measuring school integration correlated .37 with both emotional and psychological well-being and .42 with social well-being. Compared with the measure of perceived closeness, the scale measuring school integration correlated more strongly with the subjective well-being outcomes. However, as expected, youth who felt higher levels of the components of positive mental health also were more likely to report feeling closer to more significant others, and they were more likely to report higher levels of feeling integrated into their school.

The final category of positive outcomes is character, which reflects the ability to engage in normative and prosocial behaviors and refrain from antisocial and non-normative behaviors. One measure of character is participation in conduct problems such as skipping school, being arrested, smoking cigarettes, smoking marijuana, drinking alcohol, or using inhalants. As reported in Keyes (2006), flourishing youth reported the lowest prevalence of any of the aforementioned conduct problems, followed by moderately mentally healthy youth, while languishing youth reported the highest prevalence on all indicators of conduct problems. Moreover, while 25% of languishing youth engaged in at least three or more of the conduct problems, compared with 13% of moderately mentally healthy youth, only 6.5% of flourishing youth had three or more conduct problems.

Another way to assess character would be to assess how much youth care for others, or engage in prosocial behavior. Toward that end, in the CDS study, youth were also asked how frequently they helped and gave support to friends, family, and siblings in the past 6 months, using a scale from 1 (almost never) to 7 (every day). Youth were asked how often they helped friends, and how often they helped their siblings, with things they had to get done, such as homework or chores, and how often they helped parents with things they had to get done, such as chores or running errands. Youth were also asked how often they provided emotional support to their friends (as well as to siblings), such as giving them advice on a problem or making them feel better when they were sad, and how often they provide emotional support to their parents, such as making them feel better when they were sad. The average of help provided to others across the six questions (i.e., help to friends, siblings, and parents; support to friends, siblings, and parents) correlated .30 ($p < .001$) with the continuous measure of overall positive mental health. As frequency of helping others increases, level of positive mental health also tends to increase. Using the

Tukey's honestly significant difference test for pairwise contrast (and a *p*-value of .05 or less), the flourishing youth provided more support (M = 4.1, SD = 1.2) than moderately mental healthy youth (M = 3.5, SD = 1.1), who in turn provided more help to others than languishing youth (M = 3.2, SD = 1.2). Based on the response scale for helping and supporting others, the findings suggest that the difference between languishing and flourishing youth is that the former helped others "one to three times a month" on average, while flourishing youth helped others on average "about once a week." Thus, while they exhibit the lowest level of conduct problems, flourishing youth also engage in more prosocial behavior, providing more help and emotional support to friends, siblings, and parents.

## The Mental Health Continuum

Though each dimension of subjective well-being represents an important domain of study in itself, Keyes (2002, 2005b) has argued that these scales collectively measure the presence and absence of mental health. That is, mental health, like mental illness, is a syndrome of symptoms of subjective well-being.

The 14 items of subjective well-being shown above represent the Mental Health Continuum-Short Form (MHC-SF), which was created for more efficient integration into epidemiological and clinical research as well as public health surveillance. The MHC-SF is derived from the long form (MHC-LF), which consisted of seven items measuring emotional well-being, six 3-item scales (or 18 items total) that measured the six dimensions of Ryff's (1989) model of psychological well-being, and five 3-item scales (or 15 items total) that measure the five dimensions of Keyes' (1998) model of social well-being. The measure of emotional well-being in the MHC-LF included six items measuring the frequency of positive affect that was derived, in part, from Bradburn's (1969) affect balance scale and a single item of the quality of life overall based on Cantril's (1965) self-anchoring items. The estimates of internal consistency reliability for each of the three sets of measures—emotional, psychological, and social well-being—in the MHC short and long forms have all been high (>.80; see, e.g., Keyes 2005a). The MHC-LF form measures of social and psychological well-being have been validated (see Keyes 1998; Ryff 1989; Ryff and Keyes 1995) and used in hundreds of studies over the past two decades, and their use as a measure of overall positive mental health was first introduced by Keyes (2002) and recently summarized in Keyes (2007).

While the MHC-LF consisted of 40 items, the MHC-SF consists of 14 items that were chosen as the most prototypical items representing the construct definition for each facet of well-being. Three items were chosen (happy, interested in life, and satisfied) to represent emotional well-being, six items (one item from each of the six dimensions) were chosen to represent psychological well-being, and five items (one item from each of the five dimensions) were chosen to represent social well-being. The response option for the short form was changed to measure the frequency with

which respondents experienced each symptom of positive mental health and thereby provided a clear standard for the assessment and a categorization of levels of positive mental health that was similar to the standard used to assess and diagnosis major depressive episode (see Keyes 2002, 2005a, 2007). To be diagnosed with *flourishing* mental health, individuals must experience "every day" or "almost every day" at least one of the 3 signs of hedonic well-being and at least 6 of the 11 signs of positive functioning during the past month. Individuals who exhibit low levels (i.e., "never" or "once or twice" during the past month) on at least one measure of hedonic well-being and low levels on at least six measures of positive functioning are diagnosed with *languishing* mental health. Individuals who are neither flourishing nor languishing are diagnosed with *moderate* mental health.

The short form of the MHC has shown excellent internal consistency (>.80) and discriminant validity in adolescents (ages 12–18) and adults in the USA, in the Netherlands, and in South Africa (Keyes 2005b, 2006; Keyes et al. 2008; Lamers et al. 2010; Westerhof and Keyes 2010). The 4-week test-retest reliability estimates for the long-form scales ranging from .57 for the overall psychological well-being domain, .64 for the overall emotional well-being domain, to .71 for the overall social well-being domain (Robitschek and Keyes 2006, 2009). The test-retest reliability of the MHC-SF over three successive 3-month periods averaged .68, and the 9-month test-retest was .65 (Lamers et al. 2010). The three-factor structure of the long and short forms of the MHC—emotional, psychological, and social well-being—has been confirmed in nationally representative samples of US adults (Gallagher et al. 2009) and college students (Robitschek and Keyes 2009) and in a nationally representative sample of adolescents between the ages of 12 and 18 (Keyes 2005b, 2009) as well as in South Africa (Keyes et al. 2008) and the Netherlands (Lamers et al. 2010).

The well-being dimensions of the MHC-SF are reflected in the recent definition of mental health offered by the World Health Organization (WHO). The WHO (2004) defined good mental health as "… a state of well–being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (p. 12). According to Westerhof and Keyes (2010), the WHO reference to a "state of well-being" is reflected in the measurement of emotional well-being, the reference to the ability of people to "realize their abilities and cope with normal stress" is reflected in the measurement of psychological well-being, while the reference to individuals' abilities to "work productively" and "make a contribution to community" is reflected in the measurement of social well-being.

Moreover, the merger of feeling good about a life in which individuals are functioning well, I have argued (Keyes 2002), constitutes the presence of good mental health. In the same way that depression requires symptoms of *an*hedonia, mental health consists of symptoms of hedonia. But, feeling good, in the same way as only feeling sad or losing interest in life, is not sufficient for the diagnosis of a clinical state. Rather, and in the same way that major depression consists of symptoms of *mal*functioning, mental health must also consist of symptoms of positive functioning. In turn, the mental health continuum (Keyes 2002) consists of three diagnostic categories, or levels, of positive mental health: flourishing,

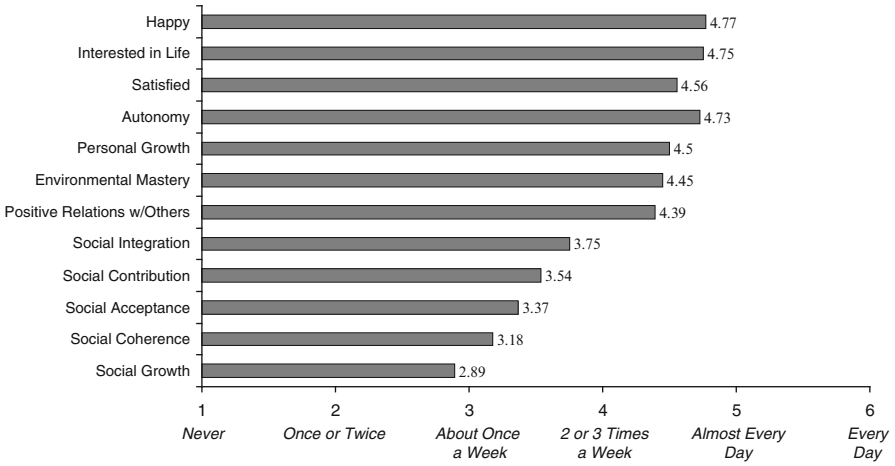


**Fig. 1.1** Mean frequency of each component of mental health in the past month. U.S. adolescents, ages 12–18, in 2002 (Data from the child development supplement) ($n = 1{,}260$)

moderate, and languishing mental health. Individuals with flourishing mental health report feeling at least one measure of hedonic well-being plus six or more of the measures of positive functioning almost every day or every day during the past month. Individuals with languishing mental health, however, report feeling at least one measure of hedonic well-being with six or more measures of positive functioning never or maybe once or twice during the past month. Languishing is the absence of mental health—a state of being mentally ***un***healthy—which is tantamount to being stuck and stagnant or feeling empty or that life lacks interest and engagement. Individuals who are neither flourishing nor languishing are diagnosed with moderate mental health.

The categorical diagnosis and the continuous assessment yield very similar estimates of the prevalence of mental health in American adolescents. As such, I will report here only the categorical diagnosis, which revealed that 38% of youth between the ages of 12 and 18 are flourishing. Over half—about 56%—of adolescent are moderately mentally healthy, while 6% are languishing. Further analyses revealed a small and negative correlation of age with the continuous assessment of mental health ($r = -.07$; $p < .02$), revealing that level of mental health declines slightly between the ages of 12 and 18. Using the categorical diagnosis and grouping youth into middle school (ages 12–14) and high school (ages 15–18) revealed a 9% drop in prevalence of flourishing between middle school and high school. While the prevalence of languishing remained constant between middle school and high school, the prevalence of flourishing declined from a high of 49% in middle school to 40% in high school.

Figure 1.1 provides insight into the specific dimensions of positive mental health where youth are succeeding and where they are falling short. As reported in Keyes (2005a), mean level of overall emotional well-being was not different

from the overall mean of psychological well-being. However, overall social well-being was lower than both overall emotional well-being and overall psychological well-being. Figure 1.1 reiterates these findings by revealing how all five dimensions of social well-being fall below the level at which youth are experiencing them even two or three times a week. Youth experience a sense of integration (i.e., that they belong to a community like a social group or their school) and a sense of social contribution (i.e., that they had something to contribute to society) about two or three times a week. Even worse, youth experience about once a week a sense of social growth (i.e., that our society is becoming a better place), social acceptance, (i.e., that people are basically good), and social coherence (i.e., that the way society works makes sense to them). In comparison, youth experience the dimensions of psychological and emotion well-being almost every day. In short, any attempts to improve the positive mental health of youth will clearly need to address the deficit of social well-being in the lives of US adolescents.

## *With Measurement We Can Test the Two-Continua Hypothesis*

The importance of measuring mental health in the same way as mental illness cannot be overstated, because it allows scientists to finally adequately test the hypothesis that mental health and illness belong to two separate continua. Indeed, mental health promotion and protection is premised on the two-continua model because good mental health is presumed to belong to a separate continuum from mental illness (Health and Welfare Canada 1988). Yet, the studies that did exist on the subject only measured mental health emotionally in terms of life satisfaction or happiness (Greenspoon and Saklofske 2001; Headey et al. 1993; Huppert and Whittington 2003; Masse et al. 1998; Suldo and Shaffer 2008). Numerous studies in mainstream psychology of emotion have shown that positive and negative emotions belong to separate continua (e.g., Bradburn 1969; Watson and Clark 1997), but as mentioned earlier, emotional disturbance or emotional vitality does not, in themselves, constitute states of mental illness or mental health.

Findings based MHC-LF in the MIDUS study (Keyes 2005b) support the two-continua model: one continuum indicating the presence and absence of positive mental health and the other indicating the presence and absence of mental illness symptoms. For example, the latent factors of mental illness and mental health correlated ($r = -.53$), but only 28.1% of their variance is shared in the MIDUS data (Keyes 2005b). The two-continua model has been replicated in a nationally representative sample of US adolescents (ages 12–18) with data from the Panel Study of Income Dynamics' Child Development Supplement (Keyes 2009), in a national study of Dutch adults (Westerhof and Keyes 2008, 2010), and in Setswana-speaking South African adults using the MHC-SF (Keyes et al. 2008).


According to the dual-continua model[3] shown above, individuals can be categorized by their recent mental illness status and according to their level of mental health—whether they have languishing, moderate, or flourishing mental health. One implication of the dual-continua model is that the absence of mental illness does not imply the presence of mental health. In the American adult population between 25 and 74 years, just over 75% were free of three common mental disorders during the past year (i.e., major depressive episode [MDE], panic disorder [PD], and generalized anxiety [GAD]). However, while just over three-quarters were free of mental illness during the past year, only about 20% were flourishing. A second implication of the dual continua is that the presence of mental illness does not imply the absence of mental health. Of the 23% of adults with any mental illness, 14.5% had moderate, and 1.5% had flourishing mental health. Thus, almost seven of every ten adults with a recent mental illness (MDE, Panic or GAD) had moderate or flourishing mental health. While the absence of mental illness does not mean the presence of mental health (i.e., flourishing), the presence of mental illness does not imply the absence of some level of good mental health.

Another important implication of the dual-continua model is that level of mental health should differentiate level of functioning among individuals free of, and

[3] This graphic was commissioned by the Winnipeg Regional Health Authority's mental health promotion team and was created by the "That 2 Graphics" in Winnipeg, Manitoba, Canada. Copyright of Fig. 1.1 remains with the author (Corey L. M. Keyes), and permission to reprint it should be directed to Corey L. M. Keyes.

those with, a mental illness. Put differently, anything less than flourishing mental health is associated with impaired functioning both for those with a mental illness and individuals free of a mental illness. Findings consistently show that adults and adolescents who are diagnosed as anything less than flourishing are functioning worse in terms of physical health outcomes, health-care utilization, missed days of work, and psychosocial functioning (Keyes 2002, 2005b, 2006, 2007, 2009a, b). Over all outcomes to date, individuals who are flourishing function better (e.g., fewer missed days of work) than those with moderate mental health, who in turn function better than languishing individuals—and this is true for individuals with a recent mental illness and for individuals free of a recent mental illness.

## *The Dual-Continua Model in Youth*

In the CDS study, the Children's Depression Inventory (Kovacs 1992) scale was the only measure of mental illness. As a screening tool, the CDI provides a threshold above which youth are expected to screen for depression under clinical assessment. The manual for the CDI recommends slightly different thresholds for boy (a score of 7 or higher) than girls (a score of 6 or higher). For our purposes here, the lower of the threshold, a score of 6 or higher, is used to suggest that an adolescent would screen for depression.

Only 4.9% of flourishing youth would screen for depression, compared with 17.3% of youth with moderate mental health. In sharp contrast, 51.5% of languishing youth would screen for depression. Thus, and compared with flourishing youth, moderately mentally healthy youth are about 3.5 times more likely to screen for depression, and languishing youth are 10.5 times more likely to screen for depression. Compared with moderately mental health youth, languishing youth are about three times more likely to screen for depression.

According to the dual-continua model, level of mental health is hypothesized to differentiate level of psychosocial functioning among individuals with and without a mental disorder. To that end, one-way ANOVAs were used to test whether level of mental health (i.e., languishing, moderate mental health, or flourishing) exerts a main effect in addition to (or interactively with) mental illness (in this case, whether or not youth are above the threshold of a score of 6 or higher on the CDI scale). The outcomes investigated included the four validation scales reported earlier (global self-concept, self-determination, perceived closeness to others, and school integration) as well as conduct problems and helping behavior. For all outcomes, level of mental health exerted a main effect (all $F$ tests, $p < .001$), with level of conduct problems decreasing, while all other outcomes increased, as level of mental health increased. There was a main effect for the dichotomous variable of mental illness (i.e., whether or not youth had a score of 6 or higher on CDI) for the outcomes of global self-concept ($F$ test, $p < .001$), school integration ($F$ test, $p < .05$), and conduct problems ($F$ test, $p < .001$), but not for the following measures: self-determination, perceived closeness to others, and helping behavior. There were no interaction effects between mental health and mental illness.

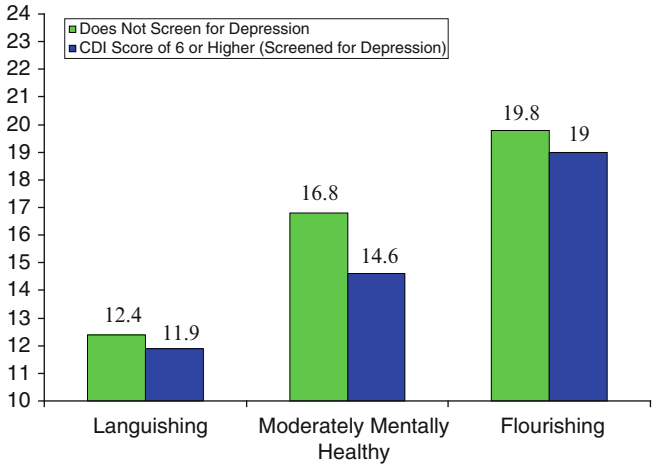


**Fig. 1.2** Mean level of perceived school integration by level of mental health and whether youth screens for depression ($n = 1{,}260$)

Figure 1.2 presents as one example the mean level of perceived integration into school by level of mental health and by mental illness. The main effect for mental illness reveals that perceived integration into school is lower for youth who screen for depression than for youth who would screen as being free of depression, and this is true at all levels of mental health. The main effect for level of mental health reveals that level of perceived integration into school increases as level of mental health increases for youth who would screen as "depression-free" as well as for youth who would screen for depression. In other words, level of mental health matters whether youth have, or do not have, a mental disorder like depression.

How many youth in America are truly mentally healthy, i.e., flourishing in life rather than merely free of mental illness? The CDS study was not designed for the purpose of psychiatric epidemiology of youth; it therefore only provides a single screening measure of depression. Although 14% of youth were screened for depression, the estimate of overall mental illness would likely be higher if the CDS had included measures of anxiety and personality disorders. Yet studies reviewed earlier that used more comprehensive assessments of mental disorders suggest the upper limit of mental illness in youth is about 20%. As such, the findings reported here (14% screening for depression) may not be that far from the best estimate of 20% overall mental illness in youth. What is unique for the CDS is that it permits demarcating the population of youth with a mental illness (as well as without) by level of mental health.

Most youth who screened for depression had moderate mental health (9.7%), while only 1.9% was flourishing and 2.7% was languishing. The fact that the proportion of youth who are languishing with possible depression is good news because youth who screen for depression and are languishing function worse than those with moderate mental health (e.g., in terms of conduct problems). Of those who did not screen for depression, only 2.5% is languishing. Languishing in the absence of a mental disorder is rare in youth compared with adults, where languishing

in the absence of mental disorders is 9.5% (Keyes 2007). Of those who do not screen for depression, just over 46% of youth are moderately mentally healthy and 37% are flourishing. By comparison, over half (50.8%) of adults otherwise free of an episode of mental disorder are moderately mentally healthy, and only 16.8% of adults are flourishing. Compared with their adult counterparts, youth in the USA are mentally healthier, with just over 20% more youth than adults flourishing.

## *Summary: The Case for Focusing on Youth*

Despite a long-standing prejudice for scholars and the lay public to equate subjective well-being with emotional well-being (i.e., happiness), research clearly has shown that subjective well-being in US youth and adults is a multifaceted and multidimensional construct. One result of the nearly 50 years of research on this important concept is that researchers have proliferated upward of 13 facets of subjective well-being. In turn, theory and research has supported the metatheoretical models of hedonia and eudaimonia that reflect different kinds of well-being. That is, subjective well-being consists of a cluster of measures reflecting emotional, or hedonic, well-being and a cluster of measures reflecting positive functioning, or eudaimonic, well-being.

Research on the subjective well-being of youth, as with adults, has focused exclusively on the dimension of hedonia, or emotional well-being. However, the research reviewed here indicates that well-being in youth is more complex and whether its structure is equivalent to the structure of subjective well-being found among adults. Findings based on data from the nationally representative CDS sample of youth clearly supported the complex, comprehensive approach to the subjective well-being of youth. That is, among youth ages 12–18, subjective well-being is characterized in terms of distinct dimensions of emotional, psychological, and social well-being. These measures exhibit good construct validity, correlating highly with measures of the quality of one's self-concept, a youth's self-determination, as well as the degree to which youth felt integrated into their school. Moreover, the well-being measures also correlated modestly with the Kovacs (1992) Child Depression Inventory and a measure of self-rated overall health and weakly with perceived math and reading skill.

Findings also revealed that levels of emotional well-being are highest, followed closely by psychological well-being, and levels of social well-being are lowest in youth between the ages of 12 and 18. Roughly speaking, these findings suggest that American adolescents experience social well-being about once a week. What this means is that typical American adolescents felt they had something to contribute to the world about once a week; adolescents felt liked they belonged somewhere about once a week; they felt that the way our society works made sense to them about once a week; they felt that our society was becoming a better place about once a week; and our adolescents felt that people in our society were basically good about once a week. It appears more sober when put this way, making it clearer, I hope, that

America's youth sorely lack social well-being. In contrast, youth reported that they experienced psychological well-being (i.e., managing responsibilities, trusting relationships with kids, growth-producing experiences, and confidence to express ideas) about two or three times a week during the past month. However, youth reported that they experienced emotional well-being—i.e., interest in life, happiness, and satisfaction—about every day during the past month.

Is it sufficient to have youth who regularly feel happy, only rarely feel that they have experiences that challenge them to grow and become a better person, but infrequently feel that they have something important to contribute to society? Parents may hope they can raise children who become happy adults; parents probably also aspire to raise children who are and become psychological healthy and socially healthy human beings. Indeed, any nation that claims to prepare its youth to become democratically engaged citizens must have youth who know how to be, and feel, integrated into society, contributing to society, accepting of people not like them, working to improve and understand society, to have a purpose in life, self-accepting and autonomous, but also able to cultivate positive relations with others while exerting some mastery over their immediate environments and, above all, capable of continued personal growth throughout life. A comprehensive approach to the assessment of youth subjective well-being can provide a more detailed picture of the strengths and weakness of our youth, and such an approach will suggest directions for future programmatic initiatives.

Indeed, it must because less than four in every ten American adolescents are flourishing. Findings suggest that fewer adolescents are mentally healthy—nearly 40%—than would be implied by taking the obverse of the best estimate of any mental disorder in youth, which would imply that about 80% or youth are free of a mental illness and therefore mentally healthy. Just over one-half of adolescents fit the criteria for moderate mental health, while 6% were mentally unhealthy, as they fit the criteria for languishing. Moreover, findings here suggest that flourishing may decline, while moderate mental health increases, during adolescence. Nearly one-half of the middle school youth, ages 12–14, were flourishing. Flourishing was the most prevalent mental health status among adolescents aged 12–14; moderate mental health was the most prevalent mental health status among adolescents aged 15–18. These data suggest—although causality cannot be inferred from them—that there is approximately a 10% loss of flourishing between middle school and high school.

Findings support the descriptive hypotheses that flourishing youth function better than moderately mentally healthy youth, who in turn function better than languishing youth. Flourishing youth had the *fewest* depressive symptoms and conduct problems and the *highest levels* of global self-concept, self-determination, closeness to other people, and school integration. Languishing youth had the *highest number* of depressive symptoms and conduct problems and the *lowest levels* of global self-concept, self-determination, closeness to other people, and school integration. Conduct problems were higher in the older, than younger, adolescents. However, flourishing in both age groups was associated with the lowest level of conduct problems; languishing (i.e., the absence of mental health) was associated with the highest level of conduct problems in both age groups.

Continued research on the epidemiology of children's mental health in the CDS and other national studies of youth can point toward new directions for prevention of mental illness and for the study of resilience. Findings reviewed thus far in this report indicate that flourishing in adolescence is associated with developmentally desirable outcomes (e.g., low depression, few conduct problems, and high psychosocial functioning). Because these data are cross-sectional, future research is needed to determine the important question of whether positive mental health is a cause or consequence (or both) of conduct problems and psychosocial functioning. What youth are most likely to be flourishing and what factors (intrapersonal, familial, educational, and community) explain how youth come to flourishing over time could provide new insights for promoting positive development and resilience in youth and their transition into adulthood.

Ultimately, the research summarized here raises questions for (1) national public mental health goals and (2) creating effective techniques and interventions for promoting mental health in youth. Nations can no longer blithely announce that they seek to promote the mental health of their citizens while only investing in the study, treatment, and risk reduction and prevention of mental illness. The two-continua model clearly debunks this as a "wanting-doing gap" because we say we want mental ***health***, but we engage in activities directed solely toward mental ***illness***. We cannot promote mental health by solely reducing mental illness, and no amount of wishful political thinking will make this fact go away. We can, of course, politically ignore the fact of the two-continua model, and this will serve only to sacrifice more young lives to the recurrent, chronic, and incurable condition of mental illness. Indeed, I'm not convinced anymore that we, as a nation, can reduce mental illness without promoting mental health.

In turn, and in recognition that subjective well-being includes the hedonic and eudaimonic traditions, it may be necessary to better understand that feeling good and functioning well (or functioning better) may not always be compatible. Can individuals feel good about their lives at the same time they are attempting or being pushed to grow, to become better people, and to become fully contributing members of society? Studies suggest that in the short term when individuals make improvements in their functioning life, hedonic well-being may be sacrificed (Keyes 2002; Keyes and Ryff 2002). In the long run, striving to function better in life, and being supported by a nation that supports that endeavor, will clearly result in the revival of feeling good about a life in which our youth can also function well.

## The Case for Mental Health Promotion

Progress has been slow in bringing mental health promotion and protection (MHPP) into the mainstream of debates about how to address the problem of mental illness. Admittedly, there has been a deficit of scientific evidence supporting the "promotion" and the "protection" axioms of MHPP. Central to the argument behind ***promotion*** is the hypothesis that gains in level of mental health should decrease the risk of mental illness