

ON HAPPINESS AND HUMAN POTENTIALS: A Review of Research on Hedonic and Eudaimonic Well-Being

Richard M. Ryan and Edward L. Deci

*Department of Clinical and Social Sciences in Psychology, University of Rochester,
Rochester, NY 14627; e-mail: ryan@psych.rochester.edu, deci@psych.rochester.edu*

Key Words subjective well-being, psychological well-being, eudaimonia,
happiness, wellness

■ **Abstract** Well-being is a complex construct that concerns optimal experience and functioning. Current research on well-being has been derived from two general perspectives: the hedonic approach, which focuses on happiness and defines well-being in terms of pleasure attainment and pain avoidance; and the eudaimonic approach, which focuses on meaning and self-realization and defines well-being in terms of the degree to which a person is fully functioning. These two views have given rise to different research foci and a body of knowledge that is in some areas divergent and in others complementary. New methodological developments concerning multilevel modeling and construct comparisons are also allowing researchers to formulate new questions for the field. This review considers research from both perspectives concerning the nature of well-being, its antecedents, and its stability across time and culture.

CONTENTS

INTRODUCTION	142
TWO TRADITIONS IN THE STUDY OF WELL-BEING	143
The Hedonic View	143
The Eudaimonic View	145
Applying the Two Viewpoints	148
RESEARCH TOPICS IN THE PSYCHOLOGY OF WELL-BEING	148
Personality, Individual Differences, and Well-Being	149
Emotions and Well-Being	150
Physical Health and Its Relations to Well-Being	151
RESEARCH ON ANTECEDENTS OF WELL-BEING	152
Social Class and Wealth as Predictors of Well-Being	152
Attachment, Relatedness, and Well-Being	154
Goal Pursuit and Well-Being: The Ups and Downs of Trying	156
RESEARCH ON DIFFERENCES IN WELL-BEING ACROSS TIME AND PLACE	157

Lifespan Perspectives on Well-Being	157
Cultural Influences: Universality versus Relativism and Well-Being	159
SUMMARY	161

INTRODUCTION

The concept of well-being refers to optimal psychological functioning and experience. It is the focus not only of everyday interpersonal inquiries (e.g. “How are you?”) but also of intense scientific scrutiny. Although the question, “How are you?” may seem simple enough, theorists have found the issue of well-being to be complex and controversial. Indeed, from the beginnings of intellectual history, there has been considerable debate about what defines optimal experience and what constitutes “the good life.” Obviously, this debate has enormous theoretical and practical implications. How we define well-being influences our practices of government, teaching, therapy, parenting, and preaching, as all such endeavors aim to change humans for the better, and thus require some vision of what “the better” is.

Well-being research seems especially prominent in current empirical psychology. In part this reflects the increasing awareness that, just as positive affect is not the opposite of negative affect (Cacioppo & Berntson 1999), well-being is not the absence of mental illness. For much of the last century, psychology’s focus on the amelioration of psychopathology overshadowed the promotion of well-being and personal growth. But beginning in the 1960s with a shift in focus toward prevention, and continuing to the present, a few researchers have been studying growth (Deci 1975), well-being (Diener 1984), and the promotion of wellness (Cowen 1991).

Still, it is interesting that there seem to have been two periods when the American public, as well as the community of scientific psychologists, evidenced a particularly strong interest in issues of psychological growth and health, namely, the 1960s when the human potential movement swept this country, and currently when considerable attention is being given to positive psychology (Seligman & Csikszentmihalyi 2000). It may be no accident that these two periods represent times of relative affluence, when the economically advantaged have found that material security and luxury do not, in themselves, secure happiness. In this sense, the bursts of interest in well-being may have been prompted by a culture of surplus.

For whatever reasons, the field is burgeoning. A Psychinfo search using the terms well-being and mental health brought forth 28,612 and 12,009 citations, respectively, for the past 5 years. When the search was broadened to include terms such as health, happiness, quality of life, and other related topics, the numbers swelled even further. Clearly, this important area of psychology cannot be thoroughly reviewed in a short survey. Nonetheless, recent years have seen a crystallization of themes within the field of well-being that both organize this voluminous literature and provide directions for future research.

First and foremost, the field has witnessed the formation of two relatively distinct, yet overlapping, perspectives and paradigms for empirical inquiry into

well-being that revolve around two distinct philosophies. The first of these can be broadly labeled hedonism (Kahneman et al 1999) and reflects the view that well-being consists of pleasure or happiness. The second view, both as ancient and as current as the hedonic view, is that well-being consists of more than just happiness. It lies instead in the actualization of human potentials. This view has been called eudaimonism (Waterman 1993), conveying the belief that well-being consists of fulfilling or realizing one's daimon or true nature. The two traditions—hedonism and eudaimonism—are founded on distinct views of human nature and of what constitutes a good society. Accordingly, they ask different questions concerning how developmental and social processes relate to well-being, and they implicitly or explicitly prescribe different approaches to the enterprise of living. As we shall see, the findings from the two intersect, but they also diverge at critical junctures.

Second, methodological and theoretical advances have enabled researchers to ask more sophisticated questions about well-being. The advent of multilevel modeling [e.g. hierarchical linear modeling (HLM)] has allowed researchers to go beyond the between-person or individual-difference focus that dominated the field. Instead of merely asking why person A has higher well-being than person B, researchers can now also examine the largely independent question of why person A is better off today than he or she was yesterday (Gable & Reis 1999). Complementing this advance, expansion of research methods to include ideographic assessments of goals, values, and aspirations has allowed an examination of how people's experiences of well-being are shaped by attributes of their personal goals and their motives for pursuing them (Emmons 1986, Little 1989, Sheldon & Kasser 1995). Similarly, new statistical methods for examining the cross-cultural equivalence of psychological constructs (Little 1997) have allowed more exacting research on the relation of culture to well-being. This is especially crucial because formulations from evolutionary psychology have challenged the "standard social science model" of humans as infinitely malleable (Tooby & Cosmides 1992), lending relevance to the search for the invariant as well as variant features of human functioning. Together, such advances have made well-being research a field in transition.

In this chapter, we begin by reviewing the two principal approaches to defining well-being, namely, the hedonic and eudaimonic approaches, considering their meta-theoretical, theoretical, and methodological aspects. We then proceed to a topical review of the literature, taking note, when appropriate, of the relation of the topics to the two general perspectives.

TWO TRADITIONS IN THE STUDY OF WELL-BEING

The Hedonic View

Equating well-being with hedonic pleasure or happiness has a long history. Aristippus, a Greek philosopher from the fourth century B.C., taught that the goal of life is to experience the maximum amount of pleasure, and that happiness

is the totality of one's hedonic moments. His early philosophical hedonism has been followed by many others. Hobbes argued that happiness lies in the successful pursuit of our human appetites, and DeSade believed that pursuit of sensation and pleasure is the ultimate goal of life. Utilitarian philosophers such as Bentham argued that it is through individuals' attempting to maximize pleasure and self-interest that the good society is built. Hedonism, as a view of well-being, has thus been expressed in many forms and has varied from a relatively narrow focus on bodily pleasures to a broad focus on appetites and self-interests.

Psychologists who have adopted the hedonic view have tended to focus on a broad conception of hedonism that includes the preferences and pleasures of the mind as well as the body (Kubovy 1999). Indeed, the predominant view among hedonic psychologists is that well-being consists of subjective happiness and concerns the experience of pleasure versus displeasure broadly construed to include all judgments about the good/bad elements of life. Happiness is thus not reducible to physical hedonism, for it can be derived from attainment of goals or valued outcomes in varied realms (Diener et al 1998).

In a volume that announced "the existence of a new field of psychology," Kahneman et al (1999) defined hedonic psychology as the study of "what makes experiences and life pleasant and unpleasant" (p. ix). Its title, *Well-being: The Foundations of Hedonic Psychology*, clearly suggests that, within this paradigm, the terms well-being and hedonism are essentially equivalent. By defining well-being in terms of pleasure versus pain, hedonic psychology poses for itself a clear and unambiguous target of research and intervention, namely maximizing human happiness. Accordingly, the volume is replete with evidence about how people calculate utilities, maximize the density of reward, and optimize inputs associated with pleasure versus displeasure.

Although there are many ways to evaluate the pleasure/pain continuum in human experience, most research within the new hedonic psychology has used assessment of subjective well-being (SWB) (Diener & Lucas 1999). SWB consists of three components: life satisfaction, the presence of positive mood, and the absence of negative mood, together often summarized as happiness.

Just as there have been philosophical arguments about equating hedonic pleasure with well-being, there has been considerable debate about the degree to which measures of SWB adequately define psychological wellness (e.g. Ryff & Singer 1998). Accordingly, there are two important issues concerning the hedonic position in research on well-being. One concerns the validity of SWB and related measures as operational definitions of (a) hedonism and/or (b) well-being. The other concerns the types of social activities, goals, and attainments theorized to promote well-being, however it is assessed. As such, there are three defensible positions that could result from a consideration of these questions. First, one could accept both the hedonic view and SWB as its indicator. Second, one could accept the use of SWB as an operational definition of well-being but endorse a eudaimonic view of what fosters SWB. And third, one could both reject the measure of SWB as an indicator of well-being and argue against hedonic principles as the vehicle to

produce well-being. Regardless of what is said about this debate, SWB has reigned as the primary index of well-being during the past decade and a half, and much of the research reviewed herein employs SWB as a major outcome variable.

Although there are various theoretical perspectives associated with hedonic psychology, some of its most prominent proponents have eschewed theory, arguing for a bottom-up empirical approach. Specifically, some have argued that we need to know more “elementary facts before a large theory is created” (Diener et al 1998, p. 35). Nevertheless, one can characterize the dominant work in hedonic psychology in theoretical terms, even if they remain implicit. Overall, the theories, whether implicit or explicit, tend to fit within what Tooby & Cosmides (1992) refer to as the standard social science model, which is built on the assumption of an enormous amount of malleability to human nature. With this meta-theoretical starting point, much of the work fits with the expectancy-value approach (e.g. Oishi et al 1999), which in its simplest form suggests that well-being is a function of expecting to attain (and ultimately attaining) the outcomes one values, whatever those might be. The focus of hedonic psychology on pleasure versus pain also readily links it with behavioral theories of reward and punishment (e.g. Shizgal 1999) and theories focused on cognitive expectations about such outcomes (e.g. Peterson 1999). Furthermore, the claim of hedonic psychologists and expectancy-value theorists that the goals through which well-being is enhanced can be highly idiosyncratic and culturally specific would also seem to fit well within a relativistic, postmodern view. Thus, although explicit theory is often not endorsed by hedonic researchers, implicit theoretical themes are identifiable.

The Eudaimonic View

Despite the currency of the hedonic view, many philosophers, religious masters, and visionaries, from both the East and West, have denigrated happiness per se as a principal criterion of well-being. Aristotle, for example, considered hedonic happiness to be a vulgar ideal, making humans slavish followers of desires. He posited, instead, that true happiness is found in the expression of virtue—that is, in doing what is worth doing. Fromm (1981), drawing on this Aristotelian view, argued that optimal well-being (*vivere bene*) requires distinguishing

between those needs (desires) that are only subjectively felt and whose satisfaction leads to momentary pleasure, and those needs that are rooted in human nature and whose realization is conducive to human growth and produces eudaimonia, i.e. “well-being.” In other words... the distinction between purely subjectively felt needs and objectively valid needs—part of the former being harmful to human growth and the latter being in accordance with the requirements of human nature (p. xxvi).

The term eudaimonia is valuable because it refers to well-being as distinct from happiness per se. Eudaimonic theories maintain that not all desires—not all outcomes that a person might value—would yield well-being when achieved. Even

though they are pleasure producing, some outcomes are not good for people and would not promote wellness. Thus, from the eudaimonic perspective, subjective happiness cannot be equated with well-being.

Waterman (1993) stated that, whereas happiness is hedonically defined, the eudaimonic conception of well-being calls upon people to live in accordance with their daimon, or true self. He suggested that eudaimonia occurs when people's life activities are most congruent or meshing with deeply held values and are holistically or fully engaged. Under such circumstances people would feel intensely alive and authentic, existing as who they really are—a state Waterman labeled personal expressiveness (PE). Empirically, Waterman showed that measures of hedonic enjoyment and PE were strongly correlated, but were nonetheless indicative of distinct types of experience. For example, whereas both PE and hedonic measures were associated with drive fulfillments, PE was more strongly related to activities that afforded personal growth and development. Furthermore, PE was more associated with being challenged and exerting effort, whereas hedonic enjoyment was more related to being relaxed, away from problems, and happy.

Ryff & Singer (1998, 2000) have explored the question of well-being in the context of developing a lifespan theory of human flourishing. Also drawing from Aristotle, they describe well-being not simply as the attaining of pleasure, but as “the striving for perfection that represents the realization of one's true potential” (Ryff 1995, p. 100). Ryff & Keyes (1995) thus spoke of psychological well-being (PWB) as distinct from SWB and presented a multidimensional approach to the measurement of PWB that taps six distinct aspects of human actualization: autonomy, personal growth, self-acceptance, life purpose, mastery, and positive relatedness. These six constructs define PWB both theoretically and operationally and they specify what promotes emotional and physical health (Ryff & Singer 1998). They have presented evidence, for example, that eudaimonic living, as represented by PWB, can influence specific physiological systems relating to immunological functioning and health promotion.

In an engaging and instructive debate, Ryff & Singer (1998) challenged SWB models of well-being as being of limited scope where positive functioning is concerned, and specifically that SWB is often a fallible indicator of healthy living. In turn, Diener et al (1998) retorted that Ryff & Singer's eudaimonic criteria lets experts define well-being, whereas SWB research allows people to tell researchers what makes their life good. What is most clear from this clash of paradigms is that these differing definitions of wellness have led to quite different types of inquiry concerning the causes, consequences, and dynamics of well-being.

Self-determination theory (SDT) (Ryan & Deci 2000) is another perspective that has both embraced the concept of eudaimonia, or self-realization, as a central definitional aspect of well-being and attempted to specify both what it means to actualize the self and how that can be accomplished. Specifically, SDT posits three basic psychological needs—autonomy, competence, and relatedness—and theorizes that fulfillment of these needs is essential for psychological growth (e.g. intrinsic motivation), integrity (e.g. internalization and assimilation of cultural practices),

and well-being (e.g. life satisfaction and psychological health), as well as the experiences of vitality (Ryan & Frederick 1997) and self-congruence (Sheldon & Elliot 1999). Need fulfillment is thus viewed as a natural aim of human life that delineates many of the meanings and purposes underlying human actions (Deci & Ryan 2000).

Specification of basic needs defines not only the minimum requirements of psychological health but also delineates prescriptively the nutriments that the social environment must supply for people to thrive and grow psychologically. Thus, SDT describes the conditions that facilitate versus undermine well-being within varied developmental periods and specific social contexts such as schools, workplaces, and friendships. SDT does not, however, suggest that the basic needs are equally valued in all families, social groups, or cultures, but it does maintain that thwarting of these needs will result in negative psychological consequences in all social or cultural contexts. As such, contextual and cultural, as well as developmental, factors continually influence the modes of expression, the means of satisfaction, and the ambient supports for these needs, and it is because of their effects on need satisfaction that they, in turn, influence growth, integrity, and well-being at both between-person and within-person levels of analysis.

SDT has both important similarities and differences with Ryff & Singer's (1998) eudaimonic approach. We wholly concur that well-being consists in what Rogers (1963) referred to as being fully functioning, rather than as simply attaining desires. We also are largely in agreement concerning the content of being eudaimonic—e.g. being autonomous, competent, and related. However, our approach theorizes that these contents are the principal factors that foster well-being, whereas Ryff and Singer's approach uses them to define well-being.

SDT posits that satisfaction of the basic psychological needs typically fosters SWB as well as eudaimonic well-being. This results from our belief that being satisfied with one's life and feeling both relatively more positive affect and less negative affect (the typical measures of SWB) do frequently point to psychological wellness, for, as Rogers (1963) suggested, emotional states are indicative of organismic valuation processes. That is, the assessment of positive and negative affect is useful insofar as emotions are, in part, appraisals of the relevance and valence of events and conditions of life with respect to the self. Thus, in SDT research, we have typically used SWB as one of several indicators of well-being. However, we have at the same time maintained that there are different types of positive experience and that some conditions that foster SWB do not promote eudaimonic well-being. For example, research by Nix et al (1999) showed that succeeding at an activity while feeling pressured to do so resulted in happiness (a positive affect closely linked to SWB), but it did not result in vitality (a positive affect more closely aligned with eudaimonic well-being). On the other hand, as predicted by SDT, succeeding at an activity while feeling autonomous resulted in both happiness and vitality. Thus, because conditions that promote SWB may not necessarily yield eudaimonic well-being, SDT research has typically supplemented SWB measures with assessments of self-actualization, vitality, and mental health in an effort to assess well-being conceived of as healthy, congruent, and vital functioning.

Applying the Two Viewpoints

The debate between hedonic and eudaimonic theorists is, as we have said, both ancient and contemporary and has often been quite heated. It will not be resolved herein. Rather, we have highlighted these two positions because of their theoretical and practical importance and because these approaches have generated distinct, but interfacing, research literatures in topical areas that we review.

Evidence from a number of investigators has indicated that well-being is probably best conceived as a multidimensional phenomenon that includes aspects of both the hedonic and eudaimonic conceptions of well-being. For example, Compton et al (1996) investigated the relation among 18 indicators of well-being and mental health, identifying two factors, one that seemed to reflect SWB and the other, personal growth. These two factors were themselves moderately correlated. The results of this study thus suggested that the hedonic and eudaimonic foci are both overlapping and distinct and that an understanding of well-being may be enhanced by measuring it in differentiated ways. King & Napa (1998) asked lay people to rate features of the good life and found that both happiness and meaning were implicated. McGregor & Little (1998) analyzed a diverse set of mental health indicators and also found two factors, one reflecting happiness and the other, meaningfulness. These researchers showed that, when pursuing personal goals, doing well and feeling happy may be disconnected from finding meaning and acting with integrity. Thus, in spite of the significant overlap, the most interesting results may be those that highlight the factors leading to divergence rather than just convergence in the hedonic and eudaimonic indicators of well-being.

RESEARCH TOPICS IN THE PSYCHOLOGY OF WELL-BEING

In what follows we briefly survey a number of research topics concerning well-being, focusing especially on those with a lively presence in contemporary research. The topics are quite diverse. Some grapple with the psychological meaning of well-being. For example, to what extent is well-being an individual difference? What is the role of emotions in well-being? and To what extent is physical health intertwined with well-being? Other topics search for antecedents of well-being at the between-person and within-person levels. Such factors as wealth, satisfying relationships, and goal attainment have been addressed. Still other topics concern whether well-being is different across time or place, for example, in different developmental periods and in different cultures. As we shall see, in many of these topical areas researchers with hedonic versus eudaimonic interests have tended to ask different kinds of questions and approach the answers by different routes.

Personality, Individual Differences, and Well-Being

Two closely related and frequently asked questions are, What type of people are likely to be well or happy? and Are there people who can be characterized as being happy or well? In other words, are there personality factors that consistently relate to well-being, and can well-being itself be thought of as a personality variable?

These questions have been actively researched with regard to SWB. DeNeve (1999) suggested that SWB is determined to a substantial degree by genetic factors and argued that SWB is relatively stable across the life span. In fact, DeNeve & Cooper (1998) did a meta-analysis involving 197 samples with more than 40,000 adults, in which SWB was a criterion variable related to various personality traits. Many personality traits were significantly associated with SWB, suggesting a correspondence between chronic personality styles and individual differences in SWB. For instance, of the “big five” traits (Costa & McCrae 1992), DeNeve & Cooper reported that extraversion and agreeableness were consistently positively associated with SWB, whereas neuroticism was consistently negatively associated with it.

Diener & Lucas (1999) suggested that these big five findings should come as no surprise because extraversion is characterized by positive affect and neuroticism is virtually defined by negative affect. For instance, they cited evidence that, controlling for measurement error, the correlation between extraversion and positive mood was 0.80, and that neuroticism and trait negative affect were indistinguishable. That is, the negative relation between SWB and neuroticism, which concerns the tendency to experience negative affect, is somewhat tautological. In line with Seidlitz (1993), Diener & Lucas further suggest that conscientiousness, agreeableness, and openness to experience are less strongly and consistently linked to SWB because these traits have their sources in “rewards in the environment” (p. 320). In other words, as individual differences, these three are more a function of environmental influences, whereas extraversion and neuroticism may be more a function of genetic factors.

Because of the trait-like features of SWB, some studies have focused on contrasts between chronically happy and unhappy people. Lyubomirsky & Tucker (1998), for example, demonstrated that characteristically happy people tend to construe the same life events and encounters more favorably than unhappy people. Further, Lyubomirsky & Ross (1999) showed that individuals high, relative to low, in SWB tended to cast events and situations in a more positive light, to be less responsive to negative feedback, and to more strongly denigrate opportunities that are not available to them. Thus, people high in SWB may have attributional styles that are more self-enhancing and, perhaps, more enabling, which in turn could contribute to the relative stability of their happiness.

Ryff and colleagues have examined the relation of the big five traits to their multiple dimensions of psychological well-being. Schmutte & Ryff (1997) found that extraversion, conscientiousness, and low neuroticism were linked with the eudaimonic dimensions of self-acceptance, mastery, and life purpose; openness to

experience was linked to personal growth; agreeableness and extraversion were linked to positive relationships; and low neuroticism was linked to autonomy.

Sheldon et al (1997) examined relations between the big five and well-being, but these researchers explored whether the degree of variability in a person's ratings on each trait across life roles (e.g. student, child, friend, etc), rather than the person's characteristic level on each trait, would relate to well-being, regardless of the specific trait being considered. In line with work by Roberts & Donahue (1994), Sheldon et al showed that greater variability in individuals' endorsements of traits across roles was associated with lower general well-being. Further, as predicted by SDT, Sheldon et al postulated and found that people were most likely to depart from their general trait characteristics in life roles in which they were least authentic, that is, where they felt least able to express their true self. In a similar vein, AW Paradise & MH Kernis (unpublished manuscript) found that greater variability in self-esteem scores over time, even among people whose average self-esteem was high, was associated with poorer well-being assessed with Ryff's (1989a) measure.

Emotions and Well-Being

The relation of emotions to well-being, like that of traits to well-being, deals to some extent with the meaning of well-being itself. As such, the hedonic and eudaimonic perspectives have quite different views and have engaged in diverse types of research.

Research on emotions and SWB has found that: (a) people ongoingly experience affect; (b) affect is valenced and easily judged as positive or negative; and (c) most people report having positive affect most of the time (Diener & Lucas 2000). Thus, because having more positive emotion and less negative emotion is SWB, the studies imply that people, in general, have fairly high SWB. Some researchers have focused on how to maintain positive affect and ameliorate negative affect, and others have focused on daily fluctuations in affect and on how ongoing experiences of affect relate to global SWB. Considerable research has addressed how people estimate mood over time, including the weight they give to various events (Kahneman 1999), as well as how response styles and the order of questions can affect global estimates (Schwarz & Strack 1991). For example, Diener et al (1991) found global judgments of subjective well-being to be based more in the frequency than intensity of positive experiences. In fact, it seems that intense positive emotions are often attended by increased unpleasant affect (Larsen & Diener 1987).

There is some indication that SWB is affected by positive and negative life events (Headey & Wearing 1989), but Suh et al (1996) found that the impact of events on SWB was brief. Further, because SWB is to some extent traitlike and people high, relative to low, in SWB are likely to construe the same event more positively, it is still unclear how much effect actual life events have on well-being.

The eudaimonic position, in contrast to the hedonic view, suggests that the important issue concerning emotions is not feeling positive per se (see Parrott 1993), but rather is the extent to which a person is fully functioning (Rogers 1963). Thus, under some conditions (e.g. the death of a loved one) a person would be considered

to be more fully functioning, and, ultimately, to have greater well-being, if he or she experienced rather than avoided the negative feeling of sadness. From a eudaimonic view, such issues as the repression, disclosure, compartmentalization, and overcontrol versus undercontrol of emotions are highly pertinent to what defines wellness. For instance, work reviewed by King & Pennebaker (1998) suggests that suppressing or withholding emotions has clear costs for psychological and physical health, and DeNeve & Cooper (1998) found that people high in repressive tendencies tend to have lower SWB. Conversely, there seem to be well-being benefits to emotional disclosure (Butzel & Ryan 1997). Such findings fit the claims of eudaimonic theorists that emotional access and congruence are important for well-being.

Another line of eudaimonic research on emotions suggests that, because emotional positivity is not part of the definition of well-being, affect can be studied as an outcome of eudaimonic processes. Thus, although more positive affect is not considered an end in itself, it would be expected, under many circumstances, to be a byproduct of eudaimonic living. Ryff & Singer (1998), for example, reported moderate correlations between their eudaimonic assessment of well-being and SWB. They emphasize some dimensions over others in these relations—in particular, positive relations were found to be particularly strongly related to positive emotional experiences. More generally, these researchers viewed emotions as a catalyst to health states, and they focused on the capacity of deep emotional experience to mobilize antistress and disease resistant functions.

A final strand of research on emotions using a eudaimonic perspective has examined psychological conditions that promote positive emotions, including happiness and vitality. This work, which has been done at both the between-persons and within-person levels, has considered the relation of basic need satisfaction to these emotional indices of well-being. In one study, Sheldon et al (1996) examined daily fluctuations in satisfaction of autonomy and competence over 2 weeks. Using HLM, they found that at the between-persons level feelings of autonomy and competence predicted happiness and vitality, but also that at the within-person level fluctuations in experiences of fulfillment of the two needs significantly predicted fluctuations in the affects. Subsequently, Reis et al (2000) showed that within-person fluctuations in all three of SDT's basic needs predicted the positive affects. Specifically, daily experiences of autonomy, competence, and relatedness each contributed unique variance to the prediction of happiness and vitality.

Physical Health and Its Relations to Well-Being

That there ought to be an association between health status and well-being seems intuitively clear. Sickness is often associated with displeasure or pain, so the presence of illness might directly increase negative affect. Further, illness often presents functional limitations, which can detract from opportunities for positive affect and life satisfaction.

Empirical results have supported these speculations. Specifically, an early meta-analysis by Okun et al (1984) relating self-reported physical health to SWB found an average correlation of 0.32. However, the relation seems to be more complex

than one might expect. Some people with objectively poor health have high SWB, whereas, conversely, some people with low well-being have no signs of somatic illness. Befitting these observations, Okun et al found that when health was rated by others (e.g. doctors) the correlation dropped noticeably to 0.16. This suggests that the meaning and construal of health states may be a major factor in SWB. SWB is, after all, subjective, so one would expect it to be affected by personality and by interpretive and reporting styles.

Ryan & Frederick (1997) assessed subjective vitality, a positive and phenomenologically accessible state of having energy available to the self, and used it as an indicator of eudaimonic well-being. They found that subjective vitality not only correlated with psychological factors such as personal autonomy and relatedness, but that it also covaried with physical symptoms. That is, more physical symptoms in a day predicted decreased energy and aliveness for that day, as did poor health habits such as smoking and fatty diets. They argued that vitality is a phenomenally salient variable that is affected by both somatic and psychological factors.

Ryff & Singer (2000) used both empirical and case study evidence to underscore how various dimensions of eudaimonic living yield salubrious effects on health more generally, including lower allostatic load and better autoimmune functioning. Their work indicated that the PWB dimension of positive relationships with others was particularly critical to the promotion of health-related processes.

RESEARCH ON ANTECEDENTS OF WELL-BEING

Considerable research has examined antecedent conditions likely to facilitate well-being. We review some of that work, organized in terms of wealth, relationships, and goal pursuits. Because the literature is voluminous, the review is necessarily, and perhaps arbitrarily, selective.

Social Class and Wealth as Predictors of Well-Being

A question of widespread interest among researchers and laypeople alike concerns the relation of wealth to happiness and well-being. Relations of both attained wealth and wealth-related goals and aspirations have been addressed from both hedonic and eudaimonic perspectives.

Does money make people happy? Long traditions in folklore and lay wisdom suggest answers in both directions. From the view of hedonic psychology, which has no a priori basis for speculating on this matter, the question is empirical, and thus far the answer has been mixed.

In a recent review, E Diener & R Biswas-Diener (unpublished) summarized research on wealth and SWB as follows: (a) people in richer nations are happier than people in poorer nations; (b) increases in national wealth within developed nations have not, over recent decades, been associated with increases in SWB; (c) within-nation differences in wealth show only small positive correlations with

happiness; *(d)* increases in personal wealth do not typically result in increased happiness; and *(e)* people who strongly desire wealth and money are more unhappy than those who do not. Although they reviewed different theoretical accounts of these findings, they concluded that there remain too many unknowns to supply an integrated model. However, they stated that avoiding poverty, living in a rich country, and focusing on goals other than material wealth are associated with attaining happiness.

Diener & Diener (1995) examined the strength of the relations between satisfaction with specific domains (family, friends, finances) and life satisfaction in college students from 31 nations. They found that, among the differential relations, financial status was more correlated with life satisfaction in poorer nations than wealthier nations.

Why might wealth be more important for increasing life satisfaction among people in poorer nations? Although there is not yet a clear answer, one key issue concerns the functional freedoms that accompany national wealth for all cultural members. A poor infrastructure within a nation constrains opportunities for stable relationships, personal expressiveness, and productivity. Thus, not only can national poverty interfere with satisfaction of physical needs, such as food and shelter, but it can also block access to exercising competencies, pursuing interests, and maintaining relationships, which would provide psychological need satisfaction. Thus, within poorer nations, the value of money for satisfying needs may be more critical than it is within a nation where most citizens have access to some basic resources for pursuing their goals.

Although the hedonic viewpoint would have little reason to view money as a problematic goal, a long tradition of eudaimonic and organismic theorists have questioned wealth and materialism as life goals. Drawing from the eudaimonic view and from SDT, Kasser & Ryan (1993, 1996) related money and materialism to well-being. They predicted that people who place a strong value on wealth relative to goals such as close relationships, personal growth, and community generativity, which are more closely related to basic psychological need fulfillment, should show lower well-being. From a eudaimonic view, placing too much priority on material goods (as well as goals such as fame and image), which in themselves do not satisfy basic psychological needs, can at best only partially satisfy the needs, and at worst can distract from foci that would yield need fulfillment. Further, because achieving money, fame, and image is often contingent on engaging in nonautonomous activities, emphasizing such goals may detract from a sense of authenticity and result in lower well-being. Beyond the relations of relative values to well-being, this view further suggests that once a person is beyond poverty level (and thus has sustenance and security) the attainment of more wealth should add little to well-being, whereas attaining fulfillment of goals more deeply connected with the basic psychological needs should directly enhance well-being.

Several studies have supported this overall model, showing that the more people focus on financial and materialistic goals, the lower their well-being. This result has been confirmed both in developed countries such as the United States and Germany

(Kasser & Ryan 1996, Schmuck et al 2000) and in less economically developed nations such as Russia and India (e.g. Ryan et al 1999). Furthermore, both cross sectional (Ryan et al 1999) and longitudinal (Sheldon & Kasser 1998) studies suggest that, whereas progress toward intrinsic goals enhances well-being, progress toward extrinsic goals such as money either does not enhance well-being or does so to a lesser extent. Finally, as Carver & Baird (1998) found, the relation between money and well-being is in part a function of the loss of autonomy associated with this life goal.

Ryff et al (1999) examined the impact of impoverishment on eudaimonic outcomes. Using the PWB measure, they found that socio-economic status was linked to the dimensions of self-acceptance, purpose, mastery, and growth. Many of the negative effects of lower socio-economic status on these dimensions appeared to result from social comparison processes, in which poorer individuals compared themselves unfavorably with others and felt unable to gain resources that could adjust perceived inequalities.

In sum, work in both the hedonic and eudaimonic traditions converges on the point that money does not appear to be a reliable route to either happiness or well-being. The relation of wealth to well-being is at best a low positive one, although it is clear that material supports can enhance access to resources that are important for happiness and self-realization. There appear to be many risks to poverty but few benefits to wealth when it comes to well-being. Furthermore, studies show specifiable eudaimonic hazards for those who overly value wealth and material goods.

Attachment, Relatedness, and Well-Being

There has been increasing appreciation within psychology of the fundamental importance of warm, trusting, and supportive interpersonal relationships for well-being. So important is relatedness that some theorists have defined relatedness as a basic human need that is essential for well-being (Baumeister & Leary 1995, Deci & Ryan 1991), and others have suggested that having stable, satisfying relationships is a general resilience factor across the lifespan (Mikulincer & Florian 1998). Insofar as there is validity to this view, one would expect a strong, universal association between the quality of relationships and well-being outcomes.

Evidence supporting the link of relatedness to SWB is manifold. Studies suggest that, of all factors that influence happiness, relatedness is at or very near the top of the list (Argyle 1987, Myers 1999). Furthermore, as DeNeve (1999) noted, affiliation and relationship-enhancing traits are among the most strongly related with SWB. Furthermore, loneliness is consistently negatively related to positive affect and life satisfaction (Lee & Ishii-Kuntz 1987). Still, the topic of relationships is complex, and even close relationships are multifaceted, so specificity is warranted concerning what aspects of relationships engender wellness. Two concepts—attachment and intimacy—are especially relevant (Reis & Patrick 1996).

The construct of attachment derives from the work of Bowlby (1969), who argued that early relationships with caregivers can be characterized in terms of differing degrees of felt security and support. Attachment studies were initially

done with relationships during infancy (Ainsworth et al 1978) and more recently during adolescence and adulthood (Hazan & Shaver 1987). The main idea is that individuals have a predominant working model that varies in the degree to which it represents secure versus insecure attachment to others. Many studies have confirmed a relation between attachment security and well-being broadly construed, and some theorists have argued that secure attachments themselves are an indicator of well-being (e.g. Simpson 1990).

Although security of attachment has typically been viewed as a stable individual difference, recent work suggests that there is considerable within-person variation in attachment security with different relational partners. Baldwin et al (1996) showed descriptively that most people exhibit different attachment styles with different figures in their lives. La Guardia et al (2000) found that this within-person variability in security of attachment was predicted by the degree to which an individual experiences need satisfaction with particular partners; those with whom one experiences security are those who facilitate feelings of autonomy, competence, and relatedness. The researchers further showed that, to a considerable degree, the positive effects of attachment security on well-being were mediated by need satisfaction. Thus, it appears that secure attachments foster well-being in large part because they represent relationships within which a person satisfies needs for autonomy, competence, and relatedness.

Research on intimacy also highlights the importance of relatedness for well-being and underscores that it is the quality of relatedness which engenders well-being. For example, Nezlek (2000) reviewed a number of studies showing that, whereas quantity of interactions does not predict well-being, quality of relatedness does. Carstensen's (1998) Social Selectivity Theory, as well as work in SDT (e.g. V. Kasser & Ryan 1999) points to the same conclusion.

This work on the quality of relationships examining between-person relations has found that individuals who in general have more intimate or higher-quality relationships tend to demonstrate greater well-being. Work by Reis et al (2000) showed further that within-person, day-to-day variations in feelings of relatedness over a two-week period predicted daily indicators of well-being, including positive affect and vitality. Data were also gathered concerning the type of interactions that fostered relatedness and, in turn, well-being. In support of both intimacy theory and SDT, it was found that people experienced greater relatedness when they felt understood, engaged in meaningful dialog, or had fun with others.

Recall that, in the work of Ryff and colleagues, positive relations with others is a dimension of well-being. Thus, whereas much of the work reviewed herein treats relationships as a source of well-being, Ryff & Singer (2000) treat it as a defining element of PWB, viewing positive relations with others as an essential element in human flourishing. In relating this variable to others, Ryff et al (2001) reviewed evidence that positive relations predicted physiological functioning and health outcomes, including the secretion of oxytocin, which is associated with positive mood and stress relief. Their view is also supported by Uchino et al (1999), who showed that social support influences mortality via changes in cardiovascular, endocrine, and autoimmune systems.

Goal Pursuit and Well-Being: The Ups and Downs of Trying

Another active area of research has been the relations of goals and goal progress to well-being. It fits with many theories in psychology that feelings of competence or efficacy with regard to life goals should be associated with greater positive affect and well-being. More controversial is the issue of whether goal pursuits must be autonomous or integrated to the self in order to yield greater wellness. Whereas hedonic theory has typically adhered to an expectancy value model where autonomy has had no role, issues related to the autonomy, authenticity, and congruence of goal pursuits have been a concern of eudaimonic researchers.

Perceived Competence and Self-Efficacy A large body of research points clearly to the fact that feeling competent and confident with respect to valued goals is associated with enhanced well-being (Carver & Scheier 1999, McGregor & Little 1998). Furthermore, it is clear that goal progress, on average, predicts enhanced well-being, particularly goals that are rated as important (e.g. Brunstein 1993). However, these general findings can be unpacked into various processes that contribute to the relation.

One issue concerns the level of challenge posed by one's goals. When life goals are nonoptimally challenging—either too easy or too difficult—positive affect is lower (Csikszentmihalyi & Csikszentmihalyi 1988). Low expectations of success have also been associated with high negative affect (Emmons 1986), and as noted, Waterman (1993) found an association between eudaimonic outcomes (PE) and growth-related, effortful challenge.

Another concern is whether one's goal activities are characterized by approach or avoidance motivational systems. Elliot & Sheldon (1997), for example, classified goals as approach or avoidance and then examined the effects of goal progress over a short-term period. Pursuit of avoidance goals was associated with both poorer goal progress and with lower well-being. Elliot et al (1997) similarly showed that people whose personal goals contained a higher proportion of avoidance had lower SWB. They also demonstrated the association between neuroticism and avoidance goals, but showed that the impact of avoidance regulation was evident even when controlling for neuroticism. Carver & Scheier (1999) also presented research linking approach goals (positively) and avoidance goals (negatively) to well-being outcomes.

Other work points to the importance of goals and motives being aligned for well-being effects to accrue. For example, Brunstein et al (1998) found that motive-goal congruence accounted for the effects of goal progress on SWB. Furthermore, they showed that commitment to motive-incongruent goals can even result in well-being declines. Such evidence suggests that how goals are anchored within the self bears on their influence on well-being.

Autonomy and Integration of Goals Another actively researched issue concerns how autonomous one is in pursuing goals. SDT in particular has taken a strong

stand on this by proposing that only self-endorsed goals will enhance well-being, so pursuit of heteronomous goals, even when done efficaciously, will not. The relative autonomy of personal goals has, accordingly, been shown repeatedly to be predictive of well-being outcomes controlling for goal efficacy at both between-person and within-person levels of analysis (Ryan & Deci 2000). Interestingly this pattern of findings has been supported in cross-cultural research, suggesting that the relative autonomy of one's pursuits matters whether one is collectivistic or individualistic, male or female (e.g. V Chirkov & RM Ryan 2001; Hayamizu 1997, Vallerand 1997).

Sheldon & Elliot (1999) developed a self-concordance model of how autonomy relates to well-being. Self-concordant goals are those that fulfill basic needs and are aligned with one's true self. These goals are well-internalized and therefore autonomous, and they emanate from intrinsic or identified motivations. Goals that are not self-concordant encompass external or introjected motivation, and are either unrelated or indirectly related to need fulfillment. Sheldon & Elliot found that, although goal attainment in itself was associated with greater well-being, this effect was significantly weaker when the attained goals were not self-concordant. People who attained more self-concordant goals had more need-satisfying experiences, and this greater need satisfaction was predictive of greater SWB. Similarly, Sheldon & Kasser (1998) studied progress toward goals in a longitudinal design, finding that goal progress was associated with enhanced SWB and lower symptoms of depression. However, the impact of goal progress was again moderated by goal concordance. Goals that were poorly integrated to the self, whose focus was not related to basic psychological needs, conveyed less SWB benefits, even when achieved.

Finally, the previously mentioned Nix et al (1999) study showed that whereas successful goal pursuits led to happiness, it was only when the pursuits were autonomous that success yielded vitality. McGregor & Little (1998) suggested that the meaningfulness of goals is a separate issue from that of goal efficacy, and in a study of personal projects they found that, whereas perceived efficacy was linked to happiness, the relative integrity of goals was linked to meaningfulness.

From the perspective of SDT, psychological well-being results in large part from satisfaction of the basic psychological needs for autonomy, competence, and relatedness, so it makes sense that autonomy as well as efficacy would be important for eudaimonic well-being, just as relatedness or attachment contribute considerably to well-being (Reis et al 2000).

RESEARCH ON DIFFERENCES IN WELL-BEING ACROSS TIME AND PLACE

Lifespan Perspectives on Well-Being

The past decade has witnessed tremendous advances in lifespan psychology, and some of the most intriguing findings concern well-being. Indeed, seemingly

anomalous findings in lifespan studies have generated many new understandings of the dynamics of well-being. Perhaps the most salient of these is the so-called paradox of aging. It has been found that in old age not only does subjective well-being not decline, but it typically increases, despite evidence that with age comes many challenges and losses (Carstensen 1998, Mroczek & Kolarz 1998). Thus, lifespan studies offer a window into the dynamics of SWB and eudaimonic well-being, as resources, capacities, and support systems change systematically with age.

Because Ryff defines well-being in a multidimensional way, her work especially lends itself to the descriptive study of lifespan changes in well-being. She and coworkers have investigated, first, whether people's conceptions of well-being change with age and, second, whether different components of well-being vary with age. The answer to both questions is yes. Regarding people's conceptions of well-being, Ryff (1989b) found that, although diverse age groups endorse good relationships and the pursuit of enjoyable activities as important for well-being, there were age differences on other dimensions, with younger adults focused more on self-knowledge, competence, and self-acceptance, and older adults focused more on positive coping with change. These findings accord well with those of Carstensen (1998), who suggested that the functions of relationships change with age. Younger adults are more interested in novelty, knowledge, and experience expansion, and older adults are more interested in depth and poignancy. With regard to variation in the components of well-being, Ryff (1991) compared groups of young, middle-aged, and older adults, identifying age trends on a number of dimensions. Older adults experienced less personal growth than younger groups; middle-aged adults experienced more autonomy than younger or older groups; and middle and older groups experienced more mastery than the younger group. There were no age trends for positive relations with others or for self-acceptance.

Ryan & La Guardia (2000) discussed the relations of need fulfillment to motivation and well-being across the lifespan. They reviewed evidence for the critical role of relatedness, competence, and autonomy in fostering well-being at all ages, suggesting that basic psychological needs influence well-being across life. However, the manner in which these needs are expressed and satisfied varies with age and with the life tasks, challenges, and affordances that change with age. They focused particularly on the role of age-related social contexts such as school and work in affecting well-being and on the adequacy of cultural scaffolds in supporting eudaimonia.

Work on SWB and aging also reveals that earlier theories of declines in well-being were not accurate. Diener & Lucas (2000) pointed out that pleasant affect tends to decline with age, but life satisfaction and negative affect do not change with age. They said that many measures of positive affect focus on aroused, excited states and this focus may account for the observed decline, whereas measures more focused on less activated states might not indicate a decline.

Cultural Influences: Universality versus Relativism and Well-Being

At the outset of this review we commented that the definition of well-being is controversial and unresolved. The meaning of well-being and the factors that facilitate it are particularly at issue in cross-cultural studies in which a principal quest is the search for systematic variants versus invariants in well-being dynamics across widely discrepant social arrangements. Christopher (1999) instructively argued that definitions of well-being are inherently culturally rooted and further, that there can be no such thing as a value-free assessment of well-being. According to Christopher, all understandings of well-being are essentially moral visions, based on individuals' judgments about what it means to be well.

Because the very definition of well-being raises cultural questions about the meaning and equivalence of constructs, quantitatively oriented researchers have often been bereft of answers to criticisms of cultural bias. Although such concerns should continue, at least some strategies have emerged that allow statistical assessments of the cultural equivalence of psychological constructs. Illustrative is the means and covariance structure analyses, which assess the degree to which the psychometric properties of a construct can be comparably modeled across diverse populations (Little 1997). Cross-cultural researchers in this area will need to employ such methods as a requisite for interpretive confidence in their findings. However, because of the newness of these techniques, few studies have employed them.

Diener and colleagues have reported a number of cross-cultural factors associated with SWB. Their analyses have included both mean level differences between nations on SWB and differential correlates of well-being across nations. For example, Diener & Diener (1995) found that across nations, self-esteem was associated with well-being, but that relation was stronger in countries characterized by individualism. The strength of association of SWB to satisfaction with wealth, friends, and family also varied by nation.

Suh et al (1998) studied the relations of emotions and norms (social approval) to life satisfaction in 61 nations. They found that whereas emotions were a stronger predictor of life satisfaction in nations classified as individualist, norms and emotions were equally predictive within collectivist nations. Oishi et al (1999) tested hypotheses based on Maslow's (1971) need theory and their own expectancy valence position, finding some support for each. They found that in poorer nations satisfaction with wealth was a stronger predictor of life satisfaction, whereas satisfaction with home life was more predictive in wealthier nations, suggesting to them a hierarchy of needs. They also found evidence that satisfaction with freedom was less predictive of SWB in collectivistic nations than in individualistic ones. They used this finding to dispute SDT's claims about the importance of volition to well-being, although their discussion reveals misconceptions about the meaning of autonomy and about SDT's position on needs. Still, the findings reveal that deeply held values play a role in well-being, a position with which SDT concurs.

A major conceptual issue in research on autonomy and well-being concerns the constant confusion in the literature between independence (nonreliance) and autonomy (volition). Cross-cultural psychologists such as Markus et al (1996) equate autonomy with independence in their conceptions of East-West differences and thus do not examine the separate effects of these dimensions. Diener & Lucas (2000) similarly cast autonomy as something one has “from” other people, indicating their definition of autonomy as separateness or independence rather than self-endorsement or volition. This melding of constructs persists despite research showing that, if anything, trusting interdependencies support the development of more autonomous regulation (e.g. Ryan & Lynch 1989). From an SDT perspective, cultural styles associated with independence should, of course, detract from relatedness satisfaction and well-being, but this is a separate issue from the relation to well-being of the relative autonomy of one’s goals, life tasks, and values.

Indeed, evidence of the importance of autonomy is evident even in collectivist nations. Studies in Japan reveal that SDT-based assessments of autonomy predict the motivation and adjustment of students (e.g. Hayamizu 1997). Deci et al (2001) examined the relation of well-being to the satisfaction of autonomy, competence, and relatedness needs both in Bulgarian workers in state-owned, collectivistically managed companies and in a sample of US workers. They found that the measures of need satisfaction stood up to stringent cross-cultural meaning-equivalence criteria, suggesting the generalizability of these constructs; they found further that satisfaction of these needs in the workplace significantly predicted the workers’ general well-being in each country, despite the highly differing cultural contexts. Even more intriguing, mean levels of autonomy at work were higher in Bulgaria, for reasons made clear by ethnographic observations. Ryan et al (1999) studied goals in Russian and US college students and found support for the model that lower well-being is predicted by overvaluing of extrinsic goals. Furthermore, Chirkov & Ryan (2001), also using means and covariance structure analyses, showed that Russian adolescents predictably viewed their parents and teachers as less autonomy supportive than did their US counterparts; however, despite its cultural normativeness, less perceived autonomy support was associated with lower well-being, including SWB, in Russia, as well as in the United States.

Sen (1999), a Nobel laureate in economics, has gone so far as to argue that freedom is a more rational goal for national development than is gross national product per se. His analysis shows that in cultures where relative freedoms have been expanded, both quality of life and economic growth are enhanced. Similarly, Frey & Stutzer (1999) showed on a large sample of Swiss citizens that, whereas economic wealth was poorly predictive of well-being, citizens who were active in their democratic participation experienced higher well-being. Thus, without denying either cultural variation in values or the importance of values in giving goals their potency, we maintain that the positions that fail to recognize the importance of autonomy for well-being may be inadvertently condoning the denial of human freedom to a significant portion of the inhabitants of the globe. Surely, this issue will receive further study.

SUMMARY

Cowen (1991) suggested that wellness should be defined not simply as the absence of psychopathology, but instead as an array of positive aspects of functioning that are promoted by attainment of strong attachment relationships, acquisition of age-appropriate cognitive, interpersonal, and coping skills, and exposure to environments that empower the person. This survey of recent work on well-being indicates clearly that study of the meaning of well-being, the conditions that engender it, and how it differs across place or time is yielding a rich and varied body of knowledge on human wellness.

Interestingly, research on well-being had tended to fall into two general groups, based on what is meant by well-being. The hedonic viewpoint focuses on subjective well-being, which is frequently equated with happiness and is formally defined as more positive affect, less negative affect, and greater life satisfaction (e.g. Diener & Lucas 1999). In contrast, the eudaimonic viewpoint focuses on psychological well-being, which is defined more broadly in terms of the fully functioning person and has been operationalized either as a set of six dimensions (Ryff 1989a), as happiness plus meaningfulness (McGregor & Little 1998), or as a set of wellness variables such as self-actualization and vitality (Ryan & Deci 2000). Interestingly, despite divisions over definitional and philosophical issues, the two research literatures, although to some degree overlapping, have tended to ask different questions and thus complement each other, providing an extensive picture of myriad person, context, and cultural factors that relate to the nature and promotion of wellness. Exciting findings have challenged old theories, raised new questions, and supplied nutriment for structured interventions to better the lives of people.

One also finds that researchers within the field of well-being are grappling with an issue that cross-cuts all social sciences, namely that concerning cultural relativism versus universals in human nature. This issue will no doubt continue to receive empirical attention, and it will likely be addressed by use of multilevel analytic strategies. That is, research will continue to uncover the relatively independent sources of variance in well-being owing to cultures and more proximal social contexts, as well as to between-person and within-person influences.

Perhaps the concern of greatest importance, not only for psychological theorists, but also for humanity, is the study of the relations between personal well-being and the broader issues of the collective wellness of humanity and the wellness of the planet. It is clear that, as individuals pursue aims they find satisfying or pleasurable, they may create conditions that make more formidable the attainment of well-being by others. An important issue, therefore, concerns the extent to which factors that foster individual well-being can be aligned or made congruent with factors that facilitate wellness at collective or global levels. Such research will, one would hope, point the way toward means through which individuals can seek hedonic or eudaimonic outcomes in ways that are sustainable in the context of the four billion others who also aspire to be fully functioning and satisfied in this earthly life.

ACKNOWLEDGMENTS

Preparation of this chapter was supported in part by grant MH-53385 from the National Institute of Mental Health.

Visit the Annual Reviews home page at www.AnnualReviews.org

LITERATURE CITED

- Ainsworth MDS, Blehar MC, Waters E, Wall S. 1978. *Patterns of Attachment*. Hillsdale, NJ: Erlbaum
- Argyle M. 1987. *The Psychology of Happiness*. London: Methuen
- Baldwin MW, Keelan JPR, Fehr B, Enns V, Koh-Rangarajoo E. 1996. Social-cognitive conceptualization of attachment working models: availability and accessibility effect. *J. Pers. Soc. Psychol.* 71:94–109
- Baumeister R, Leary MR. 1995. The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol. Bull.* 117:497–529
- Bowlby J. 1969. *Attachment*. New York: Basic
- Brunstein JC. 1993. Personal goals and subjective well-being: a longitudinal study. *J. Pers. Soc. Psychol.* 65:1061–70
- Brunstein JC, Schultheiss OC, Grässman R. 1998. Personal goals and emotional well-being: the moderating role of motive dispositions. *J. Pers. Soc. Psychol.* 75:494–508
- Butzel JS, Ryan RM. 1997. The dynamics of volitional reliance: a motivational perspective on dependence, independence, and social support. In *Sourcebook of Social Support and Personality*, ed. GR Pierce, B Lakey, IG Sarason, BR Sarason, pp. 49–67. New York: Plenum
- Cacioppo JT, Berntson GG. 1999. The affect system: architecture and operating characteristics. *Curr. Dir. Psychol. Sci.* 8:133–37
- Carstensen LL. 1998. A life-span approach to social motivation. In *Motivation and Self-Regulation Across the Life Span*, ed. J Heckhausen, CS Dweck, pp. 341–64. New York: Cambridge Univ. Press
- Carver CS, Baird E. 1998. The American dream revisited: Is it what you want or why you want it that matters? *Psychol. Sci.* 9:289–92
- Carver CS, Scheier MF. 1999. Themes and issues in the self-regulation of behavior. In *Perspectives on Behavioral Self-Regulation: Advances in Social Cognition*, ed. RS Wyer Jr, XII:1–105. Mahwah, NJ: Erlbaum
- Chirkov V, Ryan RM. 2001. Control versus autonomy support in Russia and the U.S.: effects on well-being and academic motivation. *J. Cross-Cultural Psychol.* In press
- Christopher JC. 1999. Situating psychological well-being: exploring the cultural roots of its theory and research. *J. Couns. Dev.* 77:141–52
- Compton WC, Smith ML, Cornish KA, Qualls DL. 1996. Factor structure of mental health measures. *J. Pers. Soc. Psychol.* 71:406–13
- Costa PT, McCrae RR. 1992. The five-factor model of personality and its relevance to personality disorders. *J. Pers. Disord.* 6:343–59
- Cowen EL. 1991. In pursuit of wellness. *Am. Psychol.* 46:404–8
- Csikszentmihalyi M, Csikszentmihalyi IS. 1988. *Optimal Experience: Psychological Studies of Flow in Consciousness*. New York: Cambridge Univ. Press
- Deci EL. 1975. *Intrinsic Motivation*. New York: Plenum
- Deci EL, Ryan RM. 1991. A motivational approach to self: integration in personality. In *Nebraska Symposium on Motivation: Perspectives on Motivation* ed. R Dienstbier, 38:237–88. Lincoln: Univ. Nebr. Press
- Deci EL, Ryan RM. 2000. The “what” and “why” of goal pursuits: human needs and the self-determination of behavior. *Psychol. Inq.* 11:227–68

- Deci EL, Ryan RM, Gagné M, Leone DR, Usunov J, Kornazheva BP. 2001. Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country: a cross-cultural study of self-determination. *Pers. Soc. Psychol. Bull.* In press
- DeNeve KM. 1999. Happy as an extraverted clam? The role of personality for subjective well-being. *Curr. Dir. Psychol. Sci.* 8:141–44
- DeNeve KM, Cooper H. 1998. The happy personality: a meta-analysis of 137 personality traits and subjective well-being. *Psychol. Bull.* 124:197–229
- Diener E. 1984. Subjective well-being. *Psychol. Bull.* 95:542–75
- Diener E, Diener M. 1995. Cross-cultural correlates of life satisfaction and self-esteem. *J. Pers. Soc. Psychol.* 68:653–63
- Diener E, Lucas RE. 1999. Personality and subjective well-being. See Kahneman et al 1999, pp. 213–29
- Diener E, Lucas RE. 2000. Subjective emotional well-being. In *Handbook of Emotions*, ed. M Lewis, JM Haviland, pp. 325–37. New York: Guilford. 2nd ed.
- Diener E, Sandvik E, Pavot W. 1991. Happiness is the frequency, not the intensity, of positive versus negative affect. In *Subjective Well-Being: An Interdisciplinary Perspective*, ed. F Strack, M Argyle, N Schwarz, pp. 119–39. New York: Pergamon
- Diener E, Sapyta JJ, Suh E. 1998. Subjective well-being is essential to well-being. *Psychol. Inq.* 9:33–37
- Elliot AJ, Sheldon KM. 1997. Avoidance achievement motivation: a personal goals analysis. *J. Pers. Soc. Psychol.* 73:171–85
- Elliot AJ, Sheldon KM, Church MA. 1997. Avoidance personal goals and subjective well-being. *Pers. Soc. Psychol. Bull.* 23:915–27
- Emmons RA. 1986. Personal strivings: an approach to personality and subjective well-being. *J. Pers. Soc. Psychol.* 51:1058–68
- Frey BS, Stutzer A. 1999. Measuring preferences by subjective well-being. *J. Inst. Theor. Econ.* 155:755–78
- Fromm E. 1981. Primary and secondary process in waking and in altered states of consciousness. *Acad. Psychol. Bull.* 3:29–45
- Gable SL, Reis HT. 1999. Now and then, them and us, this and that: studying relationships across time, partner, context, and person. *Pers. Relat.* 6:415–32
- Hayamizu T. 1997. Between intrinsic and extrinsic motivation: examination of reasons for academic study based on the theory of internalization. *Jpn. Psychol. Res.* 39:98–108
- Hazan C, Shaver P. 1987. Romantic love conceptualized as an attachment process. *J. Pers. Soc. Psychol.* 52:511–24
- Headey B, Wearing A. 1989. Personality, life events, and subjective well-being: toward a dynamic equilibrium model. *J. Pers. Soc. Psychol.* 57:731–39
- Higgins ET, Kruglanski AW, eds. 1996. *Social Psychology: Handbook of Basic Principles*. New York: Guilford
- Kahneman D. 1999. Objective happiness. See Kahneman et al 1999, pp. 3–25
- Kahneman D, Diener E, Schwarz N, eds. 1999. *Well-Being: The Foundations of Hedonic Psychology*. New York: Russell Sage Found.
- Kasser T, Ryan RM. 1993. A dark side of the American dream: correlates of financial success as a central life aspiration. *J. Pers. Soc. Psychol.* 65:410–22
- Kasser T, Ryan RM. 1996. Further examining the American dream: differential correlates of intrinsic and extrinsic goals. *Pers. Soc. Psychol. Bull.* 22:280–87
- Kasser VM, Ryan RM. 1999. The relation of psychological needs for autonomy and relatedness to health, vitality, well-being and mortality in a nursing home. *J. Appl. Soc. Psychol.* 29:935–54
- King LA, Napa CK. 1998. What makes life good? *J. Pers. Soc. Psychol.* 75:156–65
- King LA, Pennebaker JW. 1998. What's so great about feeling good? *Psychol. Inq.* 9:53–56
- Kubovy M. 1999. On the pleasures of the mind. See Kahneman et al 1999, pp. 134–54

- La Guardia JG, Ryan RM, Couchman C, Deci EL. 2000. Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *J. Pers. Soc. Psychol.* 79:367–84
- Larsen RJ, Diener E. 1987. Affect intensity as an individual difference characteristic: a review. *J. Res. Pers.* 21:1–39
- Lee GR, Ishii-Kuntz M. 1987. Social interaction, loneliness, and emotional well-being among the elderly. *Res. Aging* 9:459–82
- Little BR. 1989. Personal projects analysis: trivial pursuits and magnificent obsessions, and the search for coherence. In *Personality Psychology: Recent Trends and Emerging Directions*, ed. D Buss, N Cantor, pp. 15–31. New York: Springer-Verlag
- Little TD. 1997. Mean and covariance structures (MACS) analyses of cross-cultural data: practical and theoretical issues. *Multiv. Behav. Res.* 32:53–76
- Lyubomirsky S, Ross L. 1999. Changes in attractiveness of elected, rejected, and precluded alternatives: a comparison of happy and unhappy individuals. *J. Pers. Soc. Psychol.* 76:988–1007
- Lyubomirsky S, Tucker KL. 1998. Implications of individual differences in subjective happiness for perceiving, interpreting, and thinking about life events. *Motiv. Emot.* 22:155–86
- Markus HR, Kitayama S, Heiman RJ. 1996. Culture and basic psychological principles. See Higgins & Kruglanski 1996, pp. 857–913
- Maslow AH. 1971. *The Farther Reaches of Human Nature*. New York: Viking
- McGregor I, Little BR. 1998. Personal projects, happiness, and meaning: on doing well and being yourself. *J. Pers. Soc. Psychol.* 74:494–512
- Mikulincer M, Florian V. 1998. The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In *Attachment Theory and Close Relationships*, ed. JA Simpson, WS Rholes, pp. 143–65. New York: Guilford
- Mroczek DK, Kolarz CM. 1998. The effect of age on positive and negative affect: a developmental perspective on happiness. *J. Pers. Soc. Psychol.* 75:1333–49
- Myers DG. 1999. Close relationships and quality of life. See Kahneman et al 1999, pp. 374–91
- Nezlek JB. 2000. The motivational and cognitive dynamics of day-to-day social life. In *The Social Mind: Cognitive and Motivational Aspects of Interpersonal Behaviour*, ed. JP Forgas, K Williams, L Wheeler, pp. 92–111. New York: Cambridge Univ. Press
- Nix G, Ryan RM, Manly JB, Deci EL. 1999. Revitalization through self-regulation: the effects of autonomous versus controlled motivation on happiness and vitality. *J. Exp. Soc. Psychol.* 35:266–84
- Oishi S, Diener E, Lucas RE, Suh E. 1999. Cross-cultural variations in predictors of life satisfaction: perspectives from needs and values. *Pers. Soc. Psychol. Bull.* 25:980–90
- Okun MA, Stock WA, Haring MJ, Witter RA. 1984. The social activity/subjective well-being relation: a quantitative synthesis. *Res. Aging* 6:45–65
- Parrott WG. 1993. Beyond hedonism: motives for inhibiting good moods and for maintaining bad moods. In *Handbook of Mental Control*, ed. DM Wegner, JW Pennebaker, pp. 278–305. Englewood Cliffs, NJ: Prentice-Hall
- Peterson C. 1999. Personal control and well-being. See Kahneman et al 1999, pp. 288–301
- Reis HT, Patrick BC. 1996. Attachment and intimacy: component process. See Higgins & Kruglanski 1996, pp. 523–63
- Reis HT, Sheldon KM, Gable SL, Roscoe J, Ryan RM. 2000. Daily well-being: the role of autonomy, competence, and relatedness. *Pers. Soc. Psychol. Bull.* 26:419–35
- Roberts BW, Donahue EM. 1994. One personality, multiple selves: integrating personality and social roles. *J. Pers.* 62:199–218
- Rogers C. 1963. The actualizing tendency in relation to “motives” and to consciousness. In *Nebraska Symposium on Motivation*, ed. MR

- Jones, 11:1–24. Lincoln: Univ. Nebr. Press
- Ryan RM, Chirkov VI, Little TD, Sheldon KM, Timoshina E, Deci EL. 1999. The American dream in Russia: extrinsic aspirations in two cultures. *Pers. Soc. Psychol. Bull.* 25:1509–24
- Ryan RM, Deci EL. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am. Psychol.* 55:68–78
- Ryan RM, Frederick CM. 1997. On energy, personality and health: subjective vitality as a dynamic reflection of well-being. *J. Pers.* 65:529–65
- Ryan RM, La Guardia JG. 2000. What is being optimized over development? A self-determination theory perspective on basic psychological needs across the life span. In *Psychology and the Aging Revolution*, ed. SH Qualls, N Abeles, pp. 145–72. Washington, DC: APA Books. In press
- Ryan RM, Lynch J. 1989. Emotional autonomy versus detachment: revisiting the vicissitudes of adolescence and young adulthood. *Child Dev.* 60:340–56
- Ryff CD. 1989a. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J. Pers. Soc. Psychol.* 57:1069–81
- Ryff CD. 1989b. In the eye of the beholder: views of psychological well-being among middle-aged and older adults. *Psychol. Aging* 4:195–210
- Ryff CD. 1991. Possible selves in adulthood and old age: a tale of shifting horizons. *Psychol. Aging* 6:286–95
- Ryff CD. 1995. Psychological well-being in adult life. *Curr. Dir. Psychol. Sci.* 4:99–104
- Ryff CD, Keyes CLM. 1995. The structure of psychological well-being revisited. *J. Pers. Soc. Psychol.* 69:719–27
- Ryff CD, Magee WJ, Kling KC, Wing EH. 1999. Forging macro-micro linkages in the study of psychological well-being. In *The Self and Society in Aging Processes*, ed. CD Ryff, VW Marshall, pp. 247–78. New York: Springer
- Ryff CD, Singer B. 1998. The contours of positive human health. *Psychol. Inq.* 9:1–28
- Ryff CD, Singer B. 2000. Interpersonal flourishing: a positive health agenda for the new millennium. *Pers. Soc. Psychol. Rev.* 4:30–44
- Ryff CD, Singer BH, Wing E, Love GD. 2001. Elective affinities and uninvited agonies: mapping emotion with significant others onto health. In *Emotion, Social Relationships, and Health: Third Annual Wisconsin Symposium on Emotion*, ed. CD Ryff, BH Singer. New York: Oxford Univ. Press. In press
- Schmuck P, Kasser T, Ryan RM. 2000. The relationship of well-being to intrinsic and extrinsic goals in Germany and the U.S. *Soc. Indic. Res.* 50:225–41
- Schmutte PS, Ryff CD. 1997. Personality and well-being: reexamining methods and meanings. *J. Pers. Soc. Psychol.* 73:549–59
- Schwarz N, Strack F. 1991. Evaluating one's life: a judgment model of subjective well-being. In *Subjective Well-Being: An Interdisciplinary Perspective*, ed. F Strack, M Argyle, pp. 27–47. Oxford, UK: Pergamon
- Seidlitz L. 1993. *Agreeableness, conscientiousness, and openness as related to subjective well-being*. Presented at 6th Meet. Int. Soc. Study Individ. Differ., Baltimore, MD
- Seligman M, Csikszentmihalyi M. 2000. Positive psychology: an introduction. *Am. Psychol.* 55:5–14
- Sen A. 1999. *Development as Freedom*. New York: Knopf
- Sheldon KM, Elliot AJ. 1999. Goal striving, need satisfaction, and longitudinal well-being: the self-concordance model. *J. Pers. Soc. Psychol.* 76:482–97
- Sheldon KM, Kasser T. 1995. Coherence and congruence: two aspects of personality integration. *J. Pers. Soc. Psychol.* 68:531–43
- Sheldon KM, Kasser T. 1998. Pursuing personal goals: Skills enable progress, but not all progress is beneficial. *Pers. Soc. Psychol. Bull.* 24:1319–31
- Sheldon KM, Ryan RM, Rawsthorne LJ, Iлари B. 1997. “Trait” self and “true” self:

- cross-role variation in the big five personality traits and its relations with psychological authenticity and subjective well-being. *J. Pers. Soc. Psychol.* 73:1380–93
- Sheldon KM, Ryan RM, Reis HT. 1996. What makes for a good day? Competence and autonomy in the day and in the person. *Pers. Soc. Psychol. Bull.* 22:1270–79
- Shizgal P. 1999. On the neural computation of utility: See Kahneman et al 1999, pp. 500–24
- Simpson JA. 1990. Influence of attachment styles on romantic relationships. *J. Pers. Soc. Psychol.* 59:971–80
- Suh E, Diener E, Fujita F. 1996. Events and subjective well-being: Only recent events matter. *J. Pers. Soc. Psychol.* 70:1091–102
- Suh E, Diener E, Oishi S, Triandis HC. 1998. The shifting basis of life satisfaction judgements across cultures: emotions versus norms. *J. Pers. Soc. Psychol.* 74:482–93
- Tooby J, Cosmides L. 1992. The psychological foundations of culture. In *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, ed. JH Barkow, L Cosmides, J Tooby, pp. 19–136. New York: Oxford Univ. Press
- Uchino BN, Uno D, Holt-Lunstad J. 1999. Social support, physiological processes, and health. *Curr. Dir. Psychol. Sci.* 8:145–48
- Vallerand RJ. 1997. Toward a hierarchical model of intrinsic and extrinsic motivation. In *Advances in Experimental Social Psychology*, ed. MP Zanna, 29:271–360. San Diego, CA: Academic
- Waterman AS. 1993. Two conceptions of happiness: contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *J. Pers. Soc. Psychol.* 64:678–91

Copyright of Annual Review of Psychology is the property of Annual Reviews Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.