

Value priorities and subjective well-being: direct relations and congruity effects

LILACH SAGIV* and SHALOM H. SCHWARTZ
The Hebrew University of Jerusalem, Israel

Abstract

Two studies investigated relations of value priorities to measures of subjective well-being. Samples of students and adults, from Israel and former East and West Germany (N = 1261), participated in Part I. Hypothesized direct relations of nine types of values to well-being, based on 'healthy' values from the psychotherapy literature, relations of values to needs, self-determination theory, and the emotional resources needed to pursue various values were tested in each sample. Achievement, self-direction, stimulation, tradition, conformity and security values correlated with affective well-being, as predicted, but not with cognitive well-being. Part II tested the hypothesis that well-being depends upon congruence between personal values and the prevailing value environment. Results largely supported specific hypotheses regarding the values conducive to positive and negative well-being among students of business administration (n = 40) and psychology (n = 42). Hypotheses were derived from the social sanctions, environmental affordances for value attainment, and internal value conflicts likely to be experienced in each department. Copyright © 2000 John Wiley & Sons, Ltd.

Since the 1980s, research on the antecedents and correlates of subjective well-being has been especially active (Larsen, Diener, & Emmons, 1984; Pavot & Diener, 1991). Most researchers agree that two aspects of subjective well-being should be distinguished, a cognitive aspect—usually conceptualized as a person's satisfaction-with-life—and an affective aspect—usually conceptualized as a person's feeling of happiness/sadness (Argyle & Martin, 1991).

Three lines of research into influences on subjective well-being are noteworthy. One line examined effects of objective life-circumstances such as marital status on subjective well-being (Campbell, Converse, & Rogers, 1976; Veroff, Douvan, & Kukla,

*Correspondence to: Lilach Sagiv, School of Business Administration, The Hebrew University of Jerusalem, Mount Scopus, 91905, Jerusalem, Israel. e-mail: mslilach@mscc.huji.ac.il

Contract/grant sponsor: Recanati Fund of the School of Business Administration, Hebrew University.

Contract/grant sponsor: German-Israeli Foundation for Scientific Research and Development.

Contract/grant number: I-241-065.

Contract/grant sponsor: Leon and Clara Sznajderman Chair of Psychology.

1981). Interestingly, this research revealed weak and sometimes counterintuitive relationships between individuals' objective life conditions and their subjective sense of well-being (for examples, see Schwarz & Strack, 1991). A second line of research examined the influence on subjective well-being of the activities in which people engage. Argyle and Martin (1991) claim that various activities, including exercise and sport, sex, reading and music, tend to increase subjective well-being in general and to increase satisfaction with work and leisure time in particular. Third, several studies related subjective well-being to personality attributes (e.g. extroversion, neuroticism, openness to experience: Argyle & Martin, 1991; Heady & Wearing, 1991). Another attribute approach, grounded in self-determination theory, related subjective well-being to basic psychological needs, personal strivings and life goals (e.g. Emmons, 1991; Kasser & Ryan, 1993, 1995; Sheldon & Kasser, 1995).

The current study focuses on a different type of individual difference variable, namely basic values. We investigate relations between value priorities and both the cognitive and affective aspects of subjective well-being. We consider two different ways in which individual differences in basic values might relate to subjective well-being. First, a person's subjective sense of well-being might depend upon his or her profile of value priorities. People for whom particular values are especially important may tend to have a more positive sense of well-being than persons guided by a different set of values. That is, subjective well-being may be associated with emphasizing particular values (e.g. compassion) rather than others (e.g. security). An alternative view suggests that successfully realizing *any* of one's values, increases personal well-being. That is, people's sense of well-being may be unrelated to their value profile, depending instead upon how successful they are in satisfying whatever values are important to them.

These two views are not mutually exclusive. We present the theoretical grounds for both views and then study each of them empirically.

To conceptualize and measure values, we use Schwartz's (1992) theory of universals in the content and structure of basic values. Values are desirable goals, varying in importance, that serve as guiding principles in people's lives. They are socially approved verbal representations of basic motivations (Schwartz, 1992; Williams, 1968). The crucial content aspect that distinguishes among values is the type of motivational goal they express. Schwartz derived ten motivationally distinct types of values from the universal requirements of human existence. This set of values was intended to be comprehensive of the different substantive motivations common to people across cultures. Research offers considerable support for this claim of comprehensiveness (Schwartz, 1994; Schwartz & Sagiv, 1995). Consequently, studying the ten types of values permits a more encompassing assessment of relations of motivational concepts to subjective well-being than previously undertaken. The ten types of values are listed in Table 1, each defined in terms of its central goal, and followed, in parentheses, by specific values that primarily represent it.

Also relevant here are the dynamic relations among the motivational types of values (Schwartz, 1992). Actions taken in pursuit of each type of values have psychological, practical, and social consequences that may conflict or may be compatible with the pursuit of other value types. The total pattern of relations of conflict and compatibility among value priorities yields the structure of value systems represented in Figure 1. Competing value types emanate in opposing directions from the center; complementary types are in close proximity going around the circle.

Table 1. Definitions of motivational types of values in terms of their goals and the single values that represent them^a

<i>Power:</i> Social status and prestige, control or dominance over people and resources. (Social power, authority, wealth, preserving my public image)
<i>Achievement:</i> Personal success through demonstrating competence according to social standards. (Successful, capable, ambitious, influential)
<i>Hedonism:</i> Pleasure and sensuous gratification for oneself. (Pleasure, enjoying life, self-indulgent)
<i>Stimulation:</i> Excitement, novelty, and challenge in life. (Daring, a varied life, an exciting life)
<i>Self-direction:</i> Independent thought and action-choosing, creating, exploring. (Creativity, freedom, independent, curious, choosing own goals)
<i>Universalism:</i> Understanding, appreciation, tolerance and protection for the welfare of all people and for nature. (Broadminded, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature, protecting the environment)
<i>Benevolence:</i> Preservation and enhancement of the welfare of people with whom one is in frequent personal contact. (Helpful, honest, forgiving, loyal, responsible)
<i>Tradition:</i> Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self. (Humble, accepting my portion in life, devout, respect for tradition, moderate)
<i>Conformity:</i> Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms. (Politeness, obedient, self-discipline, honoring parents and elders)
<i>Security:</i> Safety, harmony and stability of society, of relationships, and of self. (Family security, national security, social order, clean, reciprocation of favors)

^aThe following values that were included in the inventory were not used in forming indexes of the importance of each value type because they do not exhibit equivalence of meaning across cultures: social recognition, intelligent, self-respect, inner harmony, true friendship, a spiritual life, mature love, meaning in life, privacy, punctuality, sense of belonging, healthy.

The theory has been tested in cross-cultural research in more than 200 samples from over 60 countries (Schwartz, 1992, 1994; Schwartz & Sagiv, 1995, unpublished data). In each sample, the intercorrelations among the single values were subjected to a nonmetric multidimensional scaling analysis (SSA: Borg & Shye, 1993; Guttman, 1968; Shye & Elizur, 1993). In the vast majority of samples, this analysis verified the distinctiveness of the ten value types. It yielded a structure of relations among value types very similar to the prototypical value structure presented in Figure 1.

In Part I of this report, we develop and test hypotheses about direct relations of value priorities to subjective well-being. We consider possible mutual influences of values and well-being on one another and their possible grounding in the same needs. In Part II we study value congruity between person and environment as a source of well-being. We examine how situational opportunities for realizing values may moderate the relations of value priorities to subjective well-being.

PART I DIRECT RELATIONS BETWEEN WELL-BEING AND VALUE PRIORITIES

In deriving hypotheses regarding the direct relations of value priorities to a subjective sense of well-being, we draw upon several bodies of literature. Although no previous

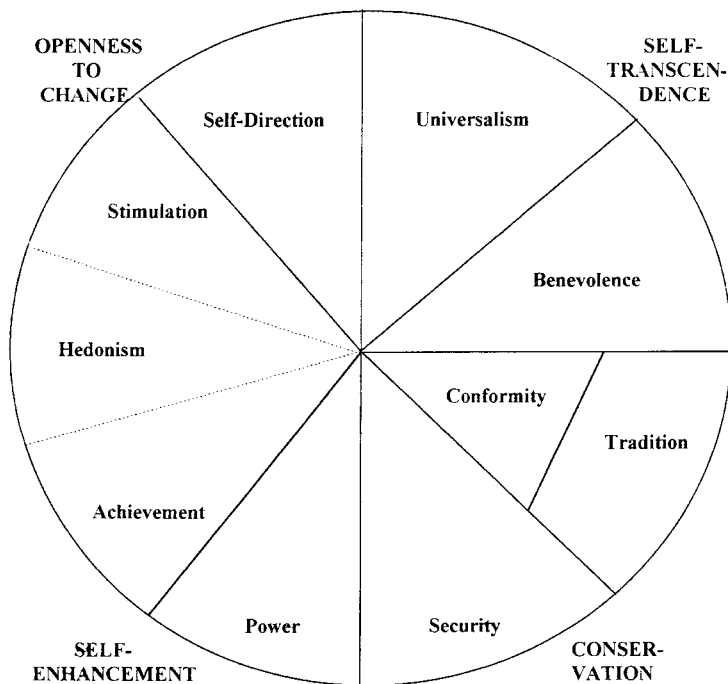


Figure 1. Theoretical model of relations among ten motivational types of values

work covers the full range of motivational content encompassed by the ten value types, each line of research contributes ideas relevant to some of the value types.

There is a considerable agreement in the psychotherapy literature in the West that particular values contribute positively to personal mental health whereas other values are detrimental. For example, Jensen and Bergin (1988) identified values from the self-direction (e.g. autonomy, freedom), benevolence (e.g. responsibility, interpersonal and family relationships), and universalism (e.g. self-awareness, personal growth) value types as 'healthy'. Similarly, Strupp (1980) referred to autonomy (self-direction), responsibility (benevolence) and fairness to others (universalism) as 'healthy values'. There is also some agreement that achievement and stimulation values are 'healthy' values. In contrast, values of the conformity, tradition, security and power types are often considered 'unhealthy' (Gat, 1997, unpublished manuscript). Data to support these speculations is sparse.

Psychotherapy researchers have not explicitly discussed the causal processes that might link mental health to the importance attributed to these 'healthy' and 'unhealthy' values. One possible explanation is that the pursuit of the 'healthy' values leads to perceptions, attitudes or behaviors that, in turn, increase personal happiness or satisfaction-with-life, and the pursuit of 'unhealthy' values has the reverse effects. Furnham and Bochner (1986) suggest, for example, that emphasizing values like self-help promotes better coping with problems which, in turn, may contribute to positive well-being. According to this explanation, emphasizing particular values leads to behaviors that are instrumental to improving one's subjective sense of well-being, while emphasizing other values does not lead to such behaviors (McCrae & Costa, 1991; Veenhoven, 1991). The psychotherapy literature provides no general analysis,

however, of why behaviors expressive of the so-called healthy values are more instrumental to subjective well-being than behaviors expressed of other values.

The reverse direction of causal influence, from subjective well-being to value priorities, is also possible. People who are happy and satisfied with their lives may be more likely to have emotional resources to pursue autonomy (self-direction), emphasize tolerance (universalism), and focus on the welfare of close others (benevolence), for example. In contrast, people who are unhappy and dissatisfied may be occupied more with their own problems and lack resources to pursue such 'healthy' values. Instead, they may pursue values like security or power, whose realization promises relief from anxiety and uncertainty and satisfaction of survival needs (Bilsky & Schwartz, 1994).

Bilsky and Schwartz (1994) provided a systematic basis for relating values to needs. Building on Maslow (1970), they classified the ten value types into those that represent growth versus deficiency needs. Values that represent growth needs (e.g. self-actualization) become more important the more a person attains the goals toward which the values are directed. Bilsky and Schwartz classified self-direction, universalism, benevolence, achievement, and stimulation as representing primarily growth needs. Hence, people who endorse such self-direction values as curiosity, independence, and creativity are likely to increase the importance they attribute to these values when they successfully realize the values in their lives. Conversely, the same people are likely to reduce the importance of these values if they are unable to realize them.

Studies of how people adapt their value priorities to job conditions (Kohn & Schooler, 1983) and to the reinforcement contingencies inherent in the prevailing sociopolitical system (Schwartz & Bardi, *in press*) have demonstrated these processes. Thus, attributing greater importance to value types that represent growth needs follows from realizing the associated goals. Goal realization, in turn, is likely to promote a positive sense of well-being. So, the priority given to growth-related values is likely to correlate positively with subjective well-being.

In contrast, values that represent deficiency needs (e.g. health, safety) are especially important to those who are unable to attain the goals toward which they are directed. However, once the gap between the desired standard of need satisfaction and the person's perceived current state is eliminated, these needs—and the values that represent them—become *less* important. Conformity, security and power values were classified as representing deficiency needs (Bilsky & Schwartz, 1994). An emphasis on these values expresses the desire to compensate for deprivation. Giving priority to these values is therefore more likely among people who feel unsafe, lacking in control over their lives, and threatened in their relations with others, feelings that give rise to a *negative* sense of well-being. So the priority given to these values is likely to correlate negatively with subjective well-being.

Much of the above reasoning is compatible with hypotheses regarding the relations between values and subjective well-being that are derivable from self-determination theory (Deci & Ryan, 1985, 1991). According to this theory, autonomy, relatedness and competence are innate, basic psychological needs. Their pursuit leads directly to 'intrinsic' satisfaction, the presumed source of true, non-contingent personal well-being. In contrast, pursuing 'extrinsic' goals (e.g. money, fame, public image, control over others) provides only indirect satisfaction of these innate needs, at best, and may even interfere with their fulfilment (Deci & Ryan, 1995). According to the theory,

people are likely to experience a positive sense of well-being to the extent that they pursue intrinsic rather than extrinsic needs or goals (Deci & Ryan, 1995). Extrinsic goals may also relate to poorer well-being because strongly pursuing them often requires stressful, ego-involved engagement in activities (Ryan, Koestner & Deci, 1991). Another explanation argues that inadequate early experiences of autonomy and relatedness give rise both to feelings of basic insecurity and to an emphasis on extrinsic goals as an external source of worth (Deci & Ryan, 1991).

The innate, intrinsic needs or goals in self-determination theory largely correspond with the goals of the value types self-direction, benevolence, and universalism. The 'extrinsic' goals are those of the power value type. Several studies based on self-determination theory support the theorized associations of goal pursuit with subjective well-being (Emmons, 1991; Kasser & Ryan, 1993, 1996; Sheldon & Kasser, 1995). They demonstrate that people who strongly emphasize 'extrinsic' relative to 'intrinsic' life goals or personal strivings experience lower well-being as measured by self-actualization, vitality, anxiety, depression, and physical symptoms.¹

Based on the speculations in psychotherapy theories, inferences from self-determination theory and findings, and our conceptual analyses of the relations of value priorities to needs and emotional resources, we hypothesize the following direct associations: (1a) Self-direction, benevolence, universalism, stimulation and achievement values correlate positively with subjective well-being. (1b) Conformity, security, power, and tradition values correlate negatively with subjective well-being.²

Method

Samples and procedure

Six samples were included in this study, permitting an examination of the consistency of findings across cultures and age groups. Samples 1–3 were gathered in 1994. They include students in humanities and social science departments in Israel ($n = 183$; Hebrew University of Jerusalem), West Germany³ ($n = 195$; Free University of [West] Berlin), and East Germany ($n = 205$; University of Technology Chemnitz). Samples 4–6 were gathered in 1996. They include adults from Israel ($n = 170$; Jerusalem), West Germany ($n = 213$; several states), and East Germany ($n = 295$; Chemnitz). The percentage female and mean ages the samples were: Israeli students—62 per cent, 23.5; West German students—64 per cent, 25.2; East German students—57 per cent, 22.8; Israeli adults—57 per cent, 39.9; West German adults—58 per cent, 38.3; East German adults—56 per cent, 38.3.

¹Carver and Baird (1998) argue that pursuing a life goal goes with self-actualization when the reason for doing so is intrinsic rather than extrinsic, regardless of whether the goal itself is intrinsic or extrinsic. For example, seeking a highly paid job (an extrinsic goal) because such jobs are more interesting (an intrinsic reason) may promote self-actualization. In this case, it is the reason that parallels basic values.

²Schwartz and Bilsky (1994) did not classify tradition values. We group them with conformity and security values because, together with them, they form a higher-order conservation type with related theoretical and empirical ties (Schwartz, 1992, 1994). The analyses permit no clear hypotheses with regard to hedonism values.

³Data were gathered after the unification of Germany. However, these participants largely formed their value priorities prior to unification, and value priorities tend to change slowly (Schwartz, Bardi & Bianchi, in press).

The research was presented as part of a study of values in countries around the world. Respondents were told that they would be asked about their values, feelings, and attitudes. They anonymously completed a questionnaire containing instruments in the order listed below, followed by a set of background items. All instruments were administered in respondents' native language. They were prepared through rigorous back-translation among German, Hebrew, and English.

Instruments

Values The importance that respondents attributed to each of 58 single values as guiding principles in their life was measured with a slightly expanded version of the Schwartz (1992) value inventory.⁴ Respondents ranged from 7 (of supreme importance) to 3 (important) to 0 (not important) to -1 (opposed to my values). An MDS analysis performed on the respondents from all six samples confirmed the discrimination of the ten types of values and their ordering according to theory (see Figure 1) in the present data. The standard indexes recommended in Schwartz (1992, 1994) were used to measure the priority given to each of the ten value types. The average internal reliabilities for the value types across the six samples were: universalism 0.73; benevolence 0.68; tradition 0.49; conformity 0.64; security 0.64; power 0.66; achievement 0.65; hedonism 0.71; stimulation 0.61; self-direction 0.58. The reliabilities varied little across samples and were within the range of variation commonly observed for the specific value types (Schmitt, Schwartz, Steyer & Schmitt, 1993; Schwartz, Verkasalo, Antonovsky & Sagiv, 1997).

Subjective well-being Subjective well-being was measured by three indicators. The satisfaction-with-life scale (Diener, Emmons, Larsen & Griffin, 1985) was the cognitive measure. It contains five items (e.g. In most ways my life is close to my ideal. The conditions of my life are excellent) measured on a 7-point agreement scale. The average reliability across samples was 0.77.

As an affective measure we used the five positive items from the 10-item Bradburn (1969) positive/negative affect scale.⁵ Respondents indicated whether they had experienced each of ten feelings during the past few weeks (e.g. on the top of the world, pleased about having accomplished something). The average reliability was 0.59.

As an additional measure of subjective well-being, we included the General Mental Health Scale from the Trier Personality Inventory (Becker, 1989). This instrument is intended to cover a broad range of both affective and cognitive self-assessments in various life domains. It contains 20 items (e.g. I have an inferiority complex. I feel full of energy and enterprise). Responses are given on a 4-point (almost never, sometimes, often, always) frequency scale. The average reliability was 0.87.

The three indicators of subjective well-being correlated positively with one another. Across samples, correlations of the satisfaction-with-life scale ranged from 0.24 to 0.36 with the positive affect scale and from 0.47 to 0.59 with the mental health scale. The correlations between the latter two scales ranged from 0.26 to 0.37. The moderate

⁴Three values were added (privacy, punctuality, self-indulgence) and one was deleted (detachment).

⁵Positive and negative affect are commonly independent factors (Bradburn, 1969). Correlations between the two subscales averaged 0.01 across samples here. We used only the positive subscale because the negative subscale had low reliabilities in three samples.

Table 2. Means and standard deviations of the indexes of subjective well-being in six samples

Indexes of well-being	Israeli students	Samples				East German adults
		West German students	East German students	Israeli adults	West German adults	
Trier Personality Inventory	3.06 (0.38)	2.90 (0.38)	3.08 (0.31)	3.18 (0.32)	3.03 (0.33)	3.03 (0.35)
Satisfaction with Life	4.06 (1.09)	4.50 (1.04)	4.52 (0.94)	4.64 (1.03)	4.84 (0.85)	4.47 (1.11)
Bradburn Positive Affect	1.60 (0.27)	1.74 (0.28)	1.75 (0.25)	2.68 (0.27)	1.86 (0.27)	1.66 (0.28)

size of these correlations is consistent with the current view in the well-being literature that the cognitive and affective aspects of subjective well-being are distinct and their indexes should be kept separate (e.g. Argyle & Martin, 1991).

Results

Table 2 presents the means and standard deviations of the indexes of subjective well-being in all six samples. As one might expect, levels of well-being varied somewhat across samples. Overall, the West German adults reported higher levels and the Israeli students and East German adults reported lower levels of well-being. Discussion of these differences is beyond the scope of this article. Differences across samples in the variances of the indexes of well-being might affect the correlations that test the hypotheses. Note, therefore, that the standard deviations of each index were quite similar across samples.

Table 3 presents the correlations of the ten value types with the three measures of subjective well-being in all six samples. In order to focus on the consistent and reliable findings, we discuss the averaged correlations for the whole set of samples, based on r to Z transformations. These are on the left side of the table.

Trier Personality Inventory We chose the general mental health scale of this inventory to reflect both affective and cognitive aspects of subjective well-being. The correlations in the averaged sample confirmed four of the nine hypothesized relations of values with subjective well-being, as measured by general mental health (all $p < 0.01$). None of the correlations was particularly strong, but several of the relationships were consistent. Achievement values correlated most positively ($r = 0.22$, in the averaged sample), with significant positive correlations in every one of the six samples. Both self-direction (0.16, average) and stimulation (0.12, average) values correlated positively with general mental health. Their correlations were also positive in all samples, though not all were significant. Of the values hypothesized to correlate negatively with subjective well-being, only tradition values (-0.15 , average) exhibited a significant negative correlation. Its correlations were also negative in all samples, though not all were significant. The findings supported neither

Table 3. Correlations of value priorities with indexes of subjective well-being^a

Value Types:	Hypothesis	Averaged sample <i>N</i> = 1261			Israeli Students <i>N</i> = 183			West German Students <i>N</i> = 195			East German Students <i>N</i> = 205			Israeli Adults <i>N</i> = 170			West German Adults <i>N</i> = 213			East German Adults <i>N</i> = 295		
		Trier	Brad Pos	SWL	Trier	Brad Pos	SWL	Trier	Brad Pos	SWL	Trier	Brad Pos	SWL	Trier	Brad Pos	SWL	Trier	Brad Pos	SWL	Trier	Brad Pos	SWL
Power	–	0.08	–0.06	–0.02	0.10	–0.11	–0.06	0.06	–0.15*	–0.03	0.21	–0.01	0.05	0.08	–0.09	–0.14*	0.12	0.00	–0.01	–0.03	–0.03	0.01
Security	–	0.01	–0.13*	–0.01	0.08	–0.10	0.01	0.08	–0.09	0.02	0.09	–0.11	0.02	–0.15*	–0.18*	0.02	–0.04	–0.14*	–0.04	–0.01	–0.17*	–0.07
Conformity	–	–0.02	–0.12*	0.02	–0.06	–0.14*	–0.04	0.04	–0.16*	–0.05	–0.01	–0.15*	0.05	–0.02	–0.04	0.10	0.00	–0.11	0.00	–0.06	–0.11*	0.03
Tradition	–	–0.15*	–0.08*	0.02	–0.19*	–0.13*	0.03	–0.07	–0.15*	0.04	–0.09	–0.07	0.03	–0.21*	0.01	0.04	–0.17*	0.01	–0.04	–0.19*	–0.14*	0.02
Benevolence	+	–0.04	0.05	0.05	0.08	0.05	0.13	–0.17	0.11	0.05	–0.09	0.10	0.04	0.16*	0.11	0.10	–0.11	–0.09	–0.01	–0.03	0.05	0.06
Universalism	+	–0.11	–0.03	–0.05	–0.16	–0.05	–0.08	–0.10	0.04	–0.04	–0.21	0.03	–0.10	–0.11	0.01	–0.06	–0.13	–0.08	0.03	0.01	–0.08	–0.06
Self-direction	+	0.16*	0.12*	–0.01	0.08	0.24*	0.04	0.21*	0.11	0.07	0.13*	0.13*	–0.10	0.22*	–0.06	–0.10	0.16*	0.16*	0.01	0.14*	0.14*	0.01*
Stimulation	+	0.12*	0.13*	0.03	0.11	0.20*	0.06	0.04	0.06	0.09	0.07	–0.01	0.01	0.14*	0.04	0.07	0.24*	0.19*	0.00	0.10	0.25*	–0.03*
Achievement	+	0.22*	0.10*	0.04	0.18*	0.19*	0.03	0.17*	0.00	0.02	0.25*	0.09	0.11	0.20*	0.08	0.03	0.22*	0.00	0.02	0.25*	0.19*	0.04
Hedonism	?	0.02	0.05	0.00	0.10	0.04	0.01	–0.01	0.02	0.00	0.04	–0.06	–0.02	0.02	0.09	0.00	0.03	0.09	0.01	–0.04	0.12	–0.01

Notes: Trier = Trier Personality Inventory, General Mental Health Scale; Brad Pos = Bradburn Positive Affective Scale; SWL = Satisfaction-with-Life Scale.

^aCorrelations are partialled on each respondent's mean rating of all values to correct for scale use, as recommended in Schwartz (1992).

**p* < 0.01, in averaged sample, <0.05 in separate samples, one-tailed.

the expected positive associations with benevolence and universalism nor the hypothesized negative associations with power, conformity and security.

Positive affect The observed correlations supported six of the nine hypothesized associations of values with the Bradburn positive affect scale in the averaged sample (all $p < 0.01$). The correlations were not large, but they were reliable and fairly consistent across samples. Stimulation (0.13), self-direction (0.12), and achievement (0.10) correlated positively with positive affect. Security (−0.13), conformity (−0.12), and tradition (−0.08) correlated negatively. At least five of the six correlations across samples were in the predicted direction for all of these values, except for tradition (4/6). The predicted positive correlation for benevolence and universalism and the predicted negative correlation for power were not reliable.

Satisfaction-with-life The picture is quite different with regard to the cognitive aspect of subjective well-being, measured by the satisfaction-with-life scale. None of the value types correlated significantly with the cognitive aspect of well-being in the averaged sample. Only one of the 60 correlations between values and satisfaction-with-life across samples was significant. One cannot attribute this consistent outcome to insensitivity of the instruments. Both the values inventory and the satisfaction-with-life scale have been applied extensively in research and have frequently exhibited meaningful relationships with other variables. It is therefore difficult to avoid the conclusion that value priorities and satisfaction-with-life do not vary together across situations.

In sum, there was support for direct—albeit not strong—associations between basic value priorities and the affective component of subjective well-being. Achievement, self-direction, and stimulation values correlated positively, and tradition negatively, with both indexes of well-being that included an affective component. In addition, conformity and security values correlated negatively with the pure affective index. There was no evidence for any relations between value priorities and the cognitive aspect of subjective well-being. These findings, replicated across six samples from three cultural groups, suggests that values have some direct influence on subjective well-being. This influence is rather weak and it refers only to the affective aspect of well-being.

PART II RELATIONS OF WELL-BEING TO VALUE CONGRUITY BETWEEN PERSON AND ENVIRONMENT

We now turn to the second approach to the relations between values and subjective well-being. This is based on the assumption that the fit between the person's value priorities and the values prevailing in the environment is crucial to well-being. Many researchers have noted that individuals may experience problems if their value hierarchies are incongruent with the hierarchy prevailing in their social environments (e.g. Feather, 1975; Furnham & Bochner, 1986; Segall, 1979; Triandis, 1990). People are more likely to experience positive well-being when they can express and fulfill their values and thus attain their goals. When the situational context blocks people's realization of their values, they are likely to experience negative well-being. We note,

in turn, three complementary, yet conceptually distinct mechanisms through which value congruence between person and environment may influence the sense of well-being:

- *Environmental affordances.* One can view environments as sets of opportunities for and constraints against goal attainment. Each physical or social environment offers a set of affordances (Gibson, 1979), of functional utilities or action possibilities. These utilities and possibilities may or may not be congruent with individuals' goals and plans (Pervin, 1992). Congruent environments afford people opportunities to express their important values, to carry out their plans, and to attain their goals. In such environments, people are likely to experience positive well-being. In contrast, incongruent environments block goal attainment. Living in such environments is likely to produce negative well-being.
- *Social sanctions.* A second way to view environments is as sets of expectations, backed by implicit or explicit sanctions, that people communicate to one another (Getzels, 1969). When most people in an environment share a set of value priorities, they are likely to communicate clearly which beliefs, values and behaviors are normative (Holland, 1985; Walsh & Holland, 1992; Schneider, 1987). People who reject the prevailing normative definitions, because these definitions oppose their own values, may be ignored, ostracized, sanctioned, or punished (Holland & Gottfredson, 1976). This would undermine their sense of well-being. People who share the prevailing normative definitions may benefit from social support and reinforcement of their views that enhance their sense of well-being.
- *Internal conflict.* Third, one's sense of well-being may be undermined by conflict between values acquired earlier and values whose internalization is advocated in a new environment. For example, if students internalized conformity values at home, internalizing the self-direction values given priority in an art school would be problematic. When one must make decisions, highly valuing incompatible sets of values is likely to provoke internal value conflict (Schwartz, 1992; Tetlock, 1986). Such conflict has been shown to undermine subjective well-being (Oles, 1991).

Based on these three mechanisms, we hypothesize that: (2) Well-being correlates positively with the congruence between people's value priorities and the priorities that prevail in their environment. We translate this general hypothesis into specific operational hypotheses below.

To test the idea that positive well-being is a product of congruency between own values and those prevailing in the environment, we examined effects of the congruence between students' values and the prevailing value culture in their university department. We studied students in psychology and business administration at an Israeli university. Virtually all students who choose these two departments for their undergraduate work view their studies as a first step toward a career in psychology or in business. They are 'pre-professionals' whose instructors see them as aspiring psychologists and business people.

Students typically choose majors congruent with their interests, skills and motivations (Walsh & Holland, 1992) or modify the latter to match the environment (Holland & Gottfredson, 1976). Consequently, both through self-selection and value socialization, students come to emphasize values similar to the values dominant in their chosen departments (Chatman, 1989, 1991). The resulting relative homogeneity of values in departments leads to the communication of fairly consistent value

expectations among students and faculty. Through formal and informal channels, students learn the goals psychologists and business people are likely to attain in their work and the goals that are likely to be blocked. Their curricula provide opportunities to practice professionally approved values, and they may be sanctioned by teachers and fellow students for expressing incongruent values. Hence the congruence between students' own value priorities and those prevalent in their department is likely to affect their subjective well-being through the mechanisms discussed above.

Consider next the profiles of preferred and rejected values likely to be distinctive of departments that train students for careers in psychology and business.

- *Psychology.* A central role requirement in the ethical code of psychologists is to contribute to the welfare of those with whom they interact professionally (APA, 1997). Holland (1985) classified psychology as a 'social' environment, one that emphasizes caring for and helping others.⁶ Therefore, in terms of the Schwartz values typology, psychologists should attribute relatively high importance to self-transcendence values, values that call for understanding and accepting all people (universalism) and expressing care and concern for the welfare of close others (benevolence). Psychologists have the opportunity to express these values in their work with individual clients and in the larger community, and they are expected to do so.

Self-transcendence values are oppose to self-enhancement values (power and achievement). Power values express the motivations to attain power, authority, and control over people and resources. Exerting power and control over people contradicts the normative role of psychologists as accepting their clients and supporting their growth and independence. Of course, psychologists may use the client-therapist relationship to gain dominance and control, but this violates the professional role they are socialized to adopt (APA, 1997). Achievement values emphasize personal success through demonstrating one's competence according to social standards (Schwartz, 1992). Achievement values also contradict the normative focus on the needs of others inherent in the psychologist's role. However, giving priority to achievement values is not incongruent with the value environment in Israeli psychology departments. Admission into these departments is extremely competitive. Those admitted continue to emphasize achievement because they must attain high grades in order to gain admission into competitive graduate programs that lead to the profession.

- *Business administration.* Holland (1985) defined management as an 'enterprising' environment, one that emphasizes manipulating other people in order to attain organizational or self-interest goals. In this view, management, and business administration in particular, is about getting other people to do what you want them to do. Managers seek to control people and resources and they have to compete for success in comparison to others. Thus, management entails the pursuit of power and prestige, ambition and success. These are goals compatible with the self-enhancement value types of power and achievement. They conflict, however, with benevolence and universalism values that emphasize concern for welfare of others.

We tested the second hypothesis using 82 of the Israeli students in sample 1 (42 from psychology and 40 from business administration). These students were from

⁶The vast majority of Israeli psychology undergraduates wish to learn psychology as a helping profession.

pre-professional departments postulated to have clear and distinctive value profiles. Most Israeli undergraduates have double majors. The business administration students constituted a particularly homogeneous group because all studied economics as their other major. The psychology students were a somewhat less homogeneous group, because they had a wide variety of other majors (e.g. sociology, philosophy, literature, biology). Neither the German student samples nor the adult samples were appropriate for studying the congruency hypothesis because they included no substantial groups exposed to a relatively homogeneous, bounded value environment.

Our description of the two departments assumes that, on average, psychology students attribute greater importance to benevolence and universalism values than do business students, whereas business students attribute greater importance to power and achievement values. We verified these assumptions by examining the mean value priorities of the students from the two departments. As expected, business students emphasized power ($M = 3.37$) values more than psychology students did ($M = 2.39$, $F = 16.22$, $p < 0.01$). Business students also emphasized achievement values ($M = 4.67$) more than psychology students ($M = 4.36$; $F = 4.14$, $p < 0.01$). Also as expected, psychology students emphasized benevolence values more than business students ($M = 4.79$ versus $M = 4.34$; $F = 28.88$, $p < 0.01$). Psychology students rated universalism slightly more important ($M = 3.90$ versus $M = 3.73$), but this difference was not reliable ($F = 1.34$; n.s.).⁷ Given these findings, we can translate the general congruence hypothesis into two specific, testable hypotheses:

- 2a. Among psychology students, emphasizing benevolence and universalism values correlates positively with subjective well-being whereas emphasizing power values correlates negatively. Emphasizing achievement values is unrelated to subjective well-being.
- 2b. Among business students, emphasizing power and achievement values correlates positively with subjective well-being whereas emphasizing benevolence and universalism correlates negatively.

Results

Business administration

Table 4 presents the correlations of individuals' subjective well-being with the importance they attribute to power, achievement, benevolence and universalism values. Columns 1–3 present the findings for business students. Eleven of the 12 correlations in columns 1–3 are in the hypothesized direction ($p = 0.003$, binomial test). Five of these correlations are significant. The findings are consistent with the hypotheses that those who attribute relatively high importance to power and achievement values experience value congruence and hence a greater sense of well-being (all six correlations are positive, four significant). Findings are weaker for

⁷The students from the two departments did not differ on any of the values not postulated to distinguish between their departments. They also had almost identical levels of subjective well-being on all three indexes.

Table 4. Correlations of indexes of subjective well-being with value priorities among business administration and psychology students

Indexes of subjective well-being	Business administration			Psychology		
	Trier	Bradburn	Satisfaction-with-Life	Trier	Bradburn	Satisfaction-with-Life
<i>Value types</i>						
Power ^a	0.34*	0.17	0.27*	-0.17	-0.34*	-0.26*
Achievement	0.36*	0.41*	0.05	0.05	-0.03	-0.07
Benevolence	0.08	-0.22	-0.11	-0.06	0.03	0.03
Universalism	-0.35*	-0.11	-0.10	0.12	0.07	0.18

^aUse of the response scale for values was controlled by partialling on each respondent's mean rating of all values.

* $p < 0.05$, one-tailed.

universalism and benevolence; five of six correlations are in the hypothesized negative direction, but only one is significant.

Psychology

Columns 4–6 present the relevant findings. Eight of the nine correlations are in the hypothesized direction ($p = 0.02$). However, only two of them are significant. Again, the findings are clear for power values, which correlate negatively with all three indicators of subjective well-being (two significant). The findings are very weak for universalism and benevolence values. The correlations with universalism values are all in the hypothesized positive direction, but none is significant. The correlations for benevolence values are all near zero, offering no support for the hypothesis. As expected, achievement values did not correlate with subjective well-being.

Overall, the findings offer a moderate degree of support for the hypotheses. Because the samples were relatively small, correlations in the expected direction may be seen as compatible with the hypotheses even when not reliable. The support was stronger for business than for psychology students. As noted, business students were a more homogeneous group, consisting entirely of students majoring in business and economics. Like business, the field of economics is also characterized by high emphases on power and achievement values (Holland, 1985; Roccas, 1997, unpublished manuscript). We may therefore assume that virtually all the business students perceived the educational environments relevant to their self-identities as encouraging these values.

In contrast, psychology students had a wide variety of second majors. Some of these fields (e.g. philosophy, economics, biology) are probably characterized by value cultures quite different from that of psychology. To the extent that some psychology students identified with their other departmental major, their subjective well-being may have depended on realizing values other than those we hypothesized. This may account for the weaker findings in the psychology sample.

The hypothesized effects of value congruence on well-being were considerably stronger and more reliable for the self-enhancement values (achievement and power) than for the self-transcendence values (universalism and benevolence). The reasons for this finding are not clear, but it is not traceable to differences in the variances or reliabilities of these sets of values. Perhaps this is a peculiarity of the particular value

Table 5. Percent of variance in subjective well-being explained in hierarchical regression analyses

Predictors entered by step:	Trier	Subjective well-being Bradburn	SWL
A Power versus Universalism			
1 Department (Business versus Psychology)	0.00	0.02	0.00
2 Values (Power versus Universalism)	0.02	0.03	0.03
3 Interaction (Values * Department)	0.09	0.07	0.08
B Achievement			
1 Department (Business versus Psychology)	0.00	0.02	0.00
2 Values (Achievement)	0.06	0.08	0.01
3 Interaction (Values * Department)	0.10	0.17	0.05

Note: Trier = Trier Personality Inventory, General Mental Health Scale; Bradburn = Positive Affect Scale; SWL = Satisfaction-with-Life Scale.

Department was coded as a dummy variable: 0 = Business; 1 = Psychology.

cultures studied. Future research in other environments is necessary to probe this finding further.

To further test the hypotheses, we computed hierarchical regression analyses. We predicted each of the three measures of subjective well-being by entering students' major department at the first step, their values at the second, and the interaction between department and values at the final step. To the extent that the fit between environment and person is what affects well-being, the interaction between department (i.e. the environment) and values (i.e. person) should explain the most variance in well-being.

According both to the values theory and empirical findings, the priority ascribed to different types of values is not independent. Thus the power and universalism value types were correlated -0.55 here.⁸ Hence, we combined them into an index by subtracting the mean universalism value score from the mean power value score.⁹ We excluded benevolence values from this index because the correlation analysis (Table 4) had shown that most correlations with the benevolence value type were near zero. We examined the influence of achievement values in a separate regression because we expected no cross-over interaction between achievement values and department: Achievement is hypothesized to correlate positively with well-being among business students but not at all among the psychology students.

Panel A of Table 5 presents the findings with regard to power and universalism values. As can be seen, students' major department had no significant effect on any of the indexes of well-being. It explained a minimal amount of the variance (2 per cent) in positive affect ($F = 1.80$ (1,80); $p > 0.10$). The addition of power versus universalism values in the second step also failed to add significantly to the explanation of variance in subjective well-being (all three indexes, F (df 1,79) < 1.40 ; $p > 0.10$). The addition of the interaction between students' major department and the priority they

⁸After partialing for use of the values scale (Schwartz, 1992).

⁹The rationale for combining these two value types here is their opposite associations with regard to the matters at issue. That is, universalism values are highly important and power values are rejected in the psychology department, while the opposite pattern characterizes the business administration department. However, power and universalism values do not have opposing patterns of association in all contexts (for examples, see Schwartz, 1996). Hence, there is no justification for treating them as a single bipolar value dimension.

gave to power versus universalism values in the third step explained significant variance in all three measures of subjective well-being. As hypothesized, this interaction had a positive impact on well-being for business students and a negative impact for psychology students. It explained an additional 7 per cent of the variance in the Trier mental health scale (F change (df 1,78) = 5.85; $p < 0.05$), 5 per cent of the variance in satisfaction-with-life (F change (df 1,78) = 3.98; $p < 0.05$), and 4 per cent of the variance in the Bradburn positive affect scale (F change (df 1,78) = 3.38; $p < 0.07$).

Panel B of Table 5 presents the findings with regard to achievement values. Not surprisingly, achievement values explained significant variance in the Trier and Bradburn measures of well-being. This reflects the combination of positive correlations in the business student sample and near zero correlations in the psychology student sample reported in Table 4. Adding the interaction effect in step 3 explained an additional 4 per cent of the variance in the Trier mental health scale (F Change (df 1,78) = 3.19; $p < 0.08$), 4 per cent of the variance in satisfaction-with-life (F Change (df 1,78) = 3.54; $p < 0.07$), and 9 per cent of the variance in positive affect (F Change (df 1,78) = 9.06; $p < 0.01$). Although only the latter finding reached the conventional 0.05 level of confidence, given the relatively small sample sizes, all three findings can be taken as pointing to interaction effects.

In sum, findings of the regression analyses provide additional support for the hypothesized congruity effects. The relations of values to subjective well-being depended on the value environment which the students inhabited.

GENERAL DISCUSSION AND CONCLUSIONS

We derived the hypotheses regarding direct relations of values to subjective well-being from four sources: (a) speculations in the psychotherapy literature about 'healthy' and 'unhealthy' values, (b) analyses of the relations of value priorities to growth versus deficiency needs, (c) assumptions about the emotional resources available to people who experience good versus poor well-being to pursue particular values, and (d) self-determination theory and the research based on it that correlated life goals with personal well-being.

As predicted, achievement, stimulation, and self-direction values correlated positively and tradition values correlated negatively with the two indexes of subjective well-being (general mental health and positive affect) that included an affective component. Conformity and security correlated negatively with the pure affective aspect of subjective well-being. In contrast, values showed no direct relations with the cognitive index of subjective well-being.

This set of findings corroborates the emphasis of psychotherapeutic theories on a sense of autonomy, competence, and self-esteem as avenues to mental health (summary in Gat, 1997, unpublished manuscript). In addition, it comports with the emphasis of self-determination theory on autonomy and competence goals as promotive of well-being (see summary in Deci & Ryan, 1995). These associations are also compatible with the idea that people who enjoy a positive sense of well-being focus on personal growth rather than on self-protection and the idea that only such people have the emotional resources to pursue autonomous, challenging goals.

On the other hand, the failure to find a positive association of subjective well-being with universalism and benevolence values raises questions about other derivations from these sources. Indeed, contrary to predictions, the correlations of universalism values with the Trier index of general mental health were negative in five of six samples, and in the averaged sample (-0.11). These outcomes contradict the notion that concern for others rather than for self promotes subjective well-being. It also conflicts with the view that poor subjective well-being leads to self-preoccupation and a lack of emotional resources needed to focus on the welfare of others.

As noted, the associations of well-being with power, security, and conformity values were weak or inconsistent. These are values that express a desire for order and control to compensate for the experience of uncertainty or threat to ones' psychological, material, physical or social welfare. The fact that they did not correlate with subjective well-being suggests that they are neither a cause nor a product of a poor sense of well-being. This outcome is inconsistent with the associations of security and conformity values with negative well-being in an earlier study (Bilsky & Schwartz, 1994). The two studies differed in their measures of well-being, however. The current study used indexes of mild negative well-being, the earlier study used a scale intended to measure psychopathology. Perhaps, when people suffer from more intense negative well-being, they are indeed more likely to cherish security and conformity values which emphasize the order, harmony, and non-threatening relations for which they yearn. Perhaps, too, the use of subjective rather than objective measures of well-being explains the absence of support for the idea that people emphasize values whose attainment would compensate what they lack. It is desirable to investigate whether people who suffer from serious anxiety, insecurity, or defective social relations, measured 'objectively', do indeed attribute especially high importance to security and conformity values.

The lack of association between power values and subjective well-being is inconsistent with the findings, in studies based on self-determination theory, that emphasizing 'extrinsic' rather than 'intrinsic' life goals associates negatively with subjective well-being. Indeed, contrary to expectations from this theory, power values correlated positively with general mental health in five of six samples, and in the averaged sample (0.09). We return to this below.

The finding that values did not relate directly to the cognitive index of subjective well-being, even when they did relate to the affective indexes, was unexpected and surprising. One possibility is that this is because the cognitive aspect of well-being studied here refers to satisfaction. Satisfaction may be influenced primarily by the extent to which people *realize* the values that are important to them rather than by the importance they attribute to particular value types. This is consistent with the content of the items in the satisfaction-with-life scale. Expressing satisfaction with life on this scale largely reflects a sense of goal attainment. Two of the five items suggest this directly ('In most ways my life is close to my ideal'. 'So far I have gotten the important things I want in life'), and two others imply it as well. A positive sense of cognitive well-being may therefore depend not on what people value but on their success in attaining whatever they value. In the second part of the current study, value congruity predicted satisfaction-with-life, probably because congruity promotes attainment of valued goals.

A possible alternative explanation for the relations between values and well-being found in this study is that people who are well adjusted in the society—and therefore

enjoy a positive sense of well being—are also likely to emphasize the values important in their society. Some findings were congruent with this idea, but most were not. For example, self-direction values were among the three most important value types in all six samples, and they did correlate positively with well-being. However, other findings contradict this explanation: Stimulation values were relatively unimportant in all six samples, but they correlated positively with well-being; security values were among the two most important values in the Israeli samples, but they correlated negatively with affective well-being; benevolence values were among the two most important values in all six samples, but they did not correlate with well-being.

The second part of the study indicated that personal value priorities contribute significantly to subjective well-being above and beyond their modest direct effects. Congruity between people's values and their environment promotes well-being regardless of the particular values to which people ascribe importance. People are likely to experience a positive sense of well-being when they emphasize the same values that prevail in their environment, when they inhabit an environment that allows them to attain the goals to which their values are directed. Subjective well-being is likely to be undermined when there is low value congruence between person and environment. This applied to the cognitive as well as to the affective aspects of subjective well-being.

We presented several mechanisms that might moderate relations between value priorities and subjective well-being. We provided a preliminary test of hypotheses based on these mechanisms with data from two university departments. Overall, the findings supported our characterization of the value culture of these departments and were compatible with most of the hypotheses. But this research was carried out with only two small samples. To increase our confidence in these preliminary results, the hypotheses must be tested again with larger samples.

We have not examined directly the three mechanisms on which we based the hypotheses. This too is a task for future research. Pre-professional university departments are useful sites for such research because they seek to socialize their members toward particular cultures of values. By testing the same conceptual hypotheses of value congruity in different departments, with regard to different values, we can assess the generality of the current theorizing. Self-direction might be congruent with the environment in creative writing, for example, but incongruent in a theology department. Stimulation might be congruent in performing arts but incongruent in accounting.

The weaker support for the congruity hypotheses in the psychology as compared with the business administration sample raises an interesting possibility. It suggests that lack of person-environment value congruity may not undermine well-being when people have alternative cultural environments that can serve as sources of their identity. The environment of the departmental major is but one of the several environments in which students spend their time (e.g. family, peer group, religious community). A person's overall sense of well-being is a product of the feelings of well-being experienced in the different environments he or she inhabits. Focusing only on one environment, as we did here, may therefore explain only part of the variance in a person's well-being that is attributable to value congruity. Future research should study the impacts of value congruity with several of the environments that people inhabit simultaneously.

As discussed above, the impact of value environments on subjective well-being probably depends upon the relevance of the environments for a person's self-identity.

The more important a given environment is for the person's self-identity, the stronger the impact that congruity with this environment will have on the person's well-being. This supposition also merits investigation. By explicitly measuring the importance of the environments studied to the self-identities of research participants, the moderating effects of identification on the relationship of well-being to value congruity can be examined.

The various findings regarding power values in this study conflict with findings in several studies that drew on self-determination theory. They reported that the pursuit of extrinsic life goals (parallel to power values) correlated negatively with well-being (Emmons, 1991; Kasser & Ryan, 1993, 1995). We found no reliable negative associations of power values with subjective well-being, and we found a positive association with general mental health. Moreover, when we took account of the environment which respondents inhabited, subjective well-being and power values correlated negatively among psychology students and positively among business students. A possible explanation for the different findings may be that the environments in the earlier studies were not supportive of power values. The student samples in those studies were recruited in psychology courses. Hence, many respondents in those samples may have spent considerable time in an environment where power values are rejected. We have insufficient information to speculate about the dominant value environments to which other samples in those studies were exposed.

The current study raises questions about the notion of 'healthy' versus 'unhealthy' values. Part I provided limited support for inferring that self-direction, achievement, and stimulation values are 'healthy' and tradition, conformity, and security values are 'unhealthy'. There was no convincing evidence, however, that benevolence and universalism values are 'healthy' or that power values are 'unhealthy'. The reasoning and findings of Part II suggest that no particular value type is inherently 'healthy' or 'unhealthy'. Rather, particular values contribute to positive or negative well-being depending on whether they are congruent with the values emphasized in particular environments. The values typically identified as 'healthy' versus 'unhealthy' may reflect a Western cultural bias or, more narrowly, a bias of highly educated Westerners. The 'healthy' values emphasize autonomy and independence whereas conformity and relationship-based values that are more conservative and security-oriented are 'unhealthy'. It is possible, even likely, that members of tradition societies would view the healthiness of these sets of values quite differently.

A recent study of patients undergoing psychodynamic psychotherapy over a period of one year uncovered a finding that partly supports the congruity view (Gat, 1997, unpublished manuscript). Patients whose stimulation, benevolence, conformity, and security values changed in the direction of the value priorities prevalent in the societal environment (as measured in a control group of 'normals') showed improvement in symptoms, subjective well-being, complaints, and adaptation. This was not the case for convergence toward other values in the environment, however. One must therefore ask why convergence on these four value types was especially important. Interestingly, convergence of patients' values toward the values of their therapist was associated more with deterioration than with improvement in mental health. We interpret this as signifying that congruity in the everyday environment is more relevant for patients' goal pursuit than congruity in the peculiar and time-limited therapeutic environment.

In sum, the first part of this study demonstrated that many types of values are directly, albeit weakly, relevant to the affective aspect of subjective well-being but not to cognitive aspects. The second part suggested that different types of values (perhaps all) may be relevant to subjective well-being, depending on the value environment. To discover the full relevance of values to well-being requires taking into account value congruity with the environment. The results of this study support the worth of continuing research on relations of well-being with values. Focusing on the congruity of people's values with the variety of environments they inhabit, and weighting the congruity by the importance of each environment to people's self-identity are promising directions for future research.

ACKNOWLEDGEMENTS

This research was supported by a grant from the Recanati Fund of the School of Business Administration at the Hebrew University to the first author, and by grant #I-241-065 from the German-Israeli Foundation for Scientific Research and Development to the first author and by the Leon and Clara Sznajderman Chair of Psychology. We thank Klaus Boehnke, Claudia Stromberg and Gila Melech for their help in carrying out the research and Anat Bardi, Arielle Lehmann, Ariel Knafo, Gila Melech, Sonia Roccas, Naomi Struch, and Noga Sverdlik for their comments on drafts of the manuscript.

REFERENCES

- American Psychological Association (1997). *Professional code of ethics for psychologists*. Washington, DC: American Psychological Association.
- Argyle, M. & Martin, L. (1991). The origins of happiness. In F. Strack, M. Argyle & N. Schwarz (Eds), *Subjective well-being* (pp. 77–104). Oxford: Pergamon.
- Becker, P. (1989). *Das Trierer persönlichkeitsinventor*. Göttingen: Hogrefe.
- Bilsky, W. & Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, **8**, 163–181.
- Borg, I. & Shye, S. (1993). *Facet theory: The method and its application*. Newbury Park, CA: Sage.
- Bradburn, N. M. (1969). *The social structure of psychological well-being*. Chicago, IL: Aldine.
- Campbell, A., Converse, P. E. & Rogers, W. L. (1976). *The quality of American life*. New York: Russell Sage.
- Carver, C. S. & Baird, E. (1998). The American dream revisited: Is it what we do or why we do it that matters? *Psychological Science*, **9**, 289–293.
- Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, **9**, 333–349.
- Chatman, J. A. (1991). Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly*, **36**, 459–484.
- Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L. & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation, Vol. 38, Perspectives on motivation* (pp. 237–288). Lincoln, NB: University of Nebraska Press.

- Deci, E. L. & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York: Plenum.
- Diener, E. & Emmons, R. A. (1984). The independence of positive and affect. *Journal of Personality and Social Psychology*, **47**, 1105–1117.
- Diener, E., Emmons, R. A., Larsen, R. J. & Griffin, S. (1985). The satisfaction-with-life scale: A measure of life satisfaction. *Journal of Personality Assessment*, **49**, 71–76.
- Diener, E. & Larsen, R. J. (1984). Temporal stability and cross-situational consistency of affective, behavioral and cognitive responses. *Journal of Personality and Social Psychology*, **47**, 871–883.
- Emmons, R. A. (1991). Personal strivings, daily life events, and psychological and physical well-being. *Journal of Personality*, **59**, 453–472.
- Feather, N. T. (1975). *Values in education and society*. New York: Free Press.
- Furnham, A. & Bochner, S. (1986). *Culture shock: Psychological reaction to unfamiliar environments*. London: Methuen.
- Getzels, J. W. (1969). A social psychology of education. In G. Lindzey & E. Aronson (Eds), *The handbook of social psychology* (vol. 5). Reading, MA: Addison-Wesley.
- Gibson, J. (1979). *The ecological approach to visual perception*. Boston: Houghton Mifflin.
- Guttman, L. (1968). A general non-metric technique for finding the smallest coordinate space for a configuration of points. *Psychometrika*, **33**, 469–506.
- Heady, B. & Wearing, A. (1991). Subjective well-being: A stocks and flows framework. In F. Strack, M. Argyle & N. Schwarz (Eds), *Subjective well-being* (pp. 49–73). Oxford: Pergamon.
- Holland, J. L. (1985). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. & Gottfredson, G. D. (1976). Using a typology of persons and environments to explain careers: Some extensions and clarifications. *The Counseling Psychologist*, **6**, 20–29.
- Jensen, J. P. & Bergin, A. E. (1988). Mental health values of professional therapists: A national interdisciplinary classification. *Professional Psychology: Research and Practice*, **19**, 290–297.
- Kasser, T. & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, **65**, 410–422.
- Kasser, T. & Ryan, R. M. (1995). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, **22**, 82–87.
- Kluckhohn, C. (1951). Values and value orientations in the theory of action: An exploration in definition and classification. In T. Parsons & E. Shils (Eds), *Toward a general theory of action* (pp. 388–433). Cambridge, MA: Harvard University Press.
- Kohn, M. & Shooler, C. (1983). *Work and personality*. Norwood, NJ: Ablex.
- Larsen, R. J., Diener, E. & Emmons, R. A. (1984). An evaluation of subjective well-being measures. *Social Indicators Research*, **17**, 1–17.
- Maslow, A. H. (1970). *Motivation and personality*. New York: Harper & Row.
- McCrae, R. R. & Costa, P. T. (1991). Adding liebe und arbeit: The full five-factor model and well-being. *Personality and Social Psychology Bulletin*, **17**, 227–232.
- Oles, P. K. (1991). Value crisis: Measurement and personality correlates. *Polish Psychological Bulletin*, **22**, 53–62.
- Pavot, W. & Diener, E. (1991). Review of the satisfaction-with-life scale. *Psychological Assessment*, **5**, 164–172.
- Pervin, L. A. (1992). Traversing the individual-environment landscape: A personal odyssey. In W. B. Walsh, K. H. Craik & R. H. Price (Eds), *Person-environment psychology: Models and perspectives* (pp. 71–88). Hillsdale, NJ: Erlbaum.
- Ryan, R. M., Koestner, R. & Deci, E. L. (1991). Ego-involved persistence: When free choice behavior is not intrinsically motivated. *Motivation and Emotion*, **15**, 185–205.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Schmitt, M. J., Schwartz, S. H., Steyer, R. & Schmitt, T. (1993). Measurement models for the Schwartz Values Inventory. *European Journal of Psychological Assessment*, **9**, 107–121.
- Schneider, B. (1987). E = f(P,B): The road to a radical approach to person-environment fit. *Journal of Vocational Behavior*, **31**, 353–361.

- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 25, (pp. 1–65). New York: Academic Press.
- Schwartz, S. H. (1994). Are there universal aspects in the content and structure of values? *Journal of Social Issues*, **50**, 19–46.
- Schwartz, S. H. (1996). Value priorities and behavior: Applying a theory of integrated value systems. In C. Seligman, J. M. Olson & M. P. Zanna (Eds), *The Psychology of Values: The Ontario Symposium*, Vol. 8, pp. (1–24). Hillsdale, NJ: Erlbaum.
- Schwartz, S. H. & Bardi, A. (1997). Influences of adaptation to communist rule on value priorities in Eastern Europe. *Political Psychology*, **18**, 385–410.
- Schwartz, S. H. & Bardi, A. (in press). Moral dialogue across cultures: An empirical perspective. In E. W. Lehman (Ed.), *An anthology of communitarian thought*.
- Schwartz, S. H., Bardi, A. & Bianchi, G. Value adaptation to the imposition and collapse of Communist regimes in Eastern Europe. In S. A. Renshon & J. Duckitt (Eds), *Political psychology: Cultural and cross-cultural perspectives*. London: Macmillan.
- Schwartz, S. H. & Huismans, S. (1995). Value priorities and religiosity in four Western religions. *Social Psychology Quarterly*, **58**, 88–107.
- Schwartz, S. H. & Sagiv, L. (1995). Identifying culture-specifics in the content and structure of values. *Journal of Cross-Cultural Psychology*, **26**, 92–116.
- Schwartz, S. H., Verkasalo, M., Antonovsky, A. & Sagiv, L. (1997). Value priorities and social desirability: Much substance, some style. *British Journal of Social Psychology*, **36**, 3–18.
- Schwarz, N. & Strack, F. (1991). Evaluating one's life: A judgment model of subjective well-being. In F. Strack, M. Argyle & N. Schwarz (Eds), *Subjective well-being* (pp. 27–48). Oxford: Pergamon.
- Segall, M. H. (1979). *Cross-cultural psychology: Human behavior in global perspective*. Monterey, CA: Brooks/Cole.
- Sheldon, K. M. & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, **68**, 531–543.
- Shye, S., Elizur, D., & Hoffman, M. (1993). *Introduction to facet theory*. New York: Sage.
- Strupp, H. H. (1980). Humanism and psychotherapy: A personal statement of the therapist's essential values. *Psychotherapy*, **17**, 396–400.
- Tetlock, P. E. (1986). A value pluralism model of ideological reasoning. *Journal of Personality and Social Psychology*, **50**, 819–827.
- Triandis, H. C. (1990). Cross-cultural studies of individualism and collectivism. In J. Berman (Ed.), *Nebraska Symposium on Motivation, 1989* (pp. 41–133). Lincoln, NB: University of Nebraska Press.
- Veenhoven, R. (1991). Questions on happiness: Classical topics, modern answers, blind spots. In F. Strack, M. Argyle & N. Schwarz (Eds), *Subjective well-being* (pp. 7–26). Oxford: Pergamon.
- Veroff, J., Douvan, E., & Kukla, R. A. (1981). *The inner American*. New York: Basic Books.
- Walsh, W. B. & Holland, J. L. (1992). A theory of personality types and work environments. In W. B. Walsh, K. H. Craik & R. H. Price (Eds), *Person–environment psychology: Models and perspectives* (pp. 35–78). Hillsdale, NJ: Erlbaum.
- Williams, R. M. Jr (1968). Values. In E. Sills (Ed.), *International encyclopedia of the social sciences*. New York: Macmillan.