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Journal of Personality and Social Psychology
1998, Vol. 74, Issue 2, pp. 494 - 512, <http://dx.doi.org/10.1037/0022-3514.74.2.494>.

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Personal Projects, Happiness, and Meaning: On Doing Well and Being Yourself

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Personal Projects Analysis (B. R. Little, 1983) was adapted to examine relations between participants' appraisals of their goal characteristics and orthogonal happiness and meaning factors that emerged from factor analyses of diverse well-being measures. In two studies with 146 and 179 university students, goal efficacy was associated with happiness and goal integrity was associated with meaning. A new technique for classifying participants according to emergent identity themes is introduced. In both studies, identity-compensatory predictors of happiness were apparent. Agentic participants were happiest if their goals were supported by others, communal participants were happiest if their goals were fun, and hedonistic participants were happiest if their goals were being accomplished. The distinction between happiness and meaning is emphasized, and the tension between efficacy and integrity is discussed. Developmental implications are discussed with reference to results from archival data from a sample of senior managers.

Wisdom literature has long promoted being true to oneself as a desirable alternative to preoccupation with success. Warnings against blind achievement are present in two of the earliest known written records, from about 3,700 years ago. In the Atrahasis epic, the gods punish "noisy" ambition with a terrible flood, and in the Gilgamesh epic, personal accomplishments lose their meaning for the protagonist in light of his friend's death (Fisher, 1970; Guirand, 1977, pp. 49–72). Similarly, in the Genesis Tower of Babel story, ambition is punished by confusion, and in Ecclesiastes, achievements are dismissed as vanity and folly. The corollary to these recommendations is represented by injunctions from Greek philosophy that "the unexamined life is not worth living" and that one should "know thyself." The examples given above converge on a theme so commonplace that it regularly appears in Hollywood films (e.g., "Regarding Henry," "The Doctor," and "The Fisher King"). Each of these films features a highly successful character absorbed in his accomplishments until some crisis makes his life feel meaningless.

Preparation of this article was supported in part by research grants from the Social Sciences and Humanities Research Council of Canada (SSHRC). Funding was also provided by an Ontario Graduate Scholarship and an SSHRC doctoral fellowship. Partial reports of these data were presented at the annual meeting of the Canadian Psychological Association, Penticton, British Columbia, Canada, May 1994.

Study 1 is based on Ian McGregor's master's thesis under the supervision of Brian R. Little. We thank Rebecca Cohen, John Holmes, Len Lecci, Geoff MacDonald, Lisa Sinclair, Eric Woody, and the members of the Carleton University Social Ecology Laboratory for helpful commentary.

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Meaning is restored and the crisis is resolved when he begins to act with integrity. Just as these examples converge on the prudence of mitigating mere success with integrity, an illustration from Hindu mythology depicts optimal functioning as involving both effective action and integrity. The popular "Dancing Shiva" icon portrays Shiva's active arms waving symbols of creation and destruction, while his head remains centered and motionless among the flurry of the four busy arms (Zimmer, 1946, pp. 151–168).

These examples represent an enduring and pervasive voice in the humanities which recommends that optimal human functioning involves integrity as well as the ability to accomplish goals. But why do wisdom traditions preach integrity? Social psychological research shows that effectiveness is a robust predictor of well-being (e.g., Bandura, 1977; Emmons, 1986; Wilson, 1990), that "knowing thyself" can make one "sadder but wiser" (e.g., Duval & Wicklund, 1972; Taylor & Brown, 1988), and that careful deliberation about action can depress mood and decrease self-esteem (Taylor & Gollwitzer, 1995). Has social psychology debunked the 3,700-year-old integrity myth? We do not think so. In this article, we contend that "doing well" is associated with happiness and that "being yourself" is associated with a different kind of well-being than has typically been assessed in past research, namely, meaning.

Efficacy and Integrity

Personality and social psychology presents a dialectic between emphases on doing well and being oneself. In parallel with the large body of research on the antecedents and consequences of successful goal completion (e.g., Bandura, 1977; Locke & Latham, 1990), there is a growing interest in personal-ity integration. According to Deci and Ryan (1991):

Organismic integration refers to the most basic developmental strivings of the self . . . toward unity in one's "self," that is, toward coherence in one's regulatory activity and experience . . . [and]

... toward interacting in a coherent and meaningful way with others so as to experience satisfying personal relationships with individuals and a harmonious relation to the larger social order. (p. 243)

Rothbaum, Weisz, and Snyder (1982) refer to the dual function of social behavior as "outward control" and "interpretive control." Outward control refers to bringing the environment in line with one's wishes (e.g., earning more money). Interpretive control refers to reconciling oneself with the environment (e.g., "It's OK that I'm poor. People mean more to me than money."). Brickman (1987) draws a related distinction between "control" and "value":

Social psychology . . . could be divided into two general parts. One part deals with the general theme of how people act on, cope with, and try to shape their external environment. . . . The other part deals with the general question of what determines people's thoughts and feelings, or how people structure their internal environment. (p. 16)

In this article, we use the terms *efficacy* and *integrity* to refer to these dual concerns, which we operationalize as participants' self-ratings of their personal projects¹ (Little, 1983). Efficacy refers to how likely one's projects are to be successful, and integrity refers to how consistent one's projects are with core aspects of the self.² We chose personal projects for our unit of analysis in this research because they can be vehicles for both efficacy and integrity; that is, as well as having obvious pragmatic implications, they can symbolically mediate the self-concept (e.g., Wicklund & Gollwitzer, 1982). For example, action identification theory describes identity as being a cumulative product of the meanings attached to everyday behaviors (Vallacher & Wegner, 1985). Although the project "get my drivers license" could serve an efficacy function of helping one to commute more effectively, it could also contribute to the integrity of a grown-up identity.

Although some projects are capable of supporting both functions, Little (1987, 1989) has referred to the possible tension between integrity and efficacy as the "meaning and manageability tradeoff." Single-mindedly pursuing "magnificent obsessions" that contribute to integrity may indeed infuse life with meaning but may also lead to considerable frustration. Insisting on integrity may undermine a sense of efficacy more easily attained through attention to achieving "small wins" (Weick, 1984). Conversely, pursuing efficacy through relatively "trivial pursuits" may contribute to a sense of accomplishment and manageability but may not feel particularly meaningful. For example, it is reputed that as one of his spiritual exercises, Mahatma Gandhi would sometimes abstain from affectionate contact with his wife. Although this practice may have contributed to his sense of personal integrity, it is reported to have introduced strain on the manageability of his relationship. Replacing his abstinence with resolve to show more affection might have facilitated the manageability of his relationship but also might have felt less meaningful for him. Although some zealots do radically limit personal efficacy in service of "the principle of the thing" (e.g., saints and suicide bombers) and some inveterate hypocrites chronically ignore the call of integrity in the pursuit of success (e.g., unethical executives and

sociopaths), we think that most people are to some extent pulled in both directions. In this research, we used Personal Projects Analysis (PPA; Little, 1983) to investigate the impact of efficacy and integrity on well-being measures of happiness and meaning.

Happiness and Meaning

The topic of meaning in life is approached warily by most academic psychologists. Yalom (1980, p. 19) attributes the rift between humanistic psychology and the academic community to the carnival atmosphere and anti-intellectualism of the humanistic psychological movement in the 1960s. Whatever the reason, empirical researchers tend to ignore the rich clinical and existential literature on meaning (e.g., Frankl, 1959/1963; Jung, 1933; Maslow, 1968; Rogers, 1961; see Yalom for a review) and to equate subjective well-being with happiness as operationalized by composite measures of life satisfaction and positive and negative affect (e.g., Diener, 1984; Myers, 1992; Veenhoven, 1991). But the more meaningful aspects of well-being have recently been regaining some credibility in mainstream personality and social psychology (e.g., see Baumeister, 1992; Brickman, 1987; Chamberlain & Zika, 1988; Deci & Ryan, 1991; DeVogler & Ebersole, 1981; Kasser & Ryan, 1993; Klinger, 1977; Little, 1989, in press; McAdams, 1993; Reker, Peacock, & Wong, 1987; Ryff, 1989; Ryff & Keyes, 1995; Sheldon & Kasser, 1995; Vallacher & Wegner, 1985; Wong & Fry, in press).

Two examples given by Baumeister (1992, p. 214) provide an illustration of the difference between happiness and meaning. First, in retrospect parents usually report that they are very glad they had children, but parents living with children usually score very low on happiness indicators. This "parenthood paradox" might be explained by differentiating between happiness and meaning; that is, raising children may tend to decrease parental

¹ Personal projects (e.g., "floss regularly," "finish my calculus assignment," and "help the poor") are self-generated accounts of what a person is doing or is planning to do. In the last 20 years, several related Personal Action Construct units (Little, 1993) have been elaborated, the most prominent being behavioral acts (Buss & Craik, 1983), current concerns (Klinger, 1977), personal projects (Little, 1983), personal strivings (Emmons, 1986), and life tasks (Cantor, Norem, Neidenthal, Langston, & Brower, 1987). Although there is a great deal of conceptual overlap, each approach has unique theoretical nuances. We prefer personal projects because they target an intermediate level of analysis. Current concerns and behavioral acts (Buss & Craik, 1983) refer to subjective states and specific acts, respectively. Life tasks and personal strivings assess superordinate trends; for example, strivings have been theoretically linked to motives and needs, and life tasks are normative and socially prescribed. The intermediate level and idiosyncratic nature of personal projects allow them to provide information about environmental constraints on efficacy and symbolic implications for integrity (Little, 1972, 1996).

² Sheldon, Ryan, and Reis (1996) make a similar distinction between "competence" and "autonomy." We prefer the term efficacy to competence because efficacy implies both personal and situational influences on action. We prefer the term integrity to autonomy because autonomy seems to refer to the motivation behind action, whereas integrity refers only to consistency between action and other aspects of the self (see also Omodei & Wearing, 1990, for a related distinction between "need satisfaction" and "involvement").

happiness but to increase parental meaning. Similarly, guerrilla revolutionaries may feel unhappy about their miserable living conditions, but the zealous fight for a cherished cause may infuse their lives with meaning. Recently, Ryff (1989) and Ryff and Keyes (1995) delineated several facets of meaning. They advocate more research attention to meaningful dimensions of well-being which have strong theoretical precedents but which have been neglected in past research, presumably because they do not translate directly into conventional measures of happiness.

One of the goals of our research is to further legitimize the meaning construct with clearer theoretical and operational definitions. Drawing on Dilthey's (1910/1977) contention that meaning arises from consistency across time and context and on balance theories that accent the desirability of consonance among cognitive elements, our primary theoretical criterion for meaning is a structural one of consonance among the temporally extended and contextually distributed elements of the self (cf. Little, 1993). From an associative network perspective (Shultz & Lepper, 1992; Read, Vanman, & Miller, 1997), nodes or elements of the self, such as defining memories, relationships, personal projects, values, and possible selves (see Figure 1), can be conceptualized as being connected by excitatory or inhibitory linkages representing their various levels of compatibility. To the extent that elements fit well together in a complementary pattern of linkages, we think that meaning will be experienced. In contrast, a self characterized by contradictory linkages will be associated with feelings of meaninglessness. This model is consistent with recent associative network concepts such as harmony (Smolensky, 1986) and coherence (Thagard, 1989) and is also reminiscent of early consistency theories, which emphasized the motivational importance of systemic concepts such as balance (Heider, 1946) and dissonance (Festinger, 1957).

Our hunch that inconsistency within the self will result in a distinct kind of negative outcome is substantiated by recent research on the affective consequences of attitude-behavior inconsistency. A large body of cognitive dissonance research over the last 40 years has demonstrated that discomfort results from engaging in behaviors that are inconsistent with attitudes, but the discomfort has usually been indirectly inferred from the

attitude change that ensues after induced compliance with a counterattitudinal task (e.g., Zanna & Cooper, 1974). Recently, however, Elliot and Devine (1994) succeeded in directly measuring dissonance discomfort and found that only certain kinds of negative affect are stimulated by attitude-behavior inconsistency. In their research, counterattitudinal behavior increased feelings of being *uncomfortable*, *bothered*, and *uneasy* but had no influence on *happiness*, *good feelings*, *energy*, *optimism*, *embarrassment*, or *shame* or on *anger*, *dissatisfaction*, *disgust*, or *annoyance* with self. These findings suggest that the feelings associated with inconsistency are distinct from the feelings that are typically assessed in conventional well-being indicators. We think that the uneasy, bothered, and uncomfortable kinds of feelings are the kinds that would accumulate to be experienced as *meaninglessness* in response to a nonintegrated self. Indeed, they seem somewhat related to the term *nausea*, which Sartre (1943/1956) used to describe the feelings associated with acute awareness of meaninglessness and absurdity.

In this research, our predictor variable for meaning is integrity—the extent to which participants appraise their personal projects as consistent with their values, commitments, and other important aspects of self-identity. We think that the assessment of consistency between projects and core elements of the self will provide an adequate proxy variable for overall systemic integrity because projects reflect the temporally extended and contextually distributed self (Little, 1993). For example, the personal project “play professional hockey” could simultaneously reflect influences from temporally extended elements of the self concept, such as the defining memory “my grandfather, the hockey legend” and the possible-self “famous,” as well as from more contextual and relational elements, such as “being able to pay off my student loans” and “impress Dianne so that she might consider marrying me one day.” If personal projects are valid samples of the distributed self, then their consistency with core elements of the self should reflect overall integrity and, according to our hypothesis, should therefore be related to the experience of meaning. We operationalized meaning using participants' responses on scales such as the Purpose in Life scale in Study 1 (Crumbaugh & Maholick, 1964) and several other scales in Study 2 that tap into the shared theme of consistency and connectedness among the diverse elements of the temporally extended and contextually distributed self. On the basis of the theory discussed above, we expected integrity to be associated with meaning (cf. Little, in press). In addition, we expected to replicate the common finding that efficacy is associated with happiness indicators (Bandura, 1977; Locke & Latham, 1990; Scheier & Carver, 1988; Wilson, 1990).

Identity Themes

Given the diverse array of self elements (see Figure 1), how do people maintain a consistent identity? We rely on the theories of McAdams (1985, 1993) and Singer and Salovey (1993) for our understanding of how self-consistency is preserved. McAdams (1985, 1993) refers to identity as a story that is lived by and that incorporates complexity and provides lives with unity and purpose. Similarly, Singer and Salovey (1993) conceive of the self as a collection of defining memories and future goals that are linked together by a narrative to yield a sense of

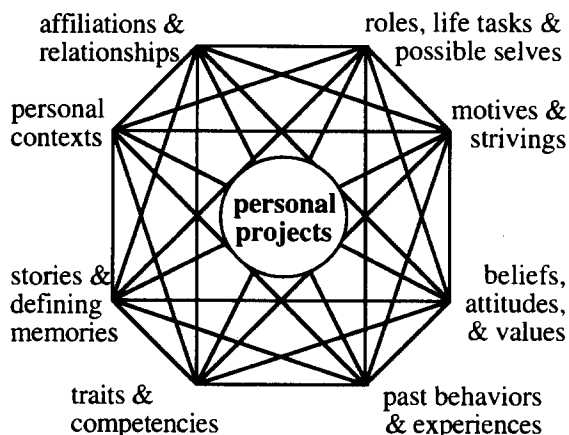


Figure 1. Elements of the temporally extended and contextually distributed self.

meaning and purpose. In light of these perspectives, we assume that self-consistency is facilitated by narratives that help to organize potentially inconsistent elements into an integrated pattern.

But is consistency the whole story? Thus far, we have treated identity themes as unimportant, focusing instead on structural considerations. Our model simply predicts that individuals will report highest meaning when their projects are consistent with core aspects of the self. Perhaps some identity themes are more conducive to happiness and meaning than others, however. Also, well-being may be negotiated differently for people with different identity themes. As a corollary to the expected integrity-meaning relation, we expected that more meaning would be reported by participants whose projects were well matched to their *primary* identity themes. For example, individuals with communal identities should experience more meaning when their projects are communal, and agentic individuals should experience more meaning when their projects are agentic. To explore these possibilities, we planned to categorize participants' identities as primarily agentic, communal, or hedonistic in theme and to compare well-being between primary identity groups and correlates of well-being within primary identity groups. There is a rich theoretical precedent for our expectation that identities would be agentic and communal, agency being characterized by mastery, power, and self-enhancement and communion being characterized by intimacy, solidarity, and connection with others (e.g., Bakan, 1966; McAdams, 1985, 1993; see Wiggins, 1991, for a review). Our pilot studies confirmed the prominence of agentic and communal themes in the identities of university students and suggested hedonism as another prevalent theme.

Summary

We designed the following studies to investigate the relationships between personal project characteristics of efficacy and integrity and well-being measures of happiness and meaning. On the basis of past goal research, we expected happiness to be associated with efficacy. On the basis of the model described above, we expected meaning to be associated with integrity (see Figures 1 and 2). Furthermore, as more direct evidence for the integrity-meaning relation, we expected the highest levels of meaning to be reported by participants whose personal projects were most consistent with their primary identity themes.

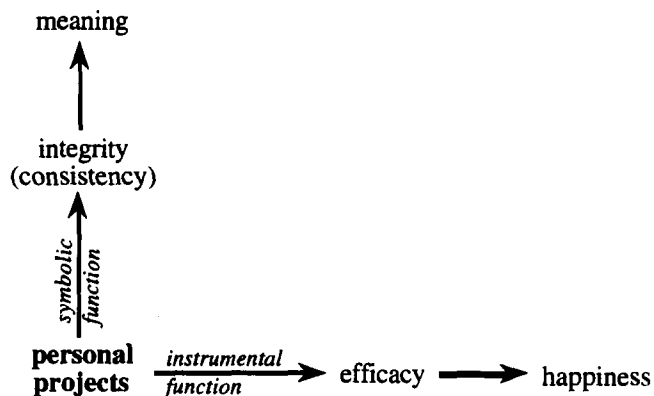


Figure 2. Dual functions of personal projects.

Study 1

We hypothesized that (a) personal project efficacy would be positively associated with happiness; (b) personal project integrity would be positively associated with meaning; (c) identities would constellate around themes of agency, communion, and hedonism; and (d) within each identity group, meaning would be positively associated with the pursuit of projects that reflect the primary identity theme. For example, we anticipated that individuals with primarily hedonistic identity themes would report higher meaning to the extent that they were having fun with their projects. This hypothesis is a more specific test of Hypothesis 2. In summary, we attempted to extend previous research on goals and subjective well-being by showing that different goal characteristics are associated with different kinds of well-being and that well-being may be negotiated differently by people whose identities are primarily agentic, communal, or hedonistic.

Method

Participants and Procedures

We recruited 81 women and 67 men from an introductory psychology course and gave them academic credit for participating. Data were collected in five group sessions with 13 to 40 participants per session. One man and one woman completed materials improperly, so their data were deleted. Each session was 90 min long, with demographic and well-being measures being collected before PPA materials. The sessions took place on the first 3 days of "study week" (December 6, 7, and 8), when many participants were completing term assignments and planning their study schedules for the upcoming final examinations. This time frame had the advantage of being a minor transition period with an elevated press for agentic (e.g., examination performance), communal (e.g., family and friends), and hedonistic (e.g., Christmas and end-of-term parties) behaviors. As such, self-relevant information from each domain should have been relatively accessible. Participants came from a wider demographic spectrum than is usually represented in first-year undergraduate courses because the course was televised. Many of the participants were from outlying rural areas, and many were mature and/or part-time students ($M = 23$ years old, $SD = 6.3$). Fewer than half were full-time students directly out of high school.

PPA

Instructions. We introduced personal projects to the participants as follows: "We are interested in studying the kinds of activities and concerns that people have in their lives. We call these personal projects. All of us have a number of personal projects at any given time that we think about, plan for, carry out, and sometimes (though not always) complete." We then showed participants examples and gave them 10 min to generate a list of personal projects that they were engaged in or intending to begin over the next month or so. After participants generated the initial list of projects, we instructed them to select the 10 that together provided the most complete and informative overview of their lives and to rate each of the 10 projects from 0 to 10 on 35 dimensions³ such as

³ Of the 35 dimensions used in this study, 23 have been used in past PPA research (importance, enjoyment, difficulty, visibility, control, initiation, stress, time pressure, outcome, self-identity, others' view of importance, value congruency, net impact, progress, challenge, absorption, self-worth, commitment, future self, self-benefit, others' benefit, social support, and creativity) and 12 were newly added for the purposes of this study (significance, fun, pride, power, communion, psychological risk, pleasure, trust, purpose, affiliation, health, and consumption).

difficulty and enjoyment (see Appendix for descriptions). We supplied anchors for all of the dimensions (e.g., "use 10 for a project that you find very difficult to carry out and 0 for one that you do not find difficult at all") and examples to clarify some dimensions. This procedure resulted in 10 project ratings per person on each of the 35 PPA dimensions.

Project factors. Each participant's 10 ratings per dimension were averaged across the projects, yielding 35 dimensional means per participant. All participants' 35 dimensional means were then entered into a principal-components analysis to stabilize the data and to reduce the number of subsequent statistical tests that would be required. All principal-components analyses in this research used varimax rotation to produce orthogonal factors and replaced missing values with the mean. Factor scores for all analyses were saved according to the Anderson-Rubin criterion, which maximizes the orthogonality of the factors and yields scores with a mean of zero and a standard deviation of one (Tabachnick & Fidell, 1989, p. 641). This strategy was deemed advantageous because all factors were used as subsequent predictor or criterion variables (Tabachnick & Fidell, p. 637). Our *N*:variable ratio was slightly lower than the common 5:1 rule-of-thumb minimum, but the *N*:variable criterion becomes less important when *N* exceeds 100 (Barret & Kline, 1981).

In keeping with past PPA research (Ruehlman & Wolchik, 1988; Wilson, 1990), we expected efficacy, integrity, and support factors to emerge, efficacy referring to how achievable projects are, integrity describing how consistent projects are with other aspects of the self, and support referring to how supportive other people are of projects. We also expected factors related to self-benefit and fun to emerge because we had included new dimensions relevant to each theme. We intended to use the *project factor* scores to assess the relations between personal project characteristics and subjective well-being.

Subjective Well-Being

Several measures were included in an attempt to represent life satisfaction, negative affect, positive affect, and life meaning. Each measure is briefly described below.

Domain-specific life satisfaction. A six-item, 11-point scale was used to assess the extent to which respondents were satisfied with life in general and with five domains of life: (a) social-relational, (b) personal-emotional, (c) academic-vocational, (d) health, and (e) administration-maintenance. This scale has shown consistent relationships with personality and PPA variables (Little, Lecci, & Watkinson, 1992; Palys, 1979; Palys & Little, 1983), and Burisch (1984a, 1984b) has demonstrated that such short, simple, undisguised, rationally derived scales can have reliability equal or superior to that of longer, empirically derived inventories. Schwarz and Strack (1991) have recommended the use of domain-specific satisfaction items because they are less likely than global life satisfaction items to elicit responses based on recency, current mood, social desirability, and other potential confounds.

Depression. The Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977), which assesses depressive symptomatology, was used as one of the measures of affect to complement the more cognitive appraisals of life satisfaction. The 20 items ask respondents to consider and rate actions and feelings of the past week on a 4-point scale. The CES-D has shown significant correlations with PPA dimensions (Little, 1989), and was designed not for clinical assessment but for investigating the relationships between depressive symptomatology and other variables across population subgroups (Radloff, 1977).

Stress. The 14-item Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) uses a 5-point scale to assess how often respondents have felt stressed in the past month. Unlike the popular Life Event Scale (Holmes & Rahe, 1967), it can tap directly into perceived stress by accessing affect attributable to unspecified daily hassles, idiosyncratically construed stressful events, and anticipatory stress.

Positive affect. The positive affect module of the Affect Balance Scale (Bradburn, 1969) contains five Yes/No questions about recent positive affect. It is a widely used scale with adequate construct validity (Larsen, Diener, & Emmons, 1985).

Meaning. The Purpose in Life scale (PIL; Crumbaugh & Maholick, 1964) was designed to measure Frankl's (1959/1963) concept of *noogenic neurosis*: an emptiness of purpose in life. Growing out of the principles of existential philosophy, noogenic neurosis describes a vacuum of perceived meaning in existence. The PIL contains 20 items scored on a 7-point semantic differential scale. Although it has been the most widely used measure of the construct and has adequate reliability (Crumbaugh, 1968; Crumbaugh & Maholick, 1964), a factor analysis of PIL items conducted by Chamberlain and Zika (1988) yielded a multifactorial solution. For this reason, we entered the items into a principal-components analysis to determine whether PIL happiness and PIL meaning factors would emerge. If so, we intended to treat them as separate scales.

Well-being factors. All of the above well-being scale totals were entered into a principal-components analysis. We expected that general happiness and meaning factors would result. We planned to assess the normative correlations between each kind of well-being and the expected efficacy and integrity project factors.

Assessment of Identity Themes

As described above, to test Hypothesis 2 we planned to assess the normative relation between scores on an expected integrity project factor and scores on an expected meaning factor. To augment this assessment with a more direct assessment of the predicted integrity-meaning relation, we planned another set of analyses based on the categorization of participants according to their primary identity themes. Hypothesis 4 predicts that participants will report higher levels of meaning to the extent that they score highly on project factors that are consistent with their primary identity themes. For example, participants with primarily hedonistic identities should experience meaning to the extent that their projects are fun. To test this idea, we grouped participants according to their primary identity themes using the following procedure.

Identity factors. First, we ran correlations within each participant between the 10 project ratings on the self-identity dimension (i.e., "to what extent does this project feel distinctly you—like a personal trademark as opposed to feeling alien to you") and the 10 project ratings on each of the other 34 dimensions (e.g., enjoyment, communion, and power). This procedure resulted in 34 within-person correlations for each participant, representing the relevance of each dimension to his or her sense of self. We transformed all participants' within-person correlations using Fisher's *r*-to-*z* transformation⁴ and then entered them all into a principal-components analysis with the expectation that agentic, communal, and hedonistic *identity factors*⁵ would emerge (Hy-

⁴ The formula used was $z = .5 [\log_e(|1 + r/1 - r|)]$. This transformation preserves the normality of distributions of correlations (Howell, 1992, p. 255). Principal-components analysis solutions are enhanced when input variables are normally distributed (Tabachnick & Fidell, 1989, p. 603).

⁵ It is important to emphasize the difference between these identity factors and the project factors mentioned earlier. Although we expected both sets of factors to reflect similar themes, they measured different constructs (i.e., project characteristics vs. identity orientation), so we expected correlations between them to be minimal. There are many contextual influences that can contribute to the kinds of projects that one undertakes, so, for example, we did not expect participants whose identities were primarily hedonistic to necessarily be having more fun with their projects. One could have a hedonistic identity but be immersed in somewhat alienating circumstances that call for projects that are not much fun (e.g., needing to get a 90% average to satisfy parents who are paying for education). Three projects for such a person might be

pothesis 3). Scores on the resulting identity factors were saved for each participant.

Identity groups. For each identity factor, all participants' scores were compared and ranked. This procedure resulted in four ranks per participant. Each participant was then classified as having the primary identity theme that corresponded to his or her highest rank.⁶ Once participants were grouped according to their primary identity themes, we compared well-being between identity groups and project factor correlates of well-being within identity groups.

Results

Project Factors

Participants generated an average of 14 projects before selecting the 10 to rate on the 35 PPA dimensions. We entered all participants' mean ratings on the 35 PPA dimensions into a principal-components analysis and retained the first five factors (eigenvalues were greater than one) because they were interpretable and relevant to our hypotheses.⁷ Participants with high scores on the efficacy factor were engaged in projects that they felt were achievable and likely to succeed. The integrity factor referred to projects that were consistent with core values, commitments, and self-identity. The self-benefit factor referred to projects that enhanced the self. The fun factor referred to pleasant and enjoyable projects. Participants with high scores on the support factor were engaged in projects that were surrounded by supportive and trustworthy others. The emergence of efficacy, integrity, and support factors is consistent with past PPA research (Little, 1989; Wilson, 1990). The fun and self-benefit factors reflect the fuller complement of agentic and hedonistic dimensions included in this study. See Table 1 for the primary loadings on each project factor.

Well-Being Factors

Principal-components analysis of the PIL. PIL items⁸ were entered into a principal-components analysis because past research has shown that the PIL consists of more than one factor (Chamberlain & Zika, 1988). We retained the first two factors (both eigenvalues were greater than one) because they were interpretable as PIL happiness and PIL meaning factors. As shown in Table 2, the first factor was primarily defined by items such as, "I am usually exuberant and enthusiastic." The second was primarily defined by items such as, "In life I have very clear goals and aims."

Principal-components analysis of well-being measures. We entered the two factors from the PIL together with the other well-being measures into a principal-components analysis. The

Table 1

Principal-Components Analysis of Personal Projects Analysis (PPA) Dimensional Means

PPA dimension	Loading on project factor				
	Self-benefit	Efficacy ^a	Fun	Integrity	Support
Self-benefit	.76				
Self-worth	.69				
Power	.65				
Future self	.63				
Significance	.58				
Pride	.55				
Difficulty		-.81			
Stress		-.81			
Challenge		-.67			
Time pressure		-.59			
Outcome		.57			
Control ^b		.46			
Fun			.85		
Pleasure			.78		
Enjoyment			.77		
Importance				.71	
Commitment				.63	
Self-identity				.60	
Value congruency				.51	
Support					.75
Trust					.64
Visibility					.59

Note. $N = 146$. Only loadings greater than .50 in absolute magnitude are presented (with one exception). Thirteen dimensions are not presented in this table because their loadings on all five factors were less than .50. Percentages of variance accounted for were as follows: self-benefit (12%), efficacy (9%), fun (9%), integrity (8%), and support (7%).

^a We reversed the valence of loadings on this factor for ease of communication. Also, this factor differed from the efficacy factor typically found in past PPA research. Dimensions of stress and time pressure typically load on their own factor. ^b The control loading on the efficacy factor was less than .50 but was included because of its link with efficacy in past PPA research (e.g., Salmela-Aro, in press).

two factors with eigenvalues greater than one were clearly interpretable as happiness and meaning factors (see Table 3). Conventional well-being measures of affect and life satisfaction were the primary loadings on the happiness factor. The PIL meaning factor was the primary loading on the meaning factor. With these orthogonal measures of happiness and meaning in hand, we now turn to our four main hypotheses. Because results were consistent across gender, only aggregated results are presented.

Hypothesis 1: Efficacy and Happiness

Our prediction that project efficacy would be associated with elevated happiness was supported, $r = .37$, $p < .001$, as dis-

"read my textbook," "go to the review lecture," and "study at the pub," which might receive low ratings (e.g., 0, 2, and 4 out of 10) on fun-related project dimensions. However, if corresponding self-identity ratings were 1, 3, and 6, then the correlations between the fun-related dimensions and the self-identity dimension would be high. These high correlations would combine to yield a high hedonistic identity factor score, even though the mean level of fun in such a person's projects would be low. In order to check the independence of the two sets of factor scores (project factors and identity factors), we ran correlations between project factors and identity factors.

⁶ If all four ranks were below the median or if there was a tie for highest rank, the participant was not classified.

⁷ Gorsuch (1988) contends that theoretical relevance and interpretability are valid criteria for determining how many factors to retain.

⁸ Items 13, 14, and 15 of the PIL were excluded because of low item total correlations.

Table 2
Principal-Components Analysis of Purpose
in Life (PIL) Items

PIL item	Loading on factor	
	PIL happiness	PIL meaning
1. Usually exuberant and enthusiastic	.81	.13
2. Life to me seems always exciting	.79	.12
5. Every day is constantly new and different	.72	.08
9. Life is full of exciting good things	.67	.24
19. Pleasure and satisfaction in life tasks	.58	.45
8. Am achieving life goals	.53	.27
3. Have very clear goals and aims in life	.10	.85
20. Clear goals and a satisfying life purpose	.22	.76
17. Find meaning, purpose, and mission in life	.31	.62

Note. $N = 146$. Only items with loadings greater than .50 on one of the factors are presented. Loadings greater than .50 are shown in bold. Percentages of variance accounted for were as follows: PIL happiness (22%) and PIL meaning (16%).

played in Table 4. This finding is consistent with past research indicating that well-being is associated with goals that are perceived as achievable and likely to succeed. Other project factor correlates of happiness were fun, $r = .27$, $p = .001$, and support, $r = .27$, $p = .001$.

Hypothesis 2: Integrity and Meaning

Our prediction that project integrity would be associated with elevated meaning was also supported, $r = .22$, $p = .007$, as displayed in Table 4. It appears as though the incorporation of meaning into our battery of well-being measures achieved its purpose of helping to uncover the relationship between project

Table 3
Principal-Components Analysis of Well-Being Measures

Measure (Cronbach alpha)	Loading on well-being factor	
	Happiness	Meaning
Domain-specific life satisfaction (.75)	.84	.29
Center for Epidemiological Studies Depression Scale (.89)	-.83	-.27
Purpose in Life Test happiness	.81	-.30
Perceived Stress Scale (.87)	-.73	-.45
Bradburn positive affect (.70)	.73	.16
Purpose in Life Test meaning	.13	.92

Note. $N = 146$. Loadings greater than .50 in absolute magnitude are shown in bold. Percentages of variance accounted for were as follows: happiness (52%) and meaning (22%).

Table 4
Correlations Between Project Factors and
Well-Being Factors (Overall)

Project factor	Well-being factor	
	Happiness	Meaning
Efficacy	.37****	.13
Integrity	.06	.22**
Fun	.27****	.14
Support	.27****	.01
Self-benefit	-.05	-.08

Note. $N = 146$.

** $p \leq .01$. *** $p \leq .005$. **** $p \leq .001$.

integrity and meaning, which has been obscured in past PPA research by the absence of an appropriate outcome measure.

Hypothesis 3: Agentic, Communal, and Hedonistic Identity Themes

We expected participants' identities to organize around themes of agency, communion, and hedonism. Results of the principal-components analysis of identity correlations supported our hypothesis. We retained the first four identity factors (eigenvalues were greater than one) because they were interpretable and theoretically relevant (see Table 5). Three of them clearly represented agentic, communal, and hedonistic themes. We chose *achievement* as a label for the unpredicted identity factor because its primary loadings resembled McClelland, Atkinson, Clark, and Lowell's (1953) description of achievement motivation as being concerned with controlled success on structured and only moderately difficult endeavors.

At this point, the reader may notice that the four identity factors appear to resemble four of the five project factors. Despite the surface similarity, however, it is important to recognize that the two sets of factors represent different constructs. Project factors reflect trends in participants' appraisals of *what* they are doing; identity factors reflect patterns in participants' *identification* with what they are doing. The absence of significant correlations along the diagonal in Table 6 (i.e., between agency-identity and project-self-benefit, achievement-identity and project-efficacy, hedonism-identity and project-fun, and communion-identity and project-support) supports our claim that the two sets of factors are not redundant and suggests that personal projects may often reflect influences other than identity preferences (see Footnote 5).

The classification of participants into identity groups yielded 33 who were achievement oriented, 36 who were agentic, 36 who were communal, and 30 who were hedonistic.⁹ The construct validity of this classification is attested to by the projects and future selves listed by prototypical identity group members. One prototypical agentic participant rated the following projects

⁹ The gender balance within groups did not differ statistically from chance frequencies. Eleven participants were not classified, nine because they ranked below the median on all four identity factors and two because of a tie between their two highest identity factor ranks.

Table 5
Principal-Components Analysis of Within-Person Correlations Between Self-Identity and the Other 34 Personal Projects Analysis Dimensions

Dimension correlated with self-identity	Loading on identity factor			
	Agency	Hedonism	Achievement	Communion
Future self	.78			
Purpose	.78			
Self-benefit	.74			
Self-worth	.73			
Importance	.73			
Significance	.69			
Commitment	.63			
Psychological risk	.63			
Pride	.55			
Fun		.82		
Enjoyment		.79		
Pleasure		.78		
Difficulty			-.74	
Outcome			.73	
Control			.70	
Progress			.57	
Stress			-.54	
Challenge			-.54	
Others' benefit				.75
Communion				.75
Affiliation				.61

Note. $N = 146$. Only loadings greater than .50 in absolute magnitude are presented. Loadings for 13 correlations are not presented in this table because they were less than .50 on all four factors. Percentages of variance accounted for were as follows: agency (17%), hedonism (10%), achievement (9%), and communion (7%).

as most self-identifying: "trip to Florida," "make myself happy," and "lose weight." Her positive future self was, "doing my M.A. in psych." This information seems consistent with the expansive and assertive nature of agency. A prototypical achievement-oriented participant rated the following projects as most self-identifying: "stay on top of school readings," "try to finish study notes soon," and "put in at least 8 to 10 hr of studies." His positive future self was, "I would like to see myself as a police officer with investments in property and living comfortably." This information seems consistent with the careful and controlled nature of achievement concerns. A

Table 6
Correlations Between Project Factors and Identity Factors

Identity factor	Project factor			
	Self-benefit	Efficacy	Fun	Support
Agency	-.11	.01	.17*	-.02
Achievement	-.01	-.04	-.12	-.02
Hedonism	.02	.21**	-.01	.02
Communion	.00	.04	.02	.09

Note. $N = 146$. The absence of significant correlations along the diagonal attests to the independence of these two ostensibly similar sets of factors.

* $p \leq .05$. ** $p \leq .01$.

prototypical communal participant rated the following projects as most self-identifying: "knitting sweaters," "spend more time with spouse," and "try to fulfill some needs of aging mom over telephone." Her positive future self was, "satisfied with life totally and enjoying all the aspects I've listed under personal projects." The communal emphasis on union and contact is clearly exemplified here. Finally, a prototypical hedonistic participant listed "keeping a positive attitude," "spend time with friends over holidays," "go snow boarding," and "ask girl I like out" as most self-identifying. In keeping with the "living for the moment" theme of hedonism, he did not describe a future self.

To assess whether happiness or meaning might be differentially associated with identity themes, we regressed happiness on the four identity factors simultaneously and regressed meaning on the four identity factors simultaneously. Overall F s for both regressions were statistically nonsignificant. To assess whether happiness or meaning might depend on participants' primary identity themes, one-way analyses of variance (ANOVAs) compared happiness across the four identity groups and meaning across the four identity groups. Again, there were no significant differences, suggesting that the four identity orientations can be equally supportive of well-being.

Hypothesis 4: Well-Being Within Identity Groups

As a more direct assessment of Hypothesis 2 (that project integrity would be associated with meaning), we ran correlations between the project factors and meaning within each identity group. We expected positive correlations between efficacy and meaning for achievement-oriented participants, self-benefit and meaning for agentic participants, support and meaning for communal participants, and fun and meaning for hedonistic participants. This pattern was not supported by the data. The only significant correlation was between fun and meaning for hedonistic participants, $r = .45$, $p = .01$.

We also ran correlations between the project factors and happiness within each identity group, and as shown in Table 7, an interesting and unanticipated finding resulted. For each identity group except the achievement-oriented group, identity-compensatory associations between project factors and happiness were

Table 7
Correlations Between Project Factors and Happiness Within Each Identity Group

Project factor	Identity group			
	Achievement oriented ($n = 33$)	Agentic ($n = 36$)	Communal ($n = 36$)	Hedonistic ($n = 30$)
Integrity	-.11	.24	-.17	.20
Efficacy	.36*	.28	.33*	.50***
Self-benefit	.08	-.20	-.10	.08
Fun	.09	.42*	.50***	-.03
Support	.04	.52****	.09	.42*

* $p \leq .05$. *** $p \leq .005$. **** $p \leq .001$.

apparent.¹⁰ Happiness was primarily associated with support for agentic participants, $r = .52, p = .001$, with fun for communal participants, $r = .50, p = .002$, and with efficacy for hedonistic participants, $r = .50, p = .005$, suggesting that happiness is associated with the pursuit of projects that counterbalance primary identity orientation. Agentic participants, whose identities were primarily oriented toward self-enhancement, were happier if their projects were supported by others. Communal participants, whose identities were primarily oriented toward interpersonal harmony and service to others, were happier if their projects were fun. Hedonistic participants, whose identities were primarily oriented toward fun and pleasure, were happier if they were getting things done. Achievement-oriented participants, however, did not conform to this compensatory pattern, being happiest when engaged in identity-consistent, efficacious projects, $r = .36, p = .03$.

Summary

We predicted that efficacy would be associated with happiness (Hypothesis 1), that integrity would be associated with meaning (Hypothesis 2), that identity themes of agency, communion, and hedonism would emerge from our principal-components analysis of within-person correlations with self-identity (Hypothesis 3), and that higher meaning would be reported by participants who were doing projects that were thematically consistent with their primary identity orientation (Hypothesis 4). The first three hypotheses were clearly supported. Separate well-being measures of happiness and meaning emerged and were significantly correlated with efficacy and integrity, respectively. Also, results from the principal-components analysis of within-person correlations with self-identity suggested that participants' identities were organized around the three predicted themes of agency, communion, and hedonism (and also an achievement theme, which was not predicted). Our fourth prediction was not supported. This seemed puzzling. How could integrity be associated with meaning (Hypothesis 2) but identity consistency, as predicted by Hypothesis 4, not be? Hypothesis 4 was supposed to be a more direct test of the integrity-meaning relation.

We think the answer may be that identity groups were based on primary identity themes, but participants' various social contexts likely require at least some identification with achievement, agency, communion, and hedonism. An extreme score on one identity-consistent project factor might reflect a kind of *identity fixation*, or tendency to neglect socially prescribed life tasks in identity-noncentral domains. For example, an individual with a primarily communal identity might tend to overfocus on communal projects and feel alienated when immersed in the hedonistic milieu of Frosh Week or the achievement demands of midterm examinations. From this perspective, Hypothesis 4 may not have been supported because the benefits for meaning of specializing in projects that are consistent with one's primary identity theme might be matched by the benefits of participating in and identifying with a balanced project profile. Indeed, Kohlberg (1981) and Loevinger (1976) contend that more complex and integrated identities are preferable to simpler ones.

This *balance* interpretation is corroborated by the unanticipated finding that participants were happier if they were engaged

in projects that were compensatory to their primary identity themes. Happiness was associated with support for agentic participants, with fun for communal participants, and with achievement for hedonistic participants. For agentic, communal, and hedonistic participants, engaging in identity-compensatory projects might be seen as reflecting a socially intelligent attunement to efficacy opportunities in everyday life (cf. Cantor & Harlow, 1994), which might be missed by participants who rigidly adhere to the dictates of one primary identity theme. Achievement-oriented participants were the only group to deviate from the compensatory pattern, perhaps because neglecting efficacy opportunities in any domain would be inconsistent with their identities. These findings suggest the benefits of not putting all one's projects "in the same basket"; happiness appears to be enhanced by balanced project pursuit.

Before any conclusions are drawn, however, several limitations of this first study must be addressed in a replication. First, the meaning factor was defined primarily by a single loading (which itself was a principal component from the PIL); it is therefore of questionable reliability and needs to be replicated with additional meaning scales included in the pool of well-being measures. Second, the results were based on several exploratory principal-components analyses. Confidence in our findings would be enhanced if they could be replicated in a second study with a simpler, more targeted approach. Third, the identity categorization was based on rankings. Although this approach has the benefit of correcting for possible differential magnitudes of the within-person correlations resulting from differential reliabilities of the contributing PPA dimensions, it may have distorted the actual significance of each theme for the participants. It would be beneficial to replicate the within-identity group results using actual identity factor scores rather than rankings as the basis of categorization. Fourth, the compensatory pattern needs to be replicated because it was not predicted in advance and may be a capitalization on chance because of the large number of statistical tests conducted. Fifth, data were collected during the pre-Christmas examination break, with its simultaneous emphasis on agentic, communal, and hedonistic concerns. It is conceivable that results could fail to generalize and that they reflect a response to this unique contextual predicament. Sixth, the battery of well-being measures preceded the assessment of personal projects. It is possible that they primed affect and led to exaggerated, mood-congruent responding in the personal projects section; for example, feeling bad may have primed project difficulty and feeling good may have primed project efficacy. Study 2 was designed to address these limitations.

Study 2

Method

Participants and Procedures

We recruited 85 men and 94 women from three introductory psychology courses and gave them academic credit for participating in one of

¹⁰ Project factor means and standard deviations were comparable across identity groups, ruling out the possibility that this pattern was a statistical artifact of a "truncated range" problem.

seven group sessions between October 7 and 10, a relatively calm point in the academic semester. The social turmoil of Frosh Week and adjustment to residence had abated, and midterm examinations had not yet begun. Sessions were 90 min long and included 19 to 36 participants. Also, compared with the more mature sample in Study 1 ($M = 23$ years old, $SD = 6.3$), this sample consisted primarily of full-time students directly out of high school (in Ontario, most students are 19 when they begin University). Seventy-eight percent were 19 or under ($M = 19$ years old, $SD = 1.4$).

PPA

We used the same PPA materials and instructions as in Study 1 but trimmed the number of PPA rating dimensions from 35 to 28 for economy (see Appendix). Also, the order of administration of materials was reversed: PPA materials were followed by the well-being measures.

Project factors. We created targeted project factors¹¹ by simply averaging each participant's 10 project ratings across PPA dimensions that had been theoretically or empirically central to the definition of each project factor in Study 1. Each participant's fun factor score was created by averaging all of his or her project ratings across the fun, pleasure, and enjoyment dimensions (i.e., the average of 30 ratings); the support factor was created by averaging support, trust, and others' view of importance ratings; the self-benefit factor was created by averaging self-worth, self-benefit, and future-self ratings; the efficacy factor was created by averaging control, outcome, and reverse-scored difficulty ratings; and the integrity factor was created by averaging self-identity, value congruency, commitment, and importance ratings.

Identity correlations. We calculated targeted indexes of the centrality of achievement, agency, communion, and hedonism themes in participants' identities by running within-person correlations between each person's *project-level identity* scores and his or her other four sets of 10 project-level scores. For each person, 10 project-level identity scores were formed by averaging ratings on self-identity, value congruency, and meaningfulness¹² for each project. Similarly, for each person, 10 *project-level efficacy* scores were formed by averaging ratings on control, outcome, and reverse-scored difficulty for each project; 10 *project-level self-benefit* scores were formed by averaging ratings on self-worth, self-benefit, and future-self for each project; 10 *project-level others'-benefit* scores were formed by averaging ratings on others' benefit, communion, and affiliation for each project; and 10 *project-level fun* scores were formed by averaging ratings on fun, pleasure, and enjoyment for each project. Correlating each person's 10 project-level identity scores with the other four sets of 10 project-level scores resulted in four identity correlations per person, representing the strength of achievement-oriented, agentic, communal, and hedonistic identity themes. These identity correlations were used in Study 2 as a simpler and more targeted measure of the identity factor scores used in Study 1.

Again, it is important to note the difference between identity correlations and project factors. Although identity correlations were partially derived from the same PPA dimensions that were used to define project factors, the two sets of scores represent distinct constructs (i.e., how participants think about themselves vs. what participants are doing); therefore, as found in Study 1, we expected correlations between these ostensibly similar constructs to be nonsignificant (see Footnote 5).

Identity groups. We classified participants as having primarily achievement-oriented, agentic, communal, or hedonistic identities on the basis of which of their identity correlations was highest. If none was $>.4$, the participant was not classified. This approach compared identity themes based on actual correlations and not ranks, as in Study 1; therefore, we expected group membership to be less evenly distributed than it was in Study 1. Within identity groups, we expected to replicate the compensatory pattern from Study 1.

Subjective Well-Being

All the well-being measures from Study 1 were included, and the following scales were added to increase the reliability of the happiness and meaning factors.

Positive and negative affect scales. Participants used a 7-point scale, from 1 (*not at all*) to 7 (*extremely much*), to rate the extent to which they had felt each of 18 emotions in the last month. The 11 positive emotions (e.g., happy, joyful, pleased) were averaged for a positive affect score, and the 7 negative emotions (e.g., depressed or blue, unhappy, frustrated) were averaged for a negative affect score. These subjective well-being scales have been used in a number of published studies, beginning with Diener and Emmons (1985), and have internal consistency coefficients of about .90. We expected them to load primarily on the happiness factor.

Satisfaction With Life Scale. The Satisfaction With Life Scale is a popular measure of the cognitive component of happiness. Its five items (e.g., "I am satisfied with my life" and "In most ways my life is close to my ideal") are rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). It possesses high test-retest reliability and several other desirable scale qualities (Diener, Emmons, Larsen, & Griffin, 1985). We expected this scale to load primarily on the happiness factor.

Loyola Generativity Scale (LGS). Generative concern for others has been persistently nominated as an important identity hallmark that provides a feeling of being meaningfully integrated into society and linked to the future (e.g., Erikson, 1959, 1982; Mansfield & McAdams, 1996; McAdams, 1985; McAdams & de St. Aubin, 1992; McAdams, Ruetzel, & Foley, 1986). The LGS is a valid and reliable measure of generative concern (McAdams & de St. Aubin, 1992). Its 20 items (e.g., "I feel as though I have made a difference to many people" and "I feel as though my contributions will exist after I die") are rated on a 4-point scale. Because of the size of our package of materials, we used only 12 of the 20 items. We expected this scale to load primarily on the meaning factor.

Theory-based psychological well-being (PWB). According to Ryff (1989) and Ryff and Keyes (1995), research on subjective well-being has been largely atheoretical and has neglected the fundamental, underlying question of what it actually means to be healthy psychologically. In contrast to conventional data-driven approaches that have culminated in the hegemony of affect and satisfaction indicators, Ryff developed six scales that capture aspects of well-being central to the writings of several major humanistic theorists. Two of the six scales (Self-Acceptance and Environmental Mastery) correlate highly with conventional happiness scales and so were not included in this study. The other four are not reliably associated with typical happiness indicators (Ryff & Keyes, 1995) and so were included in this study. Each of the four scales is reliable and valid and consists of 20 items rated on a 4-point scale (Ryff, 1989). Again, because of concerns about the size of our package, we shortened each scale to nine items.

Ryff and Keyes (1995) characterize high scorers on each scale as follows: *Positive Relations With Others*—"Has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships"; *Autonomy*—"Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards"; *Purpose in Life*—"Has goals in life and a sense of directedness;

¹¹ Tabachnick and Fidell (1989, p. 641) maintain that this technique is adequate when standard deviations of contributing variables are roughly equal. The standard deviation of the variables used ranged from 1.2 to 2.0.

¹² This dimension was added for Study 2. It was defined as, "How personally meaningful is each project?"

feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living"; and *Personal Growth*—"Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness."

Well-being factors. We entered all well-being scale totals into a principal-components analysis with the expectation that affect and satisfaction scales would load primarily on a happiness factor and that the PIL,¹³ LGS, and PWB scales would load primarily on a meaning factor. We expected that the PIL, LGS and PWB scales would load primarily on our meaning factor because they refer, in various ways, to the extent to which individuals feel meaningfully related to their social worlds and imagined futures.

Results

Happiness and meaning factors from Study 1 were clearly replicated with the expected pattern of loadings from the new scales. Happiness was defined by negative affect, positive affect, and life satisfaction. Meaning was defined by personal growth, purpose in life, generativity, relationship quality, and autonomy. Cronbach alphas and loadings are presented in Table 8.

Participants generated an average of 15 projects before selecting the 10 for rating. As in Study 1, efficacy was associated with happiness, $r = .34$, $p < .001$, and integrity was associated with meaning, $r = .39$, $p < .001$. In addition, efficacy was significantly correlated with meaning, $r = .33$, $p < .001$ (see Table 9); this correlation was not significant in Study 1. Because efficacy and integrity were not constrained to orthogonality in Study 2, $r = .46$, $p < .001$, we also regressed happiness onto efficacy and integrity simultaneously and then meaning onto efficacy and integrity simultaneously to determine the strength of unique associations. Table 9 shows that the relation between efficacy and meaning was partially mediated by integrity.¹⁴ The

Table 8
Principal-Components Analysis of Well-Being Scales

Scale (Cronbach alpha)	Loading on well-being factor	
	Happiness	Meaning
CES-D depression (.89)	-.85	-.27
PSS stress (.83)	-.74	-.35
SWB negative affect (.78)	-.74	-.05
Bradburn positive affect (.67)	.72	.14
SWB positive affect (.88)	.71	.32
Domain-specific life satisfaction (.75)	.69	.37
SWLS life satisfaction (.86)	.64	.29
PWB growth (.72)	.24	.74
PWB purpose (.77)	.30	.73
LGS generativity (.78)	.19	.73
Purpose in Life (.90)	.45	.71
PWB relationships (.82)	.38	.67
PWB autonomy (.82)	.04	.61

Note. $N = 179$. Loadings greater than .50 in absolute magnitude are shown in bold. Percentages of variance accounted for were as follows: happiness (33%) and meaning (27%). CES-D = Center for Epidemiological Studies Depression Scale; PSS = Perceived Stress Scale; SWB = subjective well-being; SWLS = Satisfaction With Life Scale; PWB = Psychological Well-Being Scale; LGS = Loyola Generativity Scale.

Table 9
Relations Between Project Factors and Well-Being Factors (Overall)

Well-being factor	Project factor			
	Efficacy		Integrity	
	r	Beta	r	Beta
Happiness	.34****	.40****	.07	-.11
Meaning	.33****	.19*	.39****	.31****

Note. $N = 179$. Beta values are for the simultaneous entry of efficacy and integrity into the regression equations.

* $p \leq .05$. **** $p \leq .001$.

zero-order correlation between efficacy and meaning, $r = .33$, was reduced to beta = .19 (the standardized regression coefficient) when integrity was statistically controlled. None of the other project factors (support, agency, or fun) was significantly related to happiness or meaning when entered into the regression equations after efficacy and integrity.

Again, there were no significant correlations between project factors and identity correlations; for example, the amount of fun that participants were having with their projects was not correlated with how hedonistic their identities were. This finding demonstrates the independence of project characteristics and identity themes. Within identity groups,¹⁵ the compensatory pattern found in Study 1 was replicated.¹⁶ Happiness was significantly correlated with support for the 71 agentic participants, $r = .30$, $p = .01$, with fun for the 35 communal participants, $r = .36$, $p = .03$, and with efficacy for the 41 hedonistic participants, $r = .45$, $p = .003$. As shown in Table 10, this pattern held quite well for the beta values as well. A new correlation between fun and happiness emerged for the 25 achievement-oriented participants, $r = .50$, $p = .01$, but we are reluctant to interpret this result because it was unreliable across studies. As in Study 1, the normative relation between efficacy and happiness was reflected in the relations between efficacy and happiness for agentic participants, $r = .32$, $p = .007$, and communal participants, $r = .37$, $p = .03$. Finally, mirroring the results from Study 1, the overall F s for the two multiple regressions of happiness scores and then meaning scores onto the four identity

¹³ In the interest of simplifying the data analysis, we did not break this measure down into its components this time because we expected the meaning factor in this study to be shaped by other measures as well.

¹⁴ According to Baron and Kenny (1986, p. 1177), there are three conditions that must be met to establish mediation. (a) The independent variable must be significantly correlated with the mediator. (b) The independent variable must be correlated with the dependent variable. (c) The beta value of the mediator must be significant when the dependent variable is regressed on both the mediator and the independent variable simultaneously. These criteria were met.

¹⁵ Seven participants were not classified into an identity group because no identity correlations were above .4. As in Study 1, gender frequencies within identity groups did not differ statistically from chance.

¹⁶ Means and standard deviations for the project factors were comparable across identity groups, again ruling out the possibility that this pattern was attributable to a truncated range problem.

Table 10
Relations Between Project Factors and Happiness Within Identity Groups

Project factor	Identity group							
	Achievement oriented (n = 25)		Agentic (n = 71)		Communal (n = 35)		Hedonistic (n = 41)	
	r	Beta	r	Beta	r	Beta	r	Beta
Integrity	.05	-.31	.11	-.08	-.04	-.05	.13	-.32
Efficacy	.16	.03	.32*	.33*	.37*	.25	.45**	.51**
Self-benefit	.20	.06	-.03	.01	-.26*	-.34	.12	.23
Fun	.50**	.68**	.06	-.04	.36*	.34	.26	.11
Support	-.01	-.20	.30**	.28*	.12	-.03	.14	.04

Note. Beta values are for the simultaneous entry of all five project factors into the regression equations.
 * $p \leq .05$. ** $p \leq .01$.

correlations¹⁷ were nonsignificant. Similarly, ANOVAs revealed that neither happiness nor meaning scores differed significantly across identity groups.

Summary

Study 2 replicated the main findings from Study 1, despite sampling from a somewhat different population, with different well-being scales and with the assessment of project characteristics and identity groups being based on sums of targeted variables rather than exploratory factor analyses. As in Study 1, efficacy was primarily associated with happiness and integrity was primarily associated with meaning. We also replicated the identity-compensatory pattern. Agentic, communal, and hedonistic participants were happier when their projects counterbalanced their primary identity themes. Happiness was associated with support for agentic participants, with fun for communal participants, and with efficacy for hedonistic participants. This pattern was replicated even though identity group membership was based on a simplified classification procedure. Finally, as in Study 1, identity themes were not related to happiness or meaning.

General Discussion

Happy Efficacy and Meaningful Integrity

Happiness measures of affect and satisfaction are typically relied upon as the gold standard of well-being, even though research in support of these measures has been predominantly data driven and theory weak (Headey, Kelley, & Wearing, 1993). But the hegemony of happiness is beginning to wane as researchers (Kasser & Ryan, 1993; Ryff, 1989; Ryff & Keyes, 1995; Sheldon & Kasser, 1995; Waterman, 1993) call for more meaningful indicators, contending that conventional measures of subjective well-being miss important aspects of what it means to be psychologically well. In both of our studies, orthogonal measures of happiness and meaning were empirically differentiated. Happiness was defined by conventional affect and satisfaction scales, and meaning was defined by scales that operationalize humanistic theories of well-being. The common theme shared by all the scales that defined the meaning factor was

their reference, in various ways, to consonance among self-elements that are distributed across time and context, a criterion for meaning proposed long ago by Dilthey (1910/1977). Just as a book becomes meaningful when its characters and themes are coherently related, the defining characteristic of personal meaning is consistency among the multifarious elements of the self (see Figure 1).

In both studies, personal project efficacy was significantly associated with happiness, a finding that replicates past PPA research (Little, 1989; Salmela-Aro, in press; Wilson, 1990; Yetim, 1993) and that is consistent with a large body of research on goal setting and self-regulation (e.g., Bandura, 1977; Locke & Latham, 1990; Scheier & Carver, 1988). People feel better when they are doing well and when they expect to be doing well in the future. The major contribution of our research is our finding that a dimension of well-being orthogonal to happiness, meaning, was significantly related to personal project integrity (the degree to which participants were "being themselves"). Participants whose personal projects were consistent with core elements of their self-identity reported higher levels of meaning than did those whose projects were less reflective of self-identity. This finding is consistent with the theories of Bruner (1991) and Vallacher and Wegner (1985), who contended that meaning is symbolically mediated by action. It is also consistent with recent research showing that personality integration is associated with meaningful aspects of well-being such as self-actualization and vitality (Kasser & Ryan, 1993; Sheldon & Kasser, 1995; Sheldon, Ryan, & Reis, 1996).

The increasing research attention to more meaningful aspects of human functioning contrasts sharply with the past tendency to overlook integrity and focus on efficacy. For example, Cantor and Harlow (1994) defined social intelligence as the ability to maximize goal achievement. The past emphasis on efficacy is likely at least partially attributable to the robust association between efficacy and the prevailing gold standard of well-being. Our results corroborate the efficacy-happiness relationship but suggest that the usual research focus on efficacy and happiness

¹⁷ Identity correlations were transformed with Fisher's r -to- z formula to correct for the tendency of distributions of correlations to be negatively skewed (Howell, 1992, p. 255).

may have overlooked another important goal characteristic, namely, integrity. As depicted in Figure 2, it appears as though personal projects can serve two functions. They can promote happiness to the extent that they instrumentally contribute to efficacy and they can promote meaning to the extent that they are symbolically consistent with core aspects of the self.

Identity Themes and Well-Being

Our second investigation of the integrity-meaning relation was driven by the hypothesis that meaning should be related to consistency between projects and primary identity themes. We expected highest levels of meaning to be reported by agentic participants whose projects were highly self-beneficial, hedonistic participants whose projects were highly fun, and so forth. To investigate this hypothesis, we first needed to assess identity themes. Using projects as convenient core samples of identity, we introduced a new identity classification procedure based on participants' own ratings of their self-generated goals. Aside from efficiency, our approach offers two advantages over content analysis based techniques for assessing identity themes (e.g., McAdams, Hoffman, Mansfield, & Day, 1996). First, it grants participants "best-expert" status on the meaning of their own material. For example, "putting the garbage out" might be rated as a mundane administrative episode by a content analyst, but the actor alone might know that her "garbage" project represents a labor of love and a gesture of gratitude toward her partner. Second, our technique does not present participants with the demand that they give us a coherent story. They simply rate their projects on a number of dimensions, and the degree of thematic consistency emerges from the strength of within-person correlations.

Assessing identity themes in this way holds promise for personality theory for several reasons. It invokes the concept of a dynamic, constructed self that is more amenable to change than is called to mind when the language of motives, needs, or traits that people have is used. Also, instead of simply focusing on what people do, our approach recognizes the poetic license that allows individuals to turn their "garbage" into "gratitude." This shift away from viewing people as receptacles for various dispositions or as blind actors promotes a more human emphasis on how people are choosing to be. Furthermore, our assessment technique dissects identities into underlying dimensional components and could thereby facilitate investigations of the cross-impact of identities: intrapersonally, interpersonally, and cross-culturally. This aspect could present a useful starting point for clinical intervention or personal change if desired.

But from the present results based on data from two student samples, it is not clear that any identity orientation is more beneficial than others. In both samples, ANOVAs comparing happiness and meaning levels among achievement-oriented, agentic, communal, and hedonistic participants and multiple regression analyses of happiness and meaning onto the four continuous identity factors (identity correlations in Study 2) yielded statistically nonsignificant *F*s. Despite the obvious problem with confirming the null hypothesis, these findings suggest that identity themes may be equally viable. It is important to emphasize that we are not suggesting that the characteristics of personal projects are unrelated to well-being. Such a suggestion would

contradict the present efficacy and integrity findings as well as other research findings indicating that well-being is differentially associated with characteristics of projects, strivings, and aspirations (Emmons, 1986, 1991; Kasser & Ryan, 1993; Sheldon, Ryan, & Reis, 1996). Rather, our results indicate that well-being is not associated with various levels of identification with project characteristics. This view is consistent with our model of how meaning is achieved—through internal consistency within identities.

Despite support for our hypothesized normative relation between integrity and meaning, both studies failed to support the more specific hypothesis that meaning should be associated with the pursuit of projects that are consistent with primary identity themes. Meaning was not reliably associated with efficacy for achievement-oriented participants, with self-benefit for agentic participants, with support for communal participants, or with fun for hedonistic participants. We think that this result might have been attributable to the fact that we overestimated the thematic simplicity of identities. In Study 2, 69% of participants had at least two identity correlations greater than .40, and 16% had all four identity correlations greater than .40. Given such identity diversification, the meaningful benefits of acting in accord with one's primary identity theme might be countered by the meaningful costs of neglecting to act in accord with other themes. A related possibility is that fixating on one primary identity theme leaves one feeling alienated when faced with other socially prescribed life tasks, for example, the zealous communal individual faced with weekly organic chemistry assignments. As Brickman (1987) put it: "A commitment is most threatening to mental health when it becomes so stringently demanding, so all encompassing, that it leaves no room for other goals or commitments in a person's life" (p. 213).

This identity fixation interpretation of the null findings for meaning is supported by the finding in both studies that happiness within identity groups was elevated for participants who were engaged in identity-compensatory projects. Self-important agentic participants, who may tend to alienate others, were happier if they were "team players" engaged in interpersonally supported projects (i.e., trust, support, and others' view of importance). "Heavy" communals were happier if they were "lightened up" and having fun (i.e., enjoyment, pleasure, fun). Hedonists, who "just want to have fun," were happier if they were "buckled down" and getting things done (i.e., likelihood of successful outcome, control, and reverse-scored difficulty). Achievement-oriented participants were the only ones to deviate from this pattern. For them, no project factors were reliably associated with happiness across the two studies. We suspect that this may be because the central focus of the achieving identity does not exclude other themes. Achievement can be pursued in agentic, communal, and hedonistic domains.

Although the compensatory pattern was replicated in two samples with somewhat different demographics, we were curious as to whether it would generalize to other populations. To investigate this idea, we reanalyzed some archival data from a group of high-level senior managers (56 women and 54 men) who were at or near the top of their organizations.¹⁸ The limited

¹⁸ These data were originally collected for a study on gender and workplace culture (Phillips, Little, & Goodine, 1996). We are grateful to

number of PPA dimensions used in this sample and the small sample size allowed only partial assessment of the compensatory pattern, but findings were encouraging. If it can be assumed that the identities of highly successful managers tend to be agentic, then according to the compensatory pattern found in Studies 1 and 2, we would expect their happiness to be most contingent on project support. This was indeed the case. The highest correlate of well-being in this sample of managers was the PPA support dimension, $r = .34$, $p < .001$ (cf. Brunstein, Dangelmayer, & Schultheiss, 1996).

In summary, engaging in identity-compensatory projects might be seen as reflecting an attunement to task-pursuit opportunities in everyday life instead of rigid preoccupation with one's primary identity theme. For example, agentic individuals might be drawn to engaging in exclusively self-beneficial projects because of maximum resonance with their primary identity theme. According to our results, however, such specialization is not associated with higher meaning, we suspect because the benefits of specialization may be countered by the costs of alienation from thematically varied life tasks. Moreover, such specialization could compromise happiness because important but counterthematic tasks might be prone to neglect. In both studies, happiness was elevated for agentic, communal, and hedonistic participants who were engaged in identity-compensatory projects. For achievement-oriented participants, such compensation may not have been necessary because the focus of their identities is less likely to lead to unbalanced project systems requiring compensation.

The Integrity Shift

In contrast to the possible tension between overly specialized integrity and efficacy that is suggested by the compensatory pattern, Study 2 results showed a positive correlation between overall integrity and efficacy.¹⁹ Indeed, Lydon and Zanna (1990) found that students were more likely to remain committed in the face of adversity when volunteer projects were value relevant, and Brunstein (1993) found that commitment facilitated progress on personal goals. In addition, in Study 2 efficacy was a significant predictor of meaning. This relationship was partially mediated by the efficacy-integrity relationship, but the direct impact of efficacy on meaning remained statistically significant even when integrity was statistically controlled. How is it that efficacy is a predictor of meaning as well as happiness?

We think that this finding may reflect the ability of efficacy to act as a surrogate for integrity. Our thinking is based on the results of Steele's self-affirmation research (1988). Steele and his colleagues demonstrated that success or affirmation can "take the sting out of dissonance." In Steele's experiments, when "freely" chosen counterattitudinal behavior was followed by an unrelated affirmation, the dissonance discomfort that

would normally have resulted (in the absence of affirmation) was alleviated. In our research, meaninglessness is the discomfort associated with a kind of counterattitudinal behavior (inconsistency between personal projects and other elements of the self). In the same way that affirmation could anesthetize dissonance in Steele's studies, it appeared as though efficacy could take the sting out of meaninglessness for the participants in our Study 2.

This interpretation would seem to grant efficacy privileged status as capable of doing "double-duty" in support of both kinds of well-being, a notion consistent with Csikszentmihalyi's (1975) conception of flow—a blissful state associated with competence and immersion in moderately challenging tasks. Similarly, building on Vallacher and Wegner's (1985) theory of action identification, Baumeister (1991) contended that individuals seek to "escape the self" by engaging in and identifying with more immediate instrumental activities when the meaningful implications of behavior become problematic. Likewise, Becker (1973, p. 179) commented on the pervasive tendency for people to tranquilize themselves with the trivial as a solution to existential dilemmas, and Duval and Wicklund (1972) claimed that one of the functions of action is to terminate possible discomfort associated with objective self-awareness. These perspectives suggest that immersing oneself in the busy pursuit of efficacy can at least distract one from the experience of meaninglessness. Perhaps this is why a discussion of meaning is so often met with sincere bewilderment. For busy people, it may seem like an irrelevant construct.

But is sole reliance on efficacy a viable well-being strategy? Klinger (1977) proposed that well-being must be based on incentives that reliably produce affective reward and that are not vulnerable to disillusionment or habituation. According to Klinger, success as a basis of well-being is unreliable because people can become both habituated to it and disillusioned with it. Brickman (1987, p. viii) repeated a similar warning in his discussion of the hedonic treadmill, a process in which more and more happiness is sought in response to rising adaptation levels. Brickman's proposed solution was commitment to action on the basis of its perceived intrinsic, not instrumental, value. Indeed, Bellah, Madsen, Sullivan, Swidler, and Tipton (1985) described a malaise that pervades American culture, in which people who are surrounded by success feel disconnected and lacking in meaningful links with society—in the wake of the efficacy-based American dream, meaninglessness is epidemic. Along these lines, Kasser and Ryan (1993) showed that success as a central life aspiration is associated with poorer mental health and more behavioral disorders, and Sheldon and Kasser (1995) found personality integration to be associated with positive moods, increased vitality, and meaningful as opposed to distracting activities (e.g., drinking alcohol, smoking, and watching television). Together, these perspectives question the wisdom of well-being strategies that emphasize efficacy and neglect integrity.

The limitations of efficacy are underscored by an *integrity shift* that was apparent when results from the sample of senior

Susan Phillips for encouraging the reanalysis of these data. On average, participants worked 47 hr per week (ranging between 37 and 80 hr), and their average age was 47 years. Single-item ratings of life satisfaction, work satisfaction, non-work satisfaction, health satisfaction, and burnout were averaged to create one global well-being index (Cronbach alpha = .69).

¹⁹ Efficacy and integrity were constrained to orthogonality in Study 1.

managers were compared with results from the student samples. From the PPA dimensions that were used with the manager sample (see Appendix), we created indexes of efficacy (reverse-scored difficulty, stress, time pressure, challenge, and positively scored outcome) and integrity (self-identity and value congruency). In an apparent reversal of the results found for the student samples, efficacy was not significantly associated with well-being,²⁰ $r = .14$, ns , but integrity was, $r = .34$, $p < .001$. Beta values of similar magnitude and significance resulted when we regressed well-being onto efficacy and integrity simultaneously, $\beta = .13$, ns , for efficacy, and $\beta = .36$, $p < .001$, for integrity. This integrity shift suggests that the highly successful managers had either habituated to or become disillusioned with success, leaving integrity as the prime source of well-being. Either that or by midlife, concerns with efficacy and happiness had been supplanted by developmental concerns about generativity and integrity (Erikson, 1959). These conclusions are offered with caution, however, because of potential cohort differences between the student and senior manager samples. Longitudinal studies are required to adequately address our developmental speculations.

Another possible limitation of our studies is that identity factors and project factors were constrained by the dimensions that we included in the research. Although we had no theoretical reason to include other variables, it is possible that if we had added PPA dimensions relevant to any number of additional possible themes, for example, "has to do with computers," "is related to the Internet," and "technology relevance," we might have found some identities to revolve around a technology theme. For reasons of economy, we limited ourselves to including only dimensions suggested by theory and verified by our pilot studies. It is possible, however, that further studies might uncover important identity themes that we may have missed.

A final limitation of our research is that we relied on self-report measures, and it is unclear how accurately participants were able to rate projects, especially on some of the more abstract dimensions, such as self-identity. In addition, when participants rated PPA and well-being items, they likely had idiosyncratic comparison levels that guided their responses, even though anchors were given for most questions. These drawbacks likely introduced noise into our data analyses. Unfortunately, more objective measures of the predictor and criterion variables would have their own set of drawbacks. In this study, we followed the Kellian-Allportian tradition of granting participants best-expert status on their own salient concerns (Allport, 1956; Kelly, 1955). Nevertheless, it would be desirable to find support for our conclusions with different methods.

Concluding Comments

This article is about the instrumental and symbolic functions of goals. A project can serve an instrumental function with efficacy as the prime concern, and it can also serve a symbolic function with integrity as the prime concern. In past research, the importance of efficacy for well-being has been supported by the consistent empirical relation between efficacy and happiness. The main intent of this research was to legitimize integrity by demonstrating its empirical relation to well-being. Our findings are based on a differentiation of two kinds of well-being:

happiness and meaning. Happiness, which is usually considered the gold standard of well-being, refers to satisfaction with life, positive affect, and freedom from negative affect. Meaning refers to feelings of connectedness, purpose, and growth. The primary contribution of this research is our finding in both studies that goal efficacy is associated with happiness and goal integrity is associated with meaning. It appears as though the failure of past research to find a relation between integrity and well-being might have been the result of inadequate differentiation of these two kinds of well-being.

However, if integrity is related to meaningful well-being, should not the benefits of integrity be self-evident? Why has wisdom literature belabored the obvious and consistently advocated increased attention to integrity? Our results suggest two reasons. First, integrity appears to have potential drawbacks. Within identity groups in both studies, happiness was highest when participants were engaged in identity-compensatory projects. Participants were happiest when engaged in projects that were thematically inconsistent with their primary identity orientation. This finding suggests that rigid insistence on one facet of integrity might leave one unhappy because of decreased attunement to counterthematic efficacy opportunities. A second reason why the benefits of integrity might not be readily apparent is that for the young participants in Study 2, efficacy was associated with both happiness and meaning. Furthermore, aside from any chance correspondence between behavior and identity, in order for one to act with integrity, some deliberation is required to reflect on the fit between the action and the self. Such self-focus and deliberation about the implications of one's behavior have been shown to cause decreased well-being, at least in the short term (Duval & Wicklund, 1972; Taylor & Gollwitzer, 1995). Thus, the potential drawbacks of integrity and the apparent double-duty of efficacy might make efficacy seem like the more desirable strategy for well-being.

The integrity shift evident in the senior manager data sample, however, suggests that sole reliance on efficacy might not be a prudent well-being strategy. For the senior managers, efficacy was not associated with well-being, but integrity was. Perhaps they had habituated to or become disillusioned with efficacy (Klinger, 1977), or perhaps as the life story demands more meaning in its concluding chapters, efficacy is supplanted by integrity as the more poignant developmental concern (e.g., Erikson, 1959). For example, in Arthur Miller's play, "Death of a Salesman," the protagonist neglects integrity in favor of being well-liked and successful. But as his life progresses, his dissonant self begins to protrude from beneath his thinning veneer of accomplishments, causing him confusion and despair. Although these developmental speculations can only be offered as provisional until tested in a longitudinal study, they are consistent with a time-honored theme. Just as Gilgamesh's accomplishments felt meaningless when he was confronted with mortality, using efficacy as a surrogate for integrity in early life might leave one vulnerable to despair in later life. This research suggests that just as action and reflection are gracefully balanced in Shiva's dance, the dual goal functions of efficacy and integrity

²⁰ There were insufficient well-being measures in this study to differentiate between happiness and meaning.

are both desirable and need not be mutually exclusive or in conflict. If efficacy is not vacuous and integrity is not rigid, both should be able to animate a balanced and prudent project system.

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Appendix

Personal Project Rating Dimensions

Rating dimension	Item
1. Absorption:	Sometimes people get so absorbed in a project that they become oblivious to their surroundings. To what extent do you become engrossed or deeply involved in each project? ^a
2. Affiliation:	To what extent does each project involve interaction with other people? ^{a,b}
3. Challenge:	To what extent is each project challenging for you? ^{a,b,c}
4. Commitment:	How committed are you to the completion of each project? ^{a,b,c}
5. Communion:	To what extent does each project contribute toward a sense of togetherness and harmony with other people or your environment? ^{a,b}
6. Competence:	How competent are you to complete each project? ^c
7. Consumption:	To what extent does each project involve bought experiences or possessions? ^a
8. Control:	How much do you feel you are in control of each project? ^{a,b,c}
9. Creativity:	How much creativity does each project require of you? ^a
10. Difficulty:	How difficult do you find it to carry out each project? ^{a,b,c}
11. Enjoyment:	How much do you enjoy working on each project? ^{a,b,c}
12. Fun:	Some projects are intrinsically fun, whimsical, or delightful. How much fun is each project for you? ^{a,b}
13. Future self:	Most of us have some conception of what kind of person we would like to be several years down the road, the kind of "future self" that we aspire to and would be delighted to become. Imagine and jot down below how you would like to see yourself in 5 years. To what extent does each project help you to move toward becoming this desired future self? ^{a,b,c}
14. Health:	How healthy does each project make you feel while doing it? ^a
15. Importance:	How important is each project to you at the present time? ^{a,b}
16. Initiation:	How much do you feel that it was your decision to take on each project? ^{a,b,c}
17. Meaningfulness:	How personally meaningful is each project? ^b
18. Net impact:	How much do you feel that each project helps or hinders your other projects? ^{a,b}
19. Net social support/hindrances:	Overall, do you feel that other people relevant to each project are more helpful or detrimental to its completion? ^{a,b,c}
20. Others' benefit:	To what extent is each project oriented toward the benefit or well-being of others? ^{a,b}
21. Others' view of importance:	How important do you think each project is seen to be by other people or, if the project is unknown to others, how important do you think they would see it to be if they knew about it? ^{a,b,c}
22. Outcome:	How successful do you think you will be at each project? ^{a,b,c}
23. Pleasure:	To what extent is each project pleasurable, that is, comfortable, relaxing, self-indulgent, or hedonistic? ^{a,b}
24. Power:	In the eyes of others, how powerful or competent do you think each project makes you appear? ^a
25. Pride:	How proud are you to be engaged in each project? ^a
26. Progress:	How successful have you been in each project so far? ^{a,b}
27. Psychological risk:	How much psychological risk is associated with each project, for example, being ridiculed or rejected, feeling stupid, or having hopes disappointed if the project were to fail? ^a
28. Purpose:	How strongly do you feel that there are good reasons or justifications for pursuing each project, that is, how confident are you that each project is the "right" thing for you to be doing? ^{a,b}
29. Self-benefit:	To what extent is each project oriented toward your own benefit or well-being? ^{a,b}
30. Self-identity:	Most of us have some projects that are "really us" and some others that we don't really feel "ourselves" when doing. To what extent does each project feel distinctly "you"—like a personal trademark—as opposed to being quite alien to you? ^{a,b,c}
31. Self-worth:	To what extent do you feel that being engaged in each project contributes to your sense of self-worth? ^{a,b,c}
32. Significance:	How important or significant does each project make you feel when engaged in it? ^a
33. Stress:	How stressful is it for you to carry out each project? ^{a,b,c}
34. Time pressure:	How much do you feel that the amount of time available for working on each project is adequate? ^{a,b,c}
35. Trust:	To what extent do you feel you can trust the most significant other person associated with each project? ^{a,b}
36. Value congruency:	To what extent is each project consistent with the values which guide your life? ^{a,b,c}
37. Visibility:	How visible is each project to other people, that is, how aware do you think others are that you are doing each project? ^{a,b}

^a This dimension was included in Study 1. ^b A version of this dimension was included in Study 2. ^c A version of this dimension was used in the senior manager study.