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Personal Project Profiles and Subjective Well-Being

James Horley

A thesis submitted to the
Faculty of Graduate Studies and Research
in partial fulfillment of the requirements
for the degree of Master of Arts.

Department of Psychology,
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Ottawa, April, 1984.

The undersigned hereby recommend to the
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Abstract

This thesis explored the relationship between subjective well-being and aspects of everyday pursuits and activities. After a review of some theoretical and methodological issues vis-a-vis subjective well-being, it was proposed that the concept of lifestyle or personal philosophy is a key component of any comprehensive model of subjective well-being. It was also proposed that Personal Projects Analysis (Little, 1983) could provide a measure of lifestyle. A study was conceived and conducted in order to examine this question empirically.

Analysis of information supplied by 52 study participants revealed four patterns of personal project dimensional ratings- patterns that were called personal project profiles. These four patterns corresponded closely to the findings of one previous study. For those respondents reporting high well-being, four profiles again emerged. They were provisionally labelled hedonism, adventurism, individualism, and promethianism. Proportionally more males than females were classified on the adventurism profile, while more females than males were classified on the hedonism and individualism profiles. Proportionally more younger than older respondents were classified on the hedonism and adventurism profiles, while more older than younger respondents were classified on the promethianism profile. A well-being model that examined the effects of extraversion, neuroticism, and clusters of personal project variables on well-being was tested. One of the most striking findings concerned the contrast between the positive effect of a variable cluster labelled "personal meaning" on well-being, and the negative effect of a variable cluster labelled "social meaning" on well-being.

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One of the strangest, least interpretable symptoms of our time is the neglect by psychologists of the problem of happiness, the inner state which Plato, Aristotle, and almost all succeeding thinkers of the first rank assumed to be "the highest of all goods achievable by action". Although the crucial role of dissatisfaction and satisfaction is implicit in much that is said about motivation, activity, and reinforcement, psychologists are generally disposed to shun these terms as well as all their synonyms. (Murray and Kluckhohn, 1962, p. 17)

Disputes over the problem of happiness have traditionally been fought by theologians, philosophers, politicians, and economists. Jones (1953) has pointed to James' The Principles of Psychology (1890) as the beginning of psychology's involvement in the battle. In his 1890 classic, James described satisfaction as being relative to an individual's level of aspiration. As Murray and Kluckhohn and others (e.g., Bradburn, 1969; Campbell, 1981) have pointed out, however, psychologists generally have not devoted a great deal of attention to the study of happiness until very recently.

Since the 1950's, according to George (1981), two social science disciplines, psychosocial gerontology and psychosocial epidemiology (or social indicators research) have become increasingly interested in happiness and its "synonyms". These two disciplines, which count many psychologists among their numbers, have had somewhat different reasons for focussing on happiness. Psychosocial gerontology has been interested in happiness as an indicator of adjustment and successful aging, while social indicators research has been defined explicitly as the discipline concerned with the assessment, dynamics, and facilitation of human well-being and quality of life (Palys, Note 1; Palys & Little, 1980). More generally, however, both fields of inquiry have accepted happiness as an indicator of mental health. Given that concern about mental health

is really concern about psychological or subjective well-being (Bradburn, 1969), one can view happiness more properly as an indicator of subjective well-being.

A perusal of gerontological and social indicator writings reveals that a number of concepts (e.g., life satisfaction, morale) have been accepted as indicators of subjective well-being. This leads one to wonder whether the problem of happiness is a simple, unitary problem. To address such a question, it appears necessary to examine the various well-being concepts and relationships between these concepts.

Subjective well-being and its indicators

If, as Jahoda (1958) has remarked, mental health is a vague and elusive concept, then the concept of subjective well-being is no less slippery. Consulting a dictionary provides no firm grasp of the concept. Well-being has been generally defined as "the state of being healthy, happy, or prosperous" (Morris, 1970, p. 1454). From this definition, subjective well-being can be described as a state of being happy, or at least the belief that one is happy. This, however, raises the question: When dealing with concepts like happiness and life satisfaction, are we looking at different ways of defining a single construct, or are we dealing with distinct constructs related to a higher order construct? The answer would appear to be the latter.

Even in common parlance, distinctions between terms like happiness and satisfaction can be found, although many of the distinctions are obscure. One dictionary definition, for example, defines "happy" as "having or demonstrating pleasure or satisfaction" (Morris, 1970, p.599). Among social scientists who have discussed conceptual

distinctions, Campbell (1981) has stated that "there is no doubt that happiness and satisfaction have something in common [but] there is also a difference" (p. 22). He described satisfaction as involving an act of judgement and lacking the spontaneous feeling quality of happiness. Stones and Kozma (1980) have provided perhaps the most succinct conceptual definitions of happiness and life satisfaction. They defined happiness as "an activity or state in the sphere of feelings", and life satisfaction as "gratification of an appropriate portion of the major desires of life" (p. 270). Undoubtedly, the acceptability of these and other definitions can be debated at length (see Campbell, 1981, and George & Bearon, 1980, for more detailed discussions of conceptual differences). The conclusion must be drawn, however, that conceptual definitions of terms like happiness and satisfaction, although they allow for some commonality, do point to distinct terms.

It appears, then, that subjective well-being can best be viewed as a superordinate construct (Stones & Kozma, 1980), or a broad, abstract construct requiring more concrete indicators like happiness and satisfaction (George, 1981). In line with this view, subjective well-being has been defined as a self-perceived positive state or feeling (Horley, 1984). Given such an understanding, the debate that Murray and Kluckhohn (1962) have described as the problem of happiness can be regarded as the problem of subjective well-being, with the questions concerning happiness and similar concepts being separate sub-issues.

The measurement of subjective well-being

Accepting the preceding argument, one might expect to find a myriad

of subjective well-being constructs and measures. To date, however, attention has been focussed on a handful of constructs and a relatively small number of corresponding measures. An examination of the measures of two popular well-being indicators, happiness and life satisfaction, is informative.

Almost without exception, measures of happiness have been of the self-report, pencil-and-paper variety; and, for the most part, they have been rationally derived, multi-item scales. One can find examples of such scales, dating back to the early 1930's, developed for use in personality and clinical psychology (e.g., Hartmann, 1934). Wilson (1967) has provided a complete review of these early measures. More recent happiness measures, while still largely self-report and rationally derived, do reflect some changes in the conceptualization of the construct. Bradburn (1969; Bradburn & Caplovitz, 1965), for example, developed a happiness scale that is based on the notion that happiness is the outcome of the balance of two independent dimensions, positive and negative affect. Despite some unfavourable critiques (e.g., Mettee, 1971), Bradburn's Affect Balance Scale has been a useful touchstone for much empirical research (e.g., Zautra & Reich, 1981) and the impetus for happiness scale reconstruction (e.g., Kozma & Stones, 1980). Recent researchers, especially those in the social indicators field (e.g., Andrews & Withey, 1976), have deviated somewhat from tradition and have developed direct magnitude self-ratings of happiness.

An extremely influential paper in gerontology by Neugarten, Havighurst, and Tobin (1961) introduced the Life Satisfaction Index-A (LSIA). It is a global satisfaction measure composed of 25 agree-disagree format items, and it served as the model for shorter life

satisfaction measures like the LSIA-A (Adams, 1969) and the LSIZ (Wylie, 1971). The LSIA and its shorter versions quickly became the most popular measures of well-being, at least in gerontological use. Although the LSIA may still be "the most widely used instrument for assessing the subjective perceptions of well-being among older individuals" (George & Bearon, 1980, p. 47), direct magnitude ratings of life satisfaction have become popular. The initial three and 7-point scales that were developed (see Andrews & Withey, 1976) have been abandoned by some researchers for psychometric reasons in favour of 11-point scales (Atkinson, Note 2).

As one might expect, some potential problems with existing well-being measures have been raised. Such problems as the self-report nature of ratings and inappropriate assessment level deserve some attention here.

In spite of arguments that point to the many advantages of self-reports (e.g., Bradburn & Caplovitz, 1965), the almost exclusive use of self-reports has been decried by Larson (1978), who mentioned a number of concerns which were detailed by others either previously or subsequently. Zarit (1982) has pointed out that social desirability may be a cause of spuriously high well-being scores, especially with elderly respondents. This point was underscored by Neugarten, Havighurst, and Tobin (1961) with a case example, and Carstensen and Cone (1983) have reported findings that tend to confirm Zarit's doubts. The concern about the use of self-reports has also received support from the empirical work of Nisbett and Ross (1980).

George (1981) and Horley (1984) have argued that the most pressing problem facing gerontologists using well-being constructs and measures is the lack of conceptual consistency. The variance in terminological

usage does not appear to be restricted to the field of gerontology. Wherever it is evident, the advancement of measurement is profoundly influenced.

Another major difficulty, noted by Horley (1984), is inadequate assessment. According to Andrews and Withey (1976), well-being assessment can occur at two levels: a global, or life-as-a-whole level; and a life domain (e.g., marriage, employment) level. Rodgers and Converse (1976) cautioned that "the request to evaluate life as a whole may be an unfamiliar and difficult task for many respondents, so that their answers to such questions may not be as meaningful as their assessments of more concrete domains" (p. 148). Horley (1984), however, argued that even assessment at a domain level may be foreign and meaningless to some individuals. He has proposed a finer, "elemental" level of assessment. Related to this point, George (1981) warned that ratings of global happiness and life satisfaction should not be used as criterion measures in intervention evaluations, where sensitive measures are required, because of their general nature and assumed relative stability.

Undoubtedly, there are other potential problems with existing well-being measures. In spite of these criticisms, however, even vigorous detractors would likely admit that present measures provide some indication of an individual's level of subjective well-being. How that level occurs and is influenced has been a question of concern to various theorists, both classical and contemporary, who have pondered the nature of well-being and the good life.

Overview of subjective well-being theories

Quite a wide variety of theories exist which directly or indirectly address the question of how change in well-being occurs. The theories can be divided into two major groupings: theories which focus on environmental, intrapersonal, or interpersonal conditions that supposedly influence well-being; and those which are concerned with specific techniques or paths that putatively lead to psychological well-being regardless of conditions. The two categories can be seen as descriptive and prescriptive, respectively.

In the former category, one can place social comparison, adaptation level, and biological theories. Social comparison theorists (e.g., Merton & Kitt, 1950) would maintain that life satisfaction is the result of a series of social comparisons, on one or more dimensions, between one's own circumstances and the circumstances of a significant comparison group. In other words, the perception of well-being is relative to a comparison group or groups. A somewhat more elegant theory, claimed to subsume comparison theory (Brickman & Campbell, 1971), is adaptation level theory, introduced by Helson (1964). Brickman and Campbell (1971) have argued that subjective well-being is dependent upon habituation; that is, after an individual adapts to his/her own set of circumstances, the conditions that once produced a sense of well-being will no longer. According to this formulation, one must constantly seek increasingly stimulating environmental conditions in order to maintain one's level of well-being. In this way, one is indeed on a "hedonic treadmill" (Brickman & Campbell, 1971, p. 289). Other theorists in the first category would maintain that biological determinants underlying fairly stable personality characteristics are

responsible for well-being. The Greek physician, Galen, was one who held such a view. More recently, Costa and McCrae (1980) proposed that extraversion and neuroticism were major determinants of overall well-being. They demonstrated in a longitudinal study that extraversion was significantly related to happiness while neuroticism was related to unhappiness. Although they did not completely rule out other influences on well-being, they concluded that extraversion and neuroticism were the major determinants of overall well-being.

Theorists and writers who could be placed into the second category are those who have argued that it is simply the right technique or philosophy which will lead to subjective well-being. Even a partial list of theorists and their writings would be lengthy, including hundreds of writers from Aristotle to Russell. Instead, a brief discussion of a few notable examples will be presented.

One philosophy or approach to well-being which has its roots in antiquity but has a profound influence on the present is hedonism, or the belief that the pursuit of sensual pleasure should be the ultimate goal of human action. Epicurus, whose school of Greek philosophy embraced this position, can be seen as an early proponent of hedonism. Zeno, a contemporary of Epicurus, taught that humanity should accept fate without regard for baser emotions like joy or grief. His teachings formed the basis of the philosophy that became known as stoicism. A more contemporary philosopher, the German Leibnitz, argued that the basis of what might be termed "well-being" is acceptance of the belief that our mundane world is the best of all possible worlds, a position that became known as optimism. In contrast, Gautama, the founder of the Buddhist religious tradition, taught that mundane reality is characterized by

suffering, impermanence, and illusion in the form of perceived individual selfhood. He espoused a detached, selfless approach to life which is claimed to produce a heightened sense of well-being (Rahula, 1974). This claim seems to have received some recent empirical support, admittedly indirect, from Csikszentmihalyi (1975). Csikszentmihalyi has linked intense satisfaction and euphoria to an experience that he has labeled "flow", or a total absorption, to the point of experiencing lowered self-consciousness, in a demanding activity.

In light of the empirical work of Costa and McCrae (1980) and others, debate over the relative merits of existing theories would necessarily be extensive. It may, too, resolve little, especially given the rather "primitive" (i.e., undeveloped) nature of present theories. Instead, it is proposed that discussion of a more comprehensive well-being model or framework would be more fruitful than discussion of strengths and weaknesses of existing theories. An emerging theory and existing methodology- Personal Projects Analysis (PPA; Little, 1983)- appears to provide a powerful vehicle to assist in reconciling present well-being theories and findings.

Personal Projects Analysis and life satisfaction research

In partial response to an expressed need in personality psychology for more adequate units of analysis (Allport, 1958), the personal project has been suggested as an analytic unit worthy of investigation (Little, 1972, 1983). Based on personal construct theory (Kelly, 1955) and specialization theory (Little, 1976), and supported by a social ecological framework (Little & Ryan, 1976), the project is seen as a set of interrelated acts extending over time which is intended to attain or

maintain a state of affairs foreseen by an individual (Little, 1983). Given this definition, it is obvious that an individual's on-going set of personal projects, his/her project system, engages him/her spatially and temporally and can reflect cognitive, affective, and conative aspects of daily functioning. A methodological tool for assessing an individual's set of projects has been described by Little (1983), who has termed the PPA assessment package the Personal Projects Analysis Kit (PPAK).

During the administration of the PPAK (see Appendix B), respondents are requested to list a set of personal projects, activities, or concerns in which they are presently engaged. They are then asked to choose and rate ten of these projects on a number of dimensions which have been selected on conceptual or pragmatic grounds.¹ Though the number of possible dimensions is theoretically unlimited, practical limitations, such as respondent fatigue, do exist. Consequently, a "core" group of sixteen dimensions (listed and described on pp. 79-80, Appendix A) have been in use since roughly 1980.

Project rating analysis can be conducted at one or both of two levels. The project system of the individual can be searched for relationships between dimensions, and can also be content analyzed (see Little, 1983, or p. 84, Appendix A for a listing of current content categories). The option exists, however, to rise above the individual to the normative level by calculating dimension means.² A more detailed description of analytic procedures can be found in Little (1983).

With respect to the assessment of affective domains, the relevance of PPA seems very direct. Lazarus, Kanner, and Folkman (1980) have stated that emotions "arise out of the ongoing relationships or

'transactions' ...in which the person influences and is influenced by the environment" (p. 195). PPA, therefore, would appear to provide an ideal unit and methodological device for the study of emotion in general, and affective responses like happiness and satisfaction in particular. Somewhat surprisingly, however, relatively little attention has been focussed directly upon emotion in projects analysis to date. To illustrate this lack of direct attention, only two core project dimensions, project enjoyment and project stress,³ tap an affective domain. A number of inquiries, however, have probed the relationship between project variables and one well-being indicator, life satisfaction.

In what can be seen as the first major empirical test of PPA (Palys, Note 1), project enjoyment was found to be a significant correlate and predictor of satisfaction with life. Employing correlational and discriminant function analyses, Palys (Note 1; Palys & Little, 1983) reported that individuals low in satisfaction were characterized by projects having high importance to life quality ratings but low in project importance and enjoyment ratings.⁴ On the other hand, those high in satisfaction had more projects which were high in project importance and enjoyment. The impression conveyed is one of a dominant attitude of pleasure-seeking and carpe diem- a philosophy possibly quite prevalent among the university students who made up the majority of Palys' sample. Palys also reported a significant correlation between project enjoyment and extraversion, as well as significant negative correlation between an 11-point life satisfaction scale and a neuroticism rating.

Dywan (Note 7) also found that project enjoyment was a significant predictor of life satisfaction for both males and females in her sample

of introductory psychology students, but she discovered some differences between males and females. Whereas the best predictor of life satisfaction for females was bivalent impact, which is the presence of projects having both a positive and negative impact upon other activities, the best predictor of life satisfaction for males was importance to life quality. This apparent contradiction of Palys' finding may be a reflection of the significance, in terms of life satisfaction for young males entering serious career training, of planning and engaging in projects which seem to have some "down the road" importance.

Contrary to earlier findings, Yard (Note 4) discovered no relationship between project enjoyment and life satisfaction, but he did find significant correlations between project control and life satisfaction as well as anticipated successful completion of projects and life satisfaction. Like Palys, Yard also found a significant correlation between project enjoyment and extraversion.

A study by Horley (Note 3) examined bivariate relationships between project variables and life satisfaction of the elderly on a normative level. Having recruited respondents from institutional and community living situations, one interesting difference between the two groups was discovered. For the institutionalized aged, no project variables related to life satisfaction, but for the community group, there was a significant negative relationship between the number of projects listed and an 11-point life satisfaction scale. Although this finding may simply reflect an overload response on the part of the elderly who fend for themselves, it is possible that, had subjects who listed less than five projects been included in the study, low numbers of projects would

have correlated negatively with life satisfaction. In other words, with at least some groups of elderly individuals, it is suggested that a non-linear relationship exists between overall satisfaction and amount of activity or stimulation.

In a cross-sectional study of project correlates and predictors of life satisfaction in Canada and Bangladesh, Chatterjee (Note 5) reported that a multiple regression analysis using the Canadian data revealed the four best predictors of overall satisfaction to be visibility of one's actions, project challenge, self-identity of activities, and others' view of the importance of one's projects. The emergence of community-related variables such as visibility and others' view of importance may be seen as being more relevant to the recruitment of social support, especially in light of a finding by Palys (Note 1) who reported that those high in life satisfaction recruited more valuable assistants than did those lower in satisfaction. Chatterjee also reported that ratings obtained from university-aged respondents in Bangladesh showed significant positive relationships between anticipated successful completion of projects and life satisfaction as well as project progress and life satisfaction.

However tenuous, there appears to be a connection between these project findings and the theories of well-being previously discussed. It could be argued that the project findings provide some support for the well-being theories (see Table 1). Adaptation level theory receives some support from Horley's suggestions of a non-linear relationship between life satisfaction and number of projects- a relationship which, if not identical to Helson's (1964) quartic function, might fit a quadratic equation when graphed; both Yard and Palys found a number of

Table 1

Representative theories of subjective
well-being and support from personal project studies

Subjective well-being theory	Classical proponent	Contemporary proponent	Project studies in support
Category I- Descriptive			
1. Adaptation level	---	Brickman and Campbell(1971)	Horley (Note 3)
2. Social comparison	---	Merton and Kitt (1950)	Chatterjee(Note 5)
3. Biological	Galen		
— a)extraversion/ neuroticism	--- o	Costa and McCrae (1980)	Palys (Note 1) Yard (Note 4)
Category II- Prescriptive			
1. Hedonism	Epicurus	---	Palys (Note 1) Dywan (Note 7)
2. Stoicism	Zeno	---	Yard (Note 4)
3. Optimism	Leibnitz	---	Chatterjee(Note 5)
4. Selflessness	Gautama	Csikszentmihalyi (1975)	Horley (see Appendix A)

correlations between extraversion, neuroticism, life satisfaction, and project enjoyment to support the view that biologically-based personality attributes account for well-being; Chatterjee's finding concerning the prediction of life satisfaction from community-related project variables tends to support the social comparison view of well-being; the pilot study for the present investigation (see Appendix A for a complete description of rationale and results), which revealed a significant correlation between project absorption and life satisfaction, supports a selflessness stance, at least as envisioned by Csikszentmihalyi (1975); both Palys' and Dywan's findings concerning the relationship between life satisfaction and project enjoyment lend support to those who would claim that a hedonistic life leads to well-being; Yard's finding that, for police officers, project control and anticipated success relate to life satisfaction suggests a stoic-like position; an optimist view receives some support from Chatterjee's findings concerning the relationships between life satisfaction and project progress and successful outcome.

Although past project findings seem to provide some support for different well-being theories, the picture of the relationship between personal projects, well-being, and various individual measures is unclear. This is due, in part, to the wide variety of analytical techniques adopted by previous investigators. The extreme demographic differences between the aforementioned samples, however, may be an even more important factor in the explanation of the disparate results. Institutionalized octogenarians, middle-aged police officers, and young Bangladeshi students might well be expected to reveal differential relationships between project variables, personality measures, and

well-being indicators such as life satisfaction. Why? The answer appears to lie in the lifestyles and, indirectly, in the values of the various national, ethnic, or socioeconomic groups. Thus, recognition of the roles of lifestyles and values might lead to clarification of the well-being picture.

Value orientations, lifestyles, and personal project profiles

The importance and implications of a scientific study of values have been convincingly argued (see Handy, 1970; Rokeach, 1968). Presumed by many to be the basis of much human behaviour, values have been described as organized about "value orientations" (Kluckhohn, 1962) or "value directions" (von Mering, 1961). Kluckhohn defined value orientation as the "'philosophy' behind the way of life of every individual and of every relatively homogeneous group...[which] gives, with varying degrees of explicitness or implicitness, some sense of coherence or unity to living in both cognitive and affective dimensions" (p. 407). In other words, the organized set of general, existentially-related values have been equated with individual or group life philosophy. The behavioural or outward manifestation of this set of values or value assumptions can be seen as the individual's or group's lifestyle. Used here, lifestyle does not necessarily refer to the Adlerian concept of lifestyle, but the Adlerian understanding appears consistent with the present approach. Thorne (1975) has defined lifestyle as "the more or less characteristic schema ... implicit in a person's attack on his problems" (p. 236), and he has noted that, for Adler, this concept forms the theoretical basis of a state, as opposed to trait, approach to personality.

Researchers from a variety of disciplines, especially psychology,

have empirically investigated the organization of both values (e.g., Allport, Vernon, & Lindzey, 1951; Rokeach, 1968) and value orientations (e.g., Morris, 1956; von Mering, 1961). To mention just two examples of value orientation studies: In his study of value orientations, which he termed "ways of life" and "paths to life" in an earlier work (Morris, 1942), Morris (1956) examined cross-cultural differences in life philosophy; von Mering (1961), on the other hand, was interested in differences between subcultures, as well as within subcultures, examining "value profiles" to compare modal and extreme valuers.

In spite of the relative inventiveness and productivity of value investigators, Handy (1970) has criticized researchers to date for ignoring or overlooking one crucial aspect of value measurement: transactional or contextual measurement. Handy emphasized the importance of psychometric examination of value scales, but he cautioned that contextual demands force a careful investigator to examine also the operational problems of using scales in particular situations. Little (1983) appears to have addressed this concern of Handy's. In his discussion of the project as an analytic unit allowing contextual assessment, Little described values as underlying an individual's choice of projects, and he reported on the development of a "value-laddering procedure" (p. 296) for assessing values. While this technique may by itself provide a solution to the problem posed by Handy, another way of using PPA to assess value dimensions would be to examine the different patterns or profiles of scores on project dimensions. For example, high scores on importance, control, outcome, and self-typicality, coupled with low scores on visibility and others' view of importance, might indicate a set of values or a lifestyle oriented toward

personally-defined meaning and accomplishment. Reduction of project dimensional ratings to a set of patterns or profiles should not only provide a quantification of lifestyle, but it should reduce the complexity of rich but unwieldy project data to a more presentable and "digestable" format (Appotive; Note 6).

The personal project profile has been the subject of an exploratory investigation by Rodway (Note 9). Using taxonomies of project dimensional ratings generated by Skinner and Lei's (1980) Modal Profile Analysis (MPA), Rodway found readily identifiable profiles for her overall sample, as well as subsamples of young, middle-aged, and elderly males and females. Because of the exploratory nature of her study, Rodway was cautious in drawing conclusions, but she did conclude that the intuitive appeal of the profiles seemed to justify further investigation.

In the context of the present examination of subjective well-being, it appears that project profiles, which represent taxonomies of project dimensional patterns, will yield a concise quantification of lifestyle useful in the determination of the relationships between personal projects, well-being, and individual difference measures. Specifically, it is probable that analysis of a relatively heterogeneous group reporting high well-being would reveal two or more profiles distinguishable from a low well-being group. In this way, a direct relationship between project profiles and well-being theories in the second, prescriptive category is established. Expressed in terms of project dimensions, these profiles may appear as presented in Table 2. Although the configurations are highly speculative, the emergence of key dimensions, highlighted by circles for the four paths in Table 2, might

Table 2

Personal project profiles expressed as project
variable composites

<u>Project variable</u>	<u>Project profile</u>			
	Hedonism	Stoicism	Optimism	Selflessness
Importance	X	X	X	
Enjoyment	(X)		(X)	-X
Difficulty	(-X)	(X)	-X	
Visibility				
Control		X	X	
Initiation	X			
Stress	(-X)			X
Time-adequacy			X	
Outcome		X	(X)	
Self-identity			X	
Others' view				
Value congruency		(X)		(X)
Positive impact		X	X	
Negative impact		-X		
Progress	X		(X)	X
Challenge		X		
Satisfaction	(X)	X	X	X
Absorption		X		(X)
Assistance	X		X	

provide evidence of a particular philosophy or orientation.

While the link between the second well-being category and personal projects has been established theoretically, the connections between the first category, personal projects, and individual differences have yet to be explicated. These links can be made by proposing a general framework for the examination of subjective well-being.

A comprehensive view of subjective well-being

Like past theories which focus upon stable personality characteristics of an individual (e.g., Costa and McCrae, 1980) and theories which concentrate on an individual's perceptions of the external physical environment (e.g., Brickman & Campbell, 1971) or the external social environment (e.g., Merton & Kitt, 1950), the framework depicted in Figure 1 takes into account individual trait and environmental influences. The proposed framework, however, considers, indeed emphasizes, the role of an individual's personal philosophy, whether explicit or implicit, in the determination of overall well-being. For example: Following Figure 1, a stable extravert, who would be predicted by the Costa and McCrae model to express high well-being regardless of other factors, might lead a hedonistic life with few future plans and be quite satisfied with life- until some social or physical environmental upheaval, like an economic recession, produces a non-supportive environment. The likely result, low well-being, can be altered by a change in lifestyle, environment, both, or conceivably even a change in personality characteristics, perhaps via drug use or meditative practices. As another example, a neurotic introvert, who sees himself as in control of his activities and also

Figure 1

A general framework for subjective well-being

very likely to succeed, might choose a low stimulation, high constraint housing situation to take on his most meaningful projects, with the long-term outcome of high perceived well-being. If environmental conditions remain constant or improve, his activities are unlikely to change radically; but, if his environment becomes high stimulation, low constraint (that is, essentially non-supportive), low well-being would be a probable consequence, and the individual might attempt to change his/her lifestyle and/or environment. Many more examples could be given. The point is that the framework is relatively flexible with respect to the different sources considered essential to a more complete understanding of well-being. In terms of a general systems theoretical perspective (see Sundberg, 1977), the framework takes into account the systems that impinge upon everyone, as well as their respective potential effects on affective responses such as life satisfaction or happiness.

The present investigation

A study was devised and conducted to explore a number of the issues discussed above. The focus of the study was the identification and examination of personal project profiles. It was anticipated that analysis of a group reporting high well-being would reveal two or more configurations of project dimensions consistent with high subjective well-being. This stands in contrast to the expectation of a single project profile for those reporting high well-being. Although explicit prediction of the nature of the profiles was complicated by the exploratory character of the study, some tentative predictions (see Table 2) were made.

The proposed framework for the study of subjective well-being was also examined. It was hypothesized that, while personality characteristics such as extraversion and neuroticism will display a significant effect upon high and low well-being, respectively, the prediction of subjective well-being is expected to be more dependent on the particular type of individual with a particular lifestyle in particular contexts. This complex interrelationship is best examined using a path analytic strategy. The specific model proposed for testing is depicted in Figure 2. From this model, it was predicted that the mediated paths (B1 & Bn) from the extraversion and neuroticism factors, through the project profile factors, to the well-being factor would exceed the direct paths (G1 & G2) from the extraversion and neuroticism factors to the well-being factor. In addition to providing a more complete understanding of the interplay of various factors that hypothetically influence subjective well-being, and vice versa, it is anticipated that the identification of different life philosophies that relate to subjective well-being will have some clinical, ameliorative implications.

The investigation also provided the opportunity to examine three additional questions vis-a-vis PPA. First, Rodway's (Note 9) project profiles required replication. Second, a further investigation of the issue of global versus mean project ratings was required.⁵ Third, the new project dimensions of absorption, satisfaction, and assistance required testing.⁶ Although they were expected to emerge as key dimensions in some project profiles, the nature of the roles of the three new variables were not specified a priori.

Figure 2

A proposed model of subjective well-being

Method

Subjects

Recruitment of subjects was conducted in three undergraduate psychology courses: an introductory class (for which subjects received credit for experimental participation), a second year level class, and a third year level class. In order to maximize heterogeneity of respondent variables, such as age and subjective well-being, only night classes were approached.

In total, 131 students agreed to participate in the study, of whom 53 returned completed questionnaire booklets. One of these booklets was discarded because of missing information. Among the 52 study subjects, there were 17 males and 35 females. Their ages ranged from 19 to 52 ($\bar{x}=26.5$, $s.d.=7.59$) years. Thirty-seven were from the introductory class, five from the second year class, and 10 were from the third year class.

Materials

The materials used in the investigation were a set of questionnaires which made up a 15 page booklet (see Appendix B for a copy of the booklet). Among the questionnaires were: a revised PPAK (Little, 1983); an abbreviated version of the Eysenck Personality Inventory, taken from Eysenck (1958); and 11-point self-ratings of life satisfaction (Atkinson, Note 2), life meaning (adapted from Appotive, Note 6), and quality of life (Palys, Note 1); a Thing-Person Orientation Scale (Little, 1976); and a modified Repression Scale (Olson & Zanna, 1983). It was expected that, in total, the booklet would take about 90 minutes to complete.

Procedure

After being told that a study of aspects of human personality was being conducted, and that involvement was being requested, students who agreed to participate in the study were given an assessment booklet, asked to read the set of enclosed instructions, and direct any queries to the principal investigator. Subjects were then asked to take the booklet with them and return it one week later for collection in class. Also at the time of recruitment, subjects were told that a debriefing, in the form of a complete description of the purpose of the investigation, was available upon request after the completion and return of the study booklet. Approximately 10 subjects requested and received the debriefing procedure.

Analytic strategy

The generation of well-being scores and the division of the sample into high and low well-being groups were among the first tasks necessary in the data analysis. On the basis of previous reports concerning the convergent validity of single-item well-being scales (e.g., Andrews & Withey, 1976; Horley & Little, Note 10), the three well-being measures--the life satisfaction, life meaning, and quality of life scales--were combined, and the product of the three ratings used as a respondent's well-being score. It was decided, too, that the high-low cut-off criterion would be above 216, or the product of the "neutral" scores of the three scales. Univariate ANOVA and discriminant function analysis were performed to examine group differences and well-being discriminators.

Modal profile analysis was used to generate personal project profiles.⁷ Following Skinner (1979), dimensions with T-scores, one

standard deviation above or below the mean were noted in interpreting the profiles. After generating profiles for the high well-being group, the low group (i.e., the rest of the sample which, in an absolute sense, were not low) were analyzed and classified using the high group profiles. It was decided that an individual's loading on all four profiles would serve as project profile data.

In order to test the proposed well-being model, the use of linear structural equation analysis (LISREL), using Joreskog and Sorbom's (1981) LISREL V algorithm and computer program, was planned.⁸ A correlational matrix of relevant variables was generated for analysis using LISREL V and maximum likelihood estimates of causal path coefficients.

Results

Subjective well-being indicators

Descriptive statistics revealed that subjects perceived themselves, on the whole, to be high in well-being. The life satisfaction scale ($\bar{x}=6.55$, s.d.=1.93), the life meaning scale ($\bar{x}=7.11$, s.d.=1.80), and the quality of current life ladder ($\bar{x}=6.58$, s.d.=1.33) reflect scores which can be considered relatively high given the 0-to-10 rating of the scales. After deriving the single well-being index, due to the relatively high ratings, the sample was divided into high and low well-being groups on the basis of a cut-off criterion of 250, or roughly the product of the upper end of the "neutral" range for all three scales, rather than a cut-off criterion of 216. Even with such a criterion, the high well-being group was composed of 35 individuals, while the low well-being group was composed of 17.

Table 3
Univariate comparisons and standardized discriminant function
coefficients of personal project variables (by high and low
well-being groups)

Project variable	Mean(low well-being)	Mean(high well-being)	F (1,50)	p	Standardized discriminant function coefficients
Importance	7.74	7.58	.32	ns	-.51
Enjoyment	5.62	6.48	4.34	.04	.38
Difficulty	5.54	4.89	1.69	ns	--
Visibility	5.48	5.24	.15	ns	--
Control	7.22	7.65	1.16	ns	--
Initiation	7.84	8.09	.37	ns	--
Stress	4.96	4.09	3.34	ns	-.53
Time adequacy	5.16	5.04	.06	ns	--
Outcome	7.39	7.59	.28	ns	--
Self-identity	7.00	7.11	.07	ns	-.56
Others' view	6.31	5.85	.81	ns	--
Value congruency	7.65	7.39	.24	ns	--
Positive impact	6.35	6.28	.01	ns	--
Negative impact	1.97	2.55	1.18	ns	.32
Progress	4.19	4.45	.36	ns	--
Challenge	5.71	6.03	.39	ns	--
Satisfaction	6.56	7.60	6.65	.01	.47
Absorption	5.86	6.97	5.73	.02	.48
Assistance	3.55	4.91	3.43	ns	.45

In terms of personal project variables, there were marked differences between the high and low well-being groups. As presented in Table 3, univariate analysis of the 19 project dimensions revealed that those in the high well-being group reported having project systems significantly higher in enjoyment and satisfaction, and marginally lower in stress, than the low well-being group. The high well-being group also reported project systems in which they became significantly more absorbed, and have marginally greater social assistance, than the lower well-being group.

Discriminant function analysis of the 19 project variables showed that the resulting discriminant function accounted for a significant proportion of the variability in well-being scores ($R_c(8) = .61$, $p < .006$, $R_c^2 = .37$). The linear function was composed of eight variables: satisfaction, importance, absorption, stress, negative impact, self identity, assistance, and enjoyment (see Table 3 for discriminant function coefficients).

Overall project profiles

The result of the profile analysis, using MPA, of the entire sample (see Table 4) was a set of four modal profiles. Although Rodway's (Note 9) analysis of a large ($n = 1121$) community sample revealed only three significant profiles, the second, third, and fourth generic profiles bear a striking similarity to Rodway's three profiles. The second overall profile in Table 4 seems to reflect a lifestyle of those who are involved in a number of challenging and non-conflictful projects. Extremely high difficulty and stress scores, however, coupled with a low time adequacy score, tend to suggest an overcommitted project system. The

Table 4

Modal Profile Analysis of project variables for the sample
(n=52)

<u>Project variable</u>	Modal profiles (in T-scores)			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Importance	59	55	49	59
Enjoyment	60	43	47	41
Difficulty	42	67	42	48
Visibility	45	61	48	42
Control	62	46	43	62
Initiation	66	54	48	54
Stress	39	62	37	49
Time adequacy	54	40	52	32
Outcome	59	45	53	59
Self-identity	58	41	55	53
Others' view	41	58	57	55
Value congruency	51	56	55	65
Positive impact	47	56	64	40
Negative impact	37	34	20	52
Progress	50	41	54	26
Challenge	45	64	52	46
Satisfaction	55	51	57	51
Absorption	55	44	50	53
Assistance	25	32	68	62

third modal profile, in contrast to the second, appears to reflect a lifestyle typified by coherent, non-conflictful, and non-stressful activities or concerns. Like Rodway's third modal profile, the fourth profile in Table 4 suggests a project system under control, but lacking coherence or progress. Although the system is value congruent and self-typical, with anticipated positive outcome for activities, there is little enjoyment or time available in such a lifestyle- perhaps, again, revealing an overcommitment.

The first modal profile in Table 4, although dissimilar to previous overall findings, does closely correspond to one set of previous results. Owing to the large sample size, Rodway was able to generate and examine profiles of males and females in various age ranges. For her total subsample of females, Rodway's first profile suggested a low stress, non-conflictful lifestyle. This result corresponds to the first profile in Table 4.

Following Skinner and Lei (1980), more precise relationships between present and previous profiles were calculated by correlating profile T-scores. The first profile and Rodway's first female profile ($r(16)=.79, p<.001$), the second profile and Rodway's first generic profile ($r(16)=.73, p<.001$), the third profile and Rodway's second generic profile ($r(16)=.71, p<.001$), and the final profile and Rodway's final generic profile ($r(16)=.72, p<.001$) were all found to be positively correlated.

Project profiles of the high well-being group

Profile analysis, using MPA, of the personal project dimensions for the high well-being group produced four significant profiles (see Table

Table 5

Modal Profile Analysis of project variables
for the high well-being group (n 35)

<u>Project variable</u>	<u>Modal profiles (in T-scores)</u>			
	1	2	3	4
Importance	53	45	56	62
Enjoyment	62	37	45	47
Difficulty	33	65	43	62
Visibility	59	59	30	45
Control	48	43	62	65
Initiation	58	50	53	64
Stress	35	52	38	56
Time adequacy	48	44	51	37
Outcome	56	45	60	53
Self-identity	58	43	57	48
Others' view	51	58	50	43
Value congruency	56	56	53	56
Positive impact	54	60	50	41
Negative impact	30	23	36	51
Progress	57	47	40	29
Challenge	47	67	45	53
Satisfaction	58	54	53	54
Absorption	56	46	52	53
Assistance	31	55	75	32

5). A more detailed understanding of the nature of such a project system can be gained by examining the project content and value congruency of those so classified. The first modal profile for the high well-being group is marked by high positive affect (i.e., high enjoyment and satisfaction) and little problem (i.e., low difficulty, stress, and negative impact). Although the project system is perceived as relatively visible to others, there is a perceived lack of project assistance. If, one were to label this profile's prototypical individual's lifestyle, the label "hedonism" would fit. The impression is of a lifestyle in which one desires and attracts others to share in a set of activities that are both easy and enjoyable. The respondent with the highest loading (.90) on the first project path was Subject 1. Although there was no variance in this individual's value congruency ratings- all projects received the highest possible score- the nature of the elicited projects suggests generally hedonistic pursuits. While six of the ten projects concerned course work, the courses ranged from tennis lessons, through oil painting classes, to flying lessons. "Buying a piano", "Buying camping equipment", and "Keeping up with music and fashion" were among the other activities listed by Subject 1.

The second modal profile suggests the label "adventurer". The project profile is characterized by low enjoyment but, at the same time, high challenge and difficulty. High positive impact and low negative impact indicate that the system of these individuals is relatively well-integrated and non-conflictful. Subject 12 had the highest loading (.89) on the second path. This respondent's most value congruent project was "Not drink as much", followed closely by "Exercise daily", "Quit smoking", and "Study more". While these activities do not conjure

up the image of a swashbuckling adventurer, the difficulty and challenge inherent in such activities is clear (especially for a reformed or reforming hedonist!).

The third profile is characterized by low visibility but sufficient perceived assistance, and low progress but anticipated successful outcome. In addition, there is a perception of high control, low stress, and lack of conflict. The dominant impression is one of a lifestyle of "individualism", or of someone who prefers to, and perceives that they can succeed on their own. The highest loading (.87) respondent on the third profile was Subject 46. The most value congruent project for Subject 46 was "Complete my essay", followed by "Go for coffee with friend", "Do my laundry", and "Improve my communication skills".

Although not suggestive of a "loner", the elicited projects, if only the recurrent use of the pronoun "my", do seem to point to someone with an individualistic bent.

The final profile is characterized by activities which are perceived as important, self-controlled, and self-initiated, but which are not progressing well and are difficult. There is also a perceived lack of assistance and time for conducting the activities. A fitting label might be "overcomitted promethian", or one who is involved, actually overinvolved, in a number of activities. Subject 17 had the highest loading (.87) on the fourth profile. This respondent's three most value congruent projects- "Finish Laura's curtains", "Fix corner cupboard", and "Start sewing"- do not indicate extreme involvement or overcommitment on their own. Looking over the entire project list, however, it is clear that Subject 17's children are a focus of much activity and, together with holding down a full-time job, it is not too

difficult to understand how such involvements would necessarily demand extreme activity and could easily lead to overcommitment.

Examination of the high and low well-being groups' individual classification rates (i.e., the percentage of subjects whose highest loading on a modal profile was at least $|.5|$) reveals that the classification was highly successful. For the high well-being group, 91.43% of the subjects were successfully classified. This figure explained 75.47% of the total variance. Even for the low well-being group, 76.47% of the subjects and 63.35% of the total subject variance were accounted for by classification. Looking over both groups, only one subject was classified "negatively" (i.e., the best fit of the subject's project profile is the mirror image of the generated profile).

Testing the model of subjective well-being

Examination of the proposed model of subjective well-being using LISREL did not proceed as intended because of two problems. First, an overestimation of the flexibility of LISREL resulted in no measurement of social or physical environmental variables. Second, and more important, the use of MPA scores as project path data was anticipated, upon further reflection, to be suspect statistically for a number of reasons. For example, having preselected a group on the basis of their well-being scores, generating project profile scores, and then using those scores in a well-being model appeared to carry the potential of bias to the LISREL testing of the model. Consequently, it was determined that a simple examination of contingency tables with profile and individual difference variables, using a chi-square test of significance, was a preferable analytic strategy. The lack of measured

Table 6

Frequencies of personal project profiles (high well-being) by sex and age

Project profile	Age		Sex	
	<26.5 years	>26.5 years	male	female
1	13	5	4	14
2	7	0	6	1
3	8	4	2	10
4	6	9	5	10
	n=34	n=18	n=17	n=35
	n=52		n=52	

environmental variables, however, remained a problem. The small number of subjects in the high well-being group rendered detailed frequency breakdowns pointless. Instead, the full sample was included, and a number of variables in addition to extraversion and neuroticism were tested.

Both age ($\chi^2(3)=8.36$, $p<.04$) and sex ($\chi^2(3)=11.24$, $p<.02$) revealed significant differences when cross-tabulated with project profile (see Table 6 for frequencies). For those younger than 26.5 years (the sample mean), relative to those older than 26.5, more were assigned to profiles one and two. For the older group, proportionally more were assigned to the fourth profile. In other words, more of the lifestyles of the young could be called hedonistic and adventuristic than could older individuals, but the lifestyles of more older individuals than younger ones could be called promethian. With respect to sex, the first and third profiles account for proportionally more females than males, and the second profile accounts for more males than females. Thus, to generalize to the sample level, hedonistic and individualistic views are predominant among women and a stance of adventurism is significant among men.

The relative frequencies of other demographic and individual difference measures were also analyzed, but none were statistically significant. Neither income level ($\chi^2(6)=3.47$, n.s.) nor marital status ($\chi^2(6)=2.05$, n.s.) revealed significant results when cross-tabulated with profile number. Similarly, extraversion ($\chi^2(3)=1.47$, n.s.), neuroticism ($\chi^2(3)=3.01$, n.s.), repression ($\chi^2(3)=2.57$, n.s.), and thing-person orientation ($\chi^2(9)=2.57$, n.s.) produced non-significant results.

In order to examine the structure of linkages between the 19 project

variables, a nonparametric McQuitty linkage analysis (McQuitty, 1967) was performed.¹⁰ The results (see Figure 2) revealed four clusters, tentatively labeled: stress, personal meaning, self-efficacy, and social meaning. By using a cut-off coefficient of roughly $r=.45$, but tempered by rational analysis of "cluster fit", the variables that comprised the four clusters were reduced to 12. The stress cluster was made up of project stress and project difficulty; the personal meaning cluster of absorption, satisfaction, enjoyment, and importance; the self-efficacy cluster of self-typicality, outcome, and control; and the social meaning cluster of value congruency, others' view of importance, and visibility. It was decided post hoc that these four clusters would be analyzed using LISREL to obtain some understanding of the dynamics underlying the factors, well-being, and personality characteristics in a model similar to the proposed project path, well-being model.

The variables that were included in the new model, with product-moment coefficients showing intercorrelations, are presented in Table 7. The three well-being measures- the life satisfaction scale, the life meaning scale, and the present quality of life rating- were found, as expected, to be highly intercorrelated. The various project measures were correlated to a lesser extent within clusters.

The linear structural equation model and resulting path coefficients are shown in Figure 3. In light of previous findings vis-a-vis the relationship between extraversion and neuroticism (e.g., Eysenck, 1958), separate and orthogonal extraversion and neuroticism factors were established. Indeed, as reported in Table 7, a nonsignificant correlation between the two was found. Among the path coefficients reported in Figure 3, only four were significant: neuroticism-well-being

Figure 3

McQuitty Linkage Analysis of personal project variables

(n=52)

Table 7

Product-moment correlation matrix of the well-being model variables ($n=52$)

	Present life quality	Life meaning	Life satisfaction	Stress	Difficulty	Absorption	Satisfaction	Enjoyment	Importance	Self-identity	Outcome
Present life quality											
Life meaning	*** .64										
Life satisfaction	*** .61	*** .65									
Stress	-.22	-.25*	-.29*								
Difficulty	-.20	-.16	-.11	*** .72							
Absorption	.38**	.35**	.33**	-.20	-.29*						
Satisfaction	.37**	.36**	.18	-.12	-.32*	*** .63					
Enjoyment	.21	.33**	.20	-.38**	-.45***	.57***	.61***				
Importance	.07	.05	-.11	-.04	-.18	.49***	.39**	.47***			
Self-identity	-.20	.20	.12	-.32*	-.41***	.45***	.45***	.45***	.35**		
Outcome	.26*	.14	.04	-.27*	-.44***	.39**	.31*	.36**	.21	.56***	
Control	.20	.16	.17	-.18	-.28*	.25*	.03	.12	.08	.28*	.36**
Value congruency	.01	-.07	-.09	.14	-.03	.30*	.40***	.20	.22	.44**	.41**
Others' view	-.10	-.19	-.30*	.29*	.11	.14	.06	.01	.13	.14	.30*
Visibility	-.05	-.04	-.07	.29*	.23*	.09	.23*	.12	.04	.05	.13
Extraversion	.28*	.09	.17	.13	.12	.20	.22	-.04	-.11	-.07	-.03
Neuroticism	-.25*	-.23*	-.20	.24*	.19	-.25*	-.01	-.01	-.10	-.24*	-.11

* $p < .05$ ** $p < .01$ *** $p < .001$

One-tail test of significance.

Table 7 (continued)

Product-moment correlation matrix of the well-being model variables ($n=52$)

	Control	Value congruency	Others' view	Visibility	Extraversion	Neuroticism
Control						
Value congruency	.13					
Others' view	-.06	***				
Visibility	-.13	***	***			
Extraversion	-.16	-.09	-.01	.10		
Neuroticism	-.12	-.24*	-.32*	-.09	-.07	

* $p < .05$ ** $p < .01$ *** $p < .001$

One-tail test of significance.

Figure 4

Subjective well-being model with
LISREL-generated (maximum likelihood) path coefficients

($t(109)=-2.42$, $p<.05$); personal meaning-well-being ($t(109)=2.74$, $p<.05$); social meaning-well-being ($t(109)=-2.71$, $p<.05$); and neuroticism-social meaning ($t(109)=-2.08$, $p<.05$). Although a significant chi-square ($\chi^2(109)=163.70$, $p<.001$) indicated a less than optimal fit of the data to the model, the overall fit of the data was moderate (goodness of fit index=.65) according to Joreskog and Sorbom's (1981) guidelines. In total, the structural equations accounted for 40% of the variance in the data.

Summary of results

To present the study results in brief, it was found that:

1. The sample means of the three well-being measures were relatively high, ranging from 6.55 (Life Satisfaction Scale) to 7.11 (Life Meaning Scale). All three measures were found to correlate highly, from $r=.61$ (Life Satisfaction Scale and Quality of Life Ladder) to $r=.74$ (Life Meaning Scale and Quality of Life Ladder).
2. Univariate ANOVA's revealed that low and high well-being groups differed significantly on the project variables enjoyment, satisfaction, and absorption. In the case of each of these variables, the high well-being group reported higher levels.
3. A linear combination of eight project variables- satisfaction, importance, absorption, stress, negative impact, self-identity, assistance, and enjoyment- was found to discriminate between high and low well-being groups.
4. A set of four project profiles for the entire sample were

revealed using MPA. The T-scores of these profiles correlated significantly with previous findings.

5. Using MPA, a set of four project profiles were found for the high well-being group. The four labels suggested to describe these profiles were: hedonism, adventurism, individualism, and promethianism.

6. Although the proposed model of well-being was not tested as planned using LISREL, partial testing was achieved using the chi-square statistic with a frequency breakdown. Only sex and age revealed significant effects. More young than old were assigned to the hedonistic and adventurism profiles, and more old than young were assigned to the promethianism profile. For females, more were assigned to the hedonistic and individualistic profiles than males, and more males were assigned to the adventurism profile than females.

7. McQuitty linkage analysis revealed four clusters of project variables, tentatively labeled: stress, personal meaning, self-efficacy, and social meaning. Twelve variables composing these four clusters, along with extraversion, neuroticism, and the three well-being measures, were included in a revised well-being model and analyzed using LISREL. The highest path coefficient (partial beta) was found for the path from social meaning to well-being ($\beta = -.68$). Other significant betas were from: neuroticism to well-being ($\beta = -.31$),

neuroticism to stress ($\beta = .24$), and personal meaning to well-being ($\beta = .42$).

Discussion

Subjective well-being indicators

Before commenting on the findings of the present investigation, a caveat regarding result interpretation should be issued. A major concern to this writer is the high non-compliance rate of those who initially agreed to participate in the research. While a 40% return rate may be considered "respectable" given the voluntary and extrinsically unrewarding (for most) nature of the study, this means that 60% of the subjects were not represented in the analyses, and the possibility of a systematic sample bias is evident. The extremely high scores on the life satisfaction, life meaning, and present life quality scales attest to the high self-perceived positive feelings of those who returned their completed booklets. Even accepting that a voluntary study will necessarily attract those with higher well-being, one cannot help but wonder whether the well-being measures' means would have been substantially lower had most participants returned completed materials. It might have been the case, however, given the sample (viz., university students) and the time of year (viz., middle of March), that many who would have reported high well-being were eliminated because of other commitments. Profiles that would have emerged had these people been included in the sample might have been somewhat different. For example, an "achiever" profile (with high scores on importance, outcome, progress, challenge, and absorption) might have emerged, or more younger individuals might have been classified on the promethian profile.

Given a broad definition of subjective well-being, such as the one provided previously, one can regard project enjoyment and project satisfaction as well-being indicators, though elemental level ones.

Judging from the correlations between these variables and the three global well-being measures, and the discriminating ability of project enjoyment and satisfaction vis-a-vis overall well-being, there is a clear connection between global and elemental well-being measures, at least for the small present sample.

Like Palys' (Note 1; Palys & Little, 1983) findings, the high well-being group was found to report significantly higher enjoyment than the low group; but, unlike Palys' findings, which showed that the low group reported higher project difficulty than the high group, no differences between groups on difficulty were found. Both Palys' and the present samples came from university populations, but it is probable that, because the present sample came from night courses, there were age differences. Accepting that the present sample was somewhat older than Palys', and in light of Yard's (Note 4) positive correlation between enjoyment and difficulty for middle-aged police officers, it may be that difficulty and enjoyment are positively associated for middle-aged individuals. Hence, difficulty may be a good discriminator, but only for age-homogeneous groups; and, to further qualify this hypothesis, the overall saliency of difficulty is probably dependent on the value orientations of the group under study.

Absorption was found to differentiate those high in well-being from those low in well-being, with the high well-being group reporting more absorption in activities. This finding, coupled with the results of the pilot study (see Appendix A), lends some support to Csikszentmihalyi's contention that complete absorption in an activity will produce happiness or euphoria. It may also provide some tenuous evidence for the notion that, in order to experience any form of well-being, evaluation

must be suspended (Brickman & Campbell, 1971).

Personal project profiles

The results of the overall MPA and the correlational analysis of the resulting profiles lend support to the previous findings of Rodway (Note 9). The results, ~~too~~, tend to bolster confidence in the representativeness of the present sample. While the significant positive correlations between Rodway's three generic profiles and the last three generic profiles in the present analysis were expected, the significant correlation between Rodway's first profile for her female subsample and the first generic profile was unexpected. The 2:1 ratio (females:males) in the present sample, however, is a compelling explanation of this result. To extrapolate from this finding, one would expect to find a profile akin to one of Rodway's male profiles for a sample heavily weighted in favour of males.

The four MPA, or project profiles obtained using the high well-being group not only have intuitive appeal, but the classified individuals' project lists seem to corroborate the choice of profile labels. The first profile seems to reflect a hedonistic lifestyle. As predicted of a hedonistic philosophy (see Table 2), the project variables enjoyment, difficulty, and stress were found to have significant T-scores, in the predicted directions, on the first profile. Again, the two previous project studies (Palys, Note 1; Dywan, Note 7) suggesting a hedonistic lifestyle used mostly university students as participants. Admittedly, Palys (Note 1) did conduct a community replication and found enjoyment to be a potent predictor of life satisfaction, but one could argue that a philosophy that emphasizes sensual pleasure or gratification is

evident among those in university, or at least of university age. According to the frequency analysis reported previously, more young students than old, and more females than males, report a hedonistic lifestyle, although the small sample size makes such conclusions tentative at best.

At first glance, with low enjoyment and high difficulty T-scores, the second path might appear far removed from high subjective well-being. In light of the high challenge score, however, difficulty may be interpreted as challenging obstacles, as opposed to stressful barriers. The emergence of the challenge dimension suggests a lifestyle replete with activities that tax personal resources but, while not pleasurable, lead to enhanced well-being. Examination of the highest loading individual's projects seems to bear this out.¹¹

This adventurism profile appears linked to at least one set of research findings. Kobasa, Hilker, and Maddi (1979) have shown that, among individuals in high stress situations, those who seek challenge and novelty cope well with stress. Had they included a well-being measure in their battery of tests, their findings might well have indicated a similar connection between adventure or novelty seeking and high well-being.

While it seems to contain a hint of stoicism, with predicted high control and outcome scores, the third profile strongly suggests a lifestyle of individualism, largely due to the perception of sufficient social support for private, self-controlled projects. While Adler (1930) spoke of each individual having a unique, fixed "style of life", he intimated that there were general types, and an individualistic type was examined in subsequent empirical work (e.g., Thorne, 1975). It is

interesting to note that, at least for the small present sample, more women, especially young women, than men report such a lifestyle.

The fourth project profile is one that could cause one to wonder- by virtue of low reported progress of activities, little perceived assistance, little available time, and much difficulty- whether such a lifestyle could lead to high well-being for any type of individual. The picture of a harried lifestyle is quite clear. Again, however, the interpretation of difficulty is moot, and the combination of high importance, high self-control, and high self-initiation scores suggest a lifestyle that, albeit frenzied, does include personally meaningful activities. Rodway (Note 9), without using the high well-being selection criterion, found similar profiles for both middle-aged men and women, with one notable exception: the importance variable did not emerge. For those who do take on, or have forced on them, too many projects, the key dimension, in terms of high subjective well-being, is perhaps the perceived importance of the many activities. It is certainly predictable, at least in light of certain popular beliefs or theories of midlife (e.g., Sheehy, 1976), that both older males and older females (those between the ages of roughly 27 and 50 years in the present study) should express such a busy, engaged lifestyle. Mavis (Note 11) found evidence that middle-aged males lead such a promethian existence.

Project clusters and subjective well-being

The clusters of project variables that were revealed by the linkage analysis resemble previous findings (Little et al., Note 8; Yard, Note 4) but with some noteworthy differences. First, earlier studies did not include the three dimensions, absorption, satisfaction, and assistance,

and all of these variables appear in the second cluster, tentatively called "personal meaning". Further, absorption and satisfaction emerge as the pivotal elements in the cluster- a cluster that includes importance and enjoyment, which have been found to form a cluster labeled "meaning" (Little et al., Note 8). The negative relationship between assistance and initiation seems to suggest that social support can detract from a perception of self-initiation.

A second difference involves the fourth cluster, labeled "social meaning". This cluster includes not only those variables (viz., visibility and others' view) previously found in a community cluster, but it also includes positive impact, a meaning variable, and value congruency, a self-identity variable. Interestingly, this particular group of variables has emerged in a previous study, but using factor analysis, and especially for females (Little et al., Note 8). The distinction between social and personal meaning, or social and self identity, has been recently discussed and investigated by Hogan and Cheek (in press). They have postulated an orthogonal relationship between the two, and they have described maturity as possession of a high degree of both.

As would be predicted by Costa and McCrae's (1980) understanding of well-being, neuroticism had a significant negative direct effect on well-being, and extraversion had a positive, although insignificant direct effect. Neuroticism was also found to have a significant positive effect on stress. Strangely, however, extraversion had a positive though again insignificant effect on stress, and the stress factor had a small but positive influence on well-being. This may be indicative of the value of a small amount of stress, but such a conclusion is difficult to

support given the statistical non-significance of the path coefficient.

The inclusion of the social meaning factor in the model depicted in Figure 3 produced some unexpected yet seemingly explicable results. While extraversion had little influence on social meaning, neuroticism had a significant negative influence. As shown in Table 7, the zero-order r 's between the social meaning variables and the well-being variables are, while small, consistently negative. One could venture that this negative relationship exists as a result of social pressure: By mounting activities that are seen as value congruent, visible to others, and important according to others, there is a corresponding perceived social responsibility that must be shouldered, and this responsibility has a negative effect on well-being, or at least well-being indicators like life satisfaction. In contrast, personal meaning has a significant positive effect on well-being. Thus, it appears that an element of selfishness- or to use a more neutral term, egoism- underlies the perception of well-being: activities that are private, enjoyable, and personally important enhance well-being. These findings are understandable in light of Sampson's (1977) discussion of self-contained individualism or egoism as the prevailing value orientation in contemporary North American society. According to Sampson, individualism is emphasized to an extreme, but the fabric of society is maintained by cultural norms that encourage the individual to behave altruistically on occasion. Alexander (1967), too, has voiced a similar concern regarding individualism in our society, pointing an accusing finger at the physical, urban environment as the mechanism for encouraging and supporting this undesirable state of affairs.

Since the effect of personal and social meaning on well-being

demand replication, it might be interesting, and more to the point, to include in PPA more obvious community-related dimensions, such as "Significance to the social order" or "Importance to society". These dimensions should permit a less ambiguous reading of social meaning, because, as it now stands, it is conceivable that an extreme egoist might make very personal projects obvious to others not for purposes of social recruitment or praise, but for purely selfish reasons.

Recapitulation and further considerations

A profile analysis of PPA dimensional ratings was suggested as capable of providing a quantification of individuals' lifestyles. The present study examined the nature of the personal project profiles of individuals reporting high well-being, and it was found that four distinct profiles or patterns emerged. The study, however, relied exclusively on a single snapshot of an individual's view of his/her activities. It appears impossible to attribute, with absolute certainty, an individual's ratings to a particular underlying value orientation or lifestyle, because the ratings might be due to an accommodation to a temporary social and/or physical environmental change. Therefore, in order to obtain a movie, or at least a relatively revealing photo essay, of an individual's lifestyle, repeated measurement and longitudinal research appear necessary. With longitudinal study, the profiles or patterns of project ratings might take on more of the appearance of a path, documenting critical points in daily activity and lifestyle fluctuation and change.

Analysis of the revised well-being model revealed some fascinating, if perplexing, results. The importance of the statistically significant

yet opposite path coefficients between personal meaning and well-being, and social meaning and well-being, has not been firmly established by this single inquiry. The findings, however, do appear to justify further study, and not necessarily restricted to the particular model. The general framework for understanding well-being, proposed herein, will permit the development of a number of well-being models- models that will avoid the "simplicities" of past generalizations from limited studies (McClelland, 1971). In future studies, if social and physical environmental variables are included, and it appears that they should, the usefulness of statistical techniques such as LISREL is apparent.

The present study represents an attempt to reveal some of the dynamics of well-being and its various determinants and correlates in the "real world". While the difficulty of real world research is unquestionable, and likely accounts for much of the neglect of the well-being problem by psychologists, the strategy comes highly recommended (Brickman & Campbell, 1971; McClelland, 1971). While the exploratory nature of the investigation precludes definite conclusions, there are a number of clinical implications worthy of examination. If connections between individual differences, environmental factors, particular project profiles, and well-being can be empirically established, ameliorative action against low well-being can be undertaken more effectively by aiming treatment at lifestyles or views as opposed to, say, personality characteristics such as neuroticism. The findings of this study hint at the "importance of importance", or the impact of perceived project importance, for those individuals living a promethian existence, involved in numerous, time and energy consuming activities. Reconstrual of an activity's importance, or addition or

deletion of activities, is surely a more direct approach than curbing "neurotic tendencies" through psychoanalysis or similar psychotherapies. While such a therapeutic approach might smack of Fixed-Role Therapy (FRT; Kelly, 1955), as it should, the focus of the therapeutic experience- a specific activity, or a particular understanding of an activity- is more concrete than FRT's focus on roles and constructs. The proof of such a clinical approach, however, is in the tasting, and the present product exists only in recipe form. The need for cooks is clear.

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Footnotes

1. Non-standard packages, using an open elicitation format, have been given. It has been found that an average of fifteen projects are elicited (Little, 1983) but that the mean dimensional ratings are the same.

2. A question regarding the appropriateness of correlational analysis on normative project data caused this project analyst some discomfort until a small investigation was conducted. It was recognized that a correlation coefficient computed using project column means can be extremely high for any two dimensions, but exhibit no relationship when calculated ipsatively for the same group, and vice versa.

A study using data collected from twenty-five subjects by Horley (Note 3) was carried out. To begin, ipsative correlations between all dimensions were computed. The coefficients were then converted to z-scores using Fisher's r-to-z transformation, the z-scores averaged and converted back to r's, and the "averaged" r's compared to the r's calculated from normative data. Ten such comparisons were made. The differences between the ipsative and normative coefficients were so small that difference tests were not performed.

3. To be very specific, project enjoyment refers to the mean of the ratings of all projects on the enjoyment dimension, and project stress refers to the mean of the ratings of all projects on the stress dimension. For the sake of brevity, project enjoyment, or simply enjoyment, will be used to refer to these mean enjoyment ratings, and the same terminology will be used when referring to the other project dimensions. The term global project enjoyment, etc., will be used when global ratings (see Appendix A) are referred to.

4. Palys used the terms long-term and short-term importance to distinguish between the two variables importance to quality of life and importance, respectively. Although there may indeed be a temporal difference between ratings on the two dimensions, it seems probable that importance to quality of life assesses greater breadth in importance than the ordinary importance dimension.

5. Although global project ratings were included for analysis, and many parallel analyses were performed using global ratings, it was decided that, for reasons of brevity and clarity, no global results would be reported herein. They are, however, available from the author on request.

Very briefly, most findings using global ratings were very similar to the reported results (see also Table 3, Appendix A), largely due to the high positive correlations between the two sets of variables. Of the 19 project variables included in the present study, all except two, project importance and project progress, revealed significant ($p < .05$) positive correlations between global and corresponding mean measures. Most, in fact, exceeded $r = .60$ ($p < .001$).

6. Two of the three variables are mentioned in Appendix A, and one, absorption, was included in the pilot study for the present investigation. Absorption was described in Appendix A and will not be described here. Project satisfaction was included to allow for examination of satisfaction with specific activities. Its conception was inspired by White (1959), who wrote, in his discussion of competence, about satisfaction derived from successful environmental transactions.

7. Modal Profile Analysis (MPA) is an algorithm and computer program

developed by Skinner (1978, 1979; Skinner & Lei, 1980) that clusters individual scores on sets of variables into "modal profiles". Based on the assumption that there is a set of modal profiles or types underlying specific populations, MPA attempts to identify the "best", according to the ordinary least squares criterion, set of modal types, expressing variable contributions to profiles in terms of T-scores (i.e., standard scores with a mean of 50 and a standard deviation of 10). Individuals' scores on the set of variables can then be expressed in terms of their degree of resemblance to modal types.

The MPA computer program consists of three stages: identification of preliminary types, internal validation of these types, and external validation or generalization of the identified profiles to new samples. In the first stage of the analysis, a Q-type factor analysis, factoring individuals instead of traditional variables, is performed to identify the profiles. In the second stage, the profiles can be compared- if, as is desirable, more than one sample or a subsample of a large sample- and a best set of profiles generated. The third stage allows input from additional samples to determine the extent to which new samples can be classified using the best types.

For the present analysis, because of resource limitations, it was planned that one sample of 60 to 80 participants would be divided into high and low well-being groups, and the high well-being subsample would be analyzed using the first stage of MPA. The low well-being group could then be classified according to the high well-being profiles using the third stage.

8. LISREL is a general statistical model which is based upon a linear structural equation approach which, in turn, is based upon but goes

beyond ANOVA and regression analysis. Developed by Joreskog (see, for example, Joreskog, 1978), LISREL estimates the coefficients in a set of linear equations, with equation variables being either observed or latent, and it is available in the form of a computer program. The latest LISREL program, LISREL V (Joreskog and Sorbom, 1981), has been implemented on the Carleton Honeywell computer system. A succinct description of LISREL can be found in Pedhazur (1982).

9. The only negatively classified subject, Subject 23, was a single, 22 year-old male. Not only did he rate his life as extremely satisfying, meaningful, and having high current life quality, but he indicated that his expectations vis-a-vis future life quality were the highest possible- a true optimist, assuming veracity in reporting. The variables that differentiate Subject 23 from other sample subjects are three individual difference measures. First, Subject 23's thing specialization score of 42 is very high (male norms: $\bar{X} = 28$, s.d. = 6), second only to one other male (who scored 43) in the present sample. This finding is supported by the subject's project list, which included such activities as "Fix my car" and "Fix my bedroom". Second and third points, Subject 23's neuroticism and extraversion scores, minus six and plus six respectively, were maximums- a pattern not found among any of the other subjects.

10. McQuitty Linkage Analysis is performed by identifying the highest correlations, regardless of sign, in each column of a correlation matrix. The highest overall correlation is then identified, and the pair of variables become the key or central variables in the first cluster. All other high correlations in columns that involve one of the key variables, or any cluster variables, are "linked" to the appropriate

cluster. Identified variables are removed from the matrix and linked to clusters until all variables have been exhausted.

11. On the basis of his negative loading on the second profile, one might be tempted to describe the lifestyle of Subject 23, the only negatively classified subject, as "nonadventuresome". Indeed, this individual's list and rating of projects, revealing a number of rather nondescript projects rated as generally low in challenge and difficulty, seem to support such a view. Closer examination, however, reveals a single project, "Study for my exams", as having maximum ratings on challenge and difficulty, where other projects received zeros, as well as maximum ratings on importance and value congruency. This lifestyle, then, could perhaps best be described as "tempered adventurism", and it is perhaps the path that most often leads to high well-being for neurotic extraverts, although such a statement is highly speculative given the single case involved. While further exploration is required, there can be no denying the intriguing nature of the findings. As well, the clinical implications of such findings, assuming replication, are significant. For example, confronted with a neurotic, extraverted client reporting low well-being, a clinician might recommend, on the basis of the client's own perceptions of his/her own activities, either fewer or more demanding, challenging activities.

Appendix A

Pilot study rationale and results

Encouraged by previous findings (especially Chatterjee, Note 5, and a correlational analysis of the data of Little et al., Note 8, conducted by the author) and having focussed initially upon one aspect of George's (1981) definition of life satisfaction- viz., that it is a cognitive assessment of progress towards desired goals- it was felt that the relationship between project progress, a relatively new dimension, and life satisfaction should be more closely examined. Simply asking the commonplace question "How's it going?", project progress appeared as if it could serve as a project equivalent of a satisfaction measure. As a result, a study of the concurrent validity of project progress, using an 11 point satisfaction rating as the criterion, was conceived and conducted with the intention that it should serve as a pilot run for the final phase of the proposed research.

An assessment package (see pp. 77-85) was given to 52 university students who, with only two or three exceptions, were registered in a summer term of 49.100 at Carleton University. Forty-five usable response booklets were returned. The mean age of the 45 respondents was nearly 23 years, with a range from 18 to 49, though the distribution had an extreme positive skew.

As Table 1 shows, the simple correlation between mean progress ratings and life satisfaction is insignificant ($r=.12$, n.s.). Among the global ratings, to be explained in more detail below, there were no significant correlations with life satisfaction. A number of moderator variables, including project importance and self-identity, were expected to affect the satisfaction-progress correlation, but subsequent analyses

Table 1
Product-moment correlations between life satisfaction
rating and project variables.

<u>Project variables</u>	<u>Life satisfaction-mean</u>	<u>Life satisfaction-global</u>
Importance	$r=.02$ n.s.	$r=.23$ n.s.
Enjoyment	$r=.38$ $p<.005$	$r=.05$ n.s.
Difficulty	$r=-.20$ n.s.	$r=-.10$ n.s.
Visibility	$r=.06$ n.s.	$r=-.01$ n.s.
Control	$r=.19$ n.s.	$r=.15$ n.s.
Initiation	$r=.03$ n.s.	$r=.11$ n.s.
Stress	$r=-.31$ $p<.02$	$r=-.13$ n.s.
Time-adequacy	$r=.19$ n.s.	$r=.12$ n.s.
Outcome	$r=.21$ n.s.	$r=.23$ n.s.
Self-identity	$r=.35$ $p<.01$	$r=.09$ n.s.
Others' View	$r=-.12$ n.s.	$r=.04$ n.s.
Value congruency	$r=-.04$ n.s.	$r=.04$ n.s.
Positive impact	$r=-.06$ n.s.	$r=.08$ n.s.
Negative impact	$r=.07$ n.s.	$r=-.15$ n.s.
Progress	$r=.12$ n.s.	$r=.22$ n.s.
Challenge	$r=-.02$ n.s.	$r=-.08$ n.s.

(not reported here) revealed no obvious trends. Some interesting results, however, were obtained from the study.

During the planning of the pilot run, a nagging question demanded attention. The difficulty which surfaced was: How well does the rating of a project system as a whole on a particular dimension approximate the mean dimensional rating of the individual projects? During the course of completing a standard projects analysis package, an individual is asked to sample a total of ten projects from his complete set of projects. Loevinger (1965) has argued that a sampling problem exists with certain psychological tests, especially objective tests which draw items from what she has termed an undefinable universe of items. This particular sampling difficulty would not appear to beset the projects approach since the temporal focus of projects analysis is the present, and any individual can only be involved in a finite number of activities. Other problems, however, may exist. An individual for very pragmatic reasons of "project preservation" may be unwilling to reveal his most salient projects. Also, and perhaps more importantly, an individual may be unable to provide salient projects if a majority of his most personally significant activities are characterized by a vagueness or nascency which makes them inexpressible. In light of these potential problems, and a general wariness of the implicit model of the standard project analytic procedure which equally weights all projects, a set of global project scales were devised.

In Table 2, a display of means, standard deviations, and t values obtained from a comparative analysis of global ratings and column means from the individual project listing is presented. Twelve of the seventeen dimensional ratings differed significantly, with the global

Table 2

T-tests comparing global and mean project ratings

Variable (Mean above)	Number of cases	Mean	Standard Deviation	T Value	Degrees of Freedom	2-tail Probability
Importance	45	7.38	1.24			
Importance	45	8.36	1.45	3.97	44	.00
Enjoyment	45	5.94	1.75			
Enjoyment	45	7.67	1.99	5.61	44	.00
Difficulty	45	4.82	2.08			
Difficulty	45	6.16	1.80	3.82	44	.00
Visibility	45	5.27	2.08			
Visibility	45	6.29	1.74	3.09	44	.00
Control	45	7.42	1.47			
Control	45	7.36	1.85	-.27	44	.79
Initiation	45	7.89	1.65			
Initiation	45	7.42	2.01	-1.23	44	.23
Stress	45	4.34	1.75			
Stress	45	5.69	2.49	3.63	44	.00
Time-adequacy	45	5.66	1.93			
Time-adequacy	45	6.27	2.61	1.20	44	.24
Outcome	45	7.04	1.46			
Outcome	45	7.60	1.75	2.03	44	.05
Self-identity	45	6.97	1.47			
Self-identity	45	7.80	1.60	3.25	44	.00
Others' view	45	5.55	1.83			
Others' view	45	5.60	2.06	.17	44	.87
Value congruency	44	7.40	1.48			
Value congruency	44	7.48	1.80	.27	43	.79
Positive impact	45	5.87	2.42			
Positive impact	45	6.87	2.69	2.62	44	.01
Negative impact	45	2.47	1.82			
Negative impact	45	3.47	2.68	2.25	44	.03
Progress	45	4.93	1.79			
Progress	45	6.84	1.88	5.83	44	.00
Challenge	45	5.68	1.75			
Challenge	45	7.40	1.83	5.49	44	.00
Absorption	45	6.30	1.71			
Absorption	45	7.58	1.74	4.99	44	.00

scores higher in every case. This result may be due to the effects of the normative analytic procedure- i.e., the mean ratings were lowered by the addition of less important less enjoyable, etc. projects- but a quick comparison of some first-listed projects, projects high in importance, and projects high in self-identity with the global ratings revealed no obvious patterns. Correlations between mean and global dimensions (Table 3) show that almost all mean and global ratings are significantly related. At this point, then, it appears as if the nature and utility of the overall ratings is open to question and in need of a more detailed analysis.

Based upon an extrapolation of a warning by Rodgers and Converse (1976), it was hypothesized that all project dimensions are not equally meaningful for all individuals. To overcome this potential problem, a saliency index was devised and included in the assessment package. By asking people to rate their ideal project on the dimensions included in the listing and global rating procedures, counterbalanced to achieve identical presentation sequences, it was expected that a set of weights could be obtained and applied to either or both column mean scores or global ratings. It became apparent after data collection, however, that the wording of the ideal rating might have caused some problems. A subsequent scan of the results indicated that there seemed to be at least two possible interpretations of the task and, consequently, the ideal rating data were not considered in the analysis.

In addition to the standard projects package and the aforementioned amendments, two further innovations were included in the pilot study package. The first, a project categorization procedure, asked respondents to content sort their own activities, a procedure which is

Table 3
Product-moment correlations between global and
mean project ratings.

<u>Project variables</u>	<u>Global-mean correlation</u>
Importance	$r = .26$ $p < .04$
Enjoyment	$r = .39$ $p < .00$
Difficulty	$r = .27$ $p < .04$
Visibility	$r = .34$ $p < .01$
Control	$r = .58$ $p < .00$
Initiation	$r = .03$ n. s.
Stress	$r = .35$ $p < .01$
Time-adequacy	$r = -.09$ n. s.
Outcome	$r = .36$ $p < .01$
Self-identity	$r = .38$ $p < .01$
Others' view	$r = .42$ $p < .00$
Value congruency	$r = .26$ $p < .05$
Positive impact	$r = .50$ $p < .00$
Negative impact	$r = .17$ n. s.
Progress	$r = .28$ $p < .03$
Challenge	$r = .31$ $p < .02$
Absorption	$r = .51$ $p < .00$

Table 4

Product-moment correlations between absorption and other
project dimensions

Project variables	Absorption(mean)-mean	Absorption(global)-global
Importance	$r=.34$ $p=.01$	$r=.19$ $n.s.$
Enjoyment	$r=.47$ $p=.00$	$r=.51$ $p=.00$
Difficulty	$r=-.33$ $p=.01$	$r=-.14$ $n.s.$
Visibility	$r=.42$ $p=.00$	$r=-.04$ $n.s.$
Control	$r=.47$ $p=.00$	$r=.49$ $p=.00$
Initiation	$r=.17$ $n.s.$	$r=.37$ $p=.01$
Stress	$r=-.20$ $n.s.$	$r=-.34$ $p=.01$
Time-adequacy	$r=.23$ $n.s.$	$r=.30$ $p=.02$
Outcome	$r=.44$ $p=.00$	$r=.51$ $p=.00$
Self-identity	$r=.32$ $p=.02$	$r=.47$ $p=.00$
Others' View	$r=.26$ $p=.04$	$r=.33$ $p=.01$
Value congruency	$r=.04$ $n.s.$	$r=-.02$ $n.s.$
Positive impact	$r=.09$ $n.s.$	$r=.21$ $n.s.$
Negative impact	$r=.10$ $n.s.$	$r=.08$ $n.s.$
Progress	$r=.41$ $p=.00$	$r=.55$ $p=.00$
Challenge	$r=.22$ $n.s.$	$r=.10$ $n.s.$

usually conducted by independent judges. The old scheme presented some problems when dealing with data collected from certain samples, notably older subjects in Horley's (Note 3) study. The self-sorting task seemed to present no problems to respondents and was done quickly.

The second innovation was a new project dimension, absorption, suggested by Little (personal communication, 1982). An operationalization of Csikszentmihalyi's (1975) notion of "flow", project absorption was found to correlate significantly with project enjoyment and various other dimensions (see Table 4). Also, a multiple regression analysis of the data, controlling for sex, revealed that absorption was the most significant predictor of life satisfaction for females, accounting for 13% of the total variance of life satisfaction.

The results of the pilot study provided interesting glimpses of areas of study worthy of further attention. One conclusion drawn from the findings of the study was that project progress is not a likely substitute for life satisfaction. For the main study, it was decided that satisfaction be included as a dimension on its own in the project matrix.

AGE: _____

SEX: _____

INSTRUCTIONS FOR PERSONAL PROJECTS ANALYSIS

We are interested in studying the kinds of activities and concerns that people have at different stages of their life. 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.

Here are some examples of projects:

- Completing my English essay.
- Trying to help Brian get along better with others.
- Overcoming fear of meeting new people.
- Getting more outdoor exercise.
- Trying to finish the book Allan loaned me.
- Taking a trip to Ottawa.
- Cutting the grass.
- Finding a part-time job.
- Redecorating my bedroom.
- Trying to clarify my religious beliefs.
- Losing ten pounds.
- Making a birthday present for my friend.

We are also very interested in finding out how people feel about these personal projects, how enjoyable they are and so on. We would appreciate it if you could begin by just writing down in the next ten minutes as many personal projects as you can that you ~~are~~ engaged in or thinking about at the present time--remember these are not necessarily formal projects, or important ones--we would prefer you to give us more of the everyday kinds of activity or concerns that characterize your life at present.

S.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has some minor blemishes and dust specks, particularly near the top edge. The lighting is slightly brighter in the center, creating a subtle gradient.

O.K. Now copy the projects in as brief a form as possible on PAGE 5. Just make your description long enough to keep each project clearly in mind. As you can see, there is space for 10 projects.

If your initial list contains more than 10, select the 10 that you are most likely to engage in over the next month or so. If you wrote down fewer than 10, see if you can think of several more, or break down some of those you listed into several projects. It is important for everyone to try to fill in 10 projects.

In columns 1 to 17 please rate each one of your projects using any number from 0 to 10 on the following dimensions. Remember that numbers between 0 and 10 can also be used.

- 1.- Importance : how important each project is to you at the present time
(use 10 if the project is very important to you and 0 if it is not at all important to you)
- 2.- Enjoyment : how you enjoy working on each project
(use 10 if you enjoy it a great deal and 0 if you do not enjoy it at all)
- 3.- Difficulty : how difficult you find it to carry out each project
(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)
- 4.- Visibility : how visible each project is to the relevant people who are close to you, that is how aware are they that you are engaged in this project
(use 10 for a project which is very visible to those around you and 0 for a project which is not at all visible to those around you)
- 5.- Control : how much you feel you are in control of each project
(use 10 for a project over which you feel in complete control and 0 for a project over which you feel you have no control at all)
- 6.- Initiation : how much you feel responsible for having initiated each project
(use 10 if you feel fully responsible for having initiated a project and 0 if you feel you have taken no part whatsoever in initiating a project)

- 7.- Stress : how stressful it is for you to carry out each project
(use 10 if a project is very stressful to carry out.
and 0 if a project is very relaxing to carry out)
- 8.- Time adequacy : how much you feel that the amount of time you spend
working on each project is adequate
(use 10 if you feel that the amount of time spent on
a project is perfectly adequate and 0 if you feel,
for one reason or another, that the amount of time
you spend working on a project is not at all adequate)
- 9.- Outcome : what you anticipate the outcome of each project to be
(use 10 if you think that a project will be extremely
successful and 0 if you think that a project will
turn out to be a total failure)
- 10.- Self-identity : how typical of you each project is
(use 10 if a project is very typical of you and 0
if it is not at all typical of you)
- 11.- Others' view : how important each project is seen to be by
relevant people who are close to you
(use 10 if a project is seen by others as very
important and 0 if it is seen as not important at all)
- 12.- Value congruency: to what extent is each project consistent with the
values which guide your life
(use 10 if a project is totally consistent with your
values and 0 if a project is totally at odds with
them)
- 13.- Positive impact : how much you feel that each project helps the others.
Don't worry whether it hinders or not, we'll get to
that on the next dimension (use 10 to indicate that
a project greatly increases your chances of working on
other projects and 0 to indicate that a project has no
positive effect)
- 14.- Negative impact : how much you feel that each project hinders other
projects (use 10 to indicate that a project seriously
hinders your chances of working on other projects and
0 to indicate that it does not have any negative effect)
- 15.- Progress : how successful you have been in a project so far (use 10 to
indicate that you have been very successful and 0 to
indicate that you have had no success at all)
- 16.- Challenge : to what extent is each project demanding and challenging
to you (use 10 if a project is most challenging and 0
if it is not challenging at all)
- 17.- Absorption : to what extent do you become engrossed or deeply involved
in a project. (use 10 if you generally become very rapt
in an activity and 0 if you are uninvolved when doing it.)

List of Projects											
										Importance	1
										Enjoyment	2
										Difficulty	3
										Visibility	4
										Control	5
										Initiation	6
										Stress	7
										Time Adequacy	8
										Outcome (likelihood of Success)	9
										Self Identity (How typical of you?)	10
										Others' View (of importance)	11
										Value Congruency (consistency with your values)	12
										Positive Impact	13
										Negative Impact	14
										Progress	15
										Challenge	16
										Absorption	17

Personal Projects Analysis

IDEAL PROJECT RATING.

On the rating scale below, we would like you to rate; on the same set of dimensions, what for you would be an ideal project. While it is not necessary to label the project, it is important to imagine a perfect project/activity/concern and score it appropriately.

IDEAL PROJECT	Importance	1.
	Enjoyment	2.
	Difficulty	3.
	Visibility	4.
	Control	5.
	Initiation	6.
	Stress	7.
	Time Adequacy	8.
	Outcome	9.
	Self Identity	10.
	Others' View (of importance)	11.
	Value Congruency	12.
	Positive Impact	13.
	Negative Impact	14.
	Progress	15.
	Challenge	16.
	Absorption	17.

GLOBAL PROJECT RATING

In order for us to have some idea of how you regard your project system as a whole, please rate your activities in general on the previously described dimensions. (Use the same rating scheme, with 10 indicating a high level on a particular dimension and 0 indicating a low level.)

PROJECT SYSTEM	Importance	1.
	Enjoyment	2.
	Difficulty	3.
	Visibility	4.
	Control	5.
	Initiation	6.
	Stress	7.
	Time Adequacy	8.
	Outcome	9.
	Self Identity	10.
	Others' View (of importance)	11.
	Value Congruency	12.
	Positive Impact	13.
	Negative Impact	14.
	Progress	15.
	Challenge	16.
	Absorption	17.

PROJECT CATEGORIZATION

One feature of everyday activities is that they can be sorted into general types or content categories. Our list of categories is:

1. Cultural/Esthetic/Academic- any projects dealing with reading, theatre, acquisition of knowledge, or academic pursuits.
2. Interpersonal- dealing with other people on a personal level.
3. Intrapersonal- dealing with attitudes, habits, etc. relating to the self.
4. Recreational/Hobby- involving most types of leisure activities.
5. Vocational- relating to future plans, in the present, concerning any vocation.
6. Occupational-Social- dealing with people and relationships in the workplace.
7. Occupational-Task- dealing with actual work or tasks on the job.
8. Estate- relating to repair or maintenance of home, apartment, garden, or any material possessions.
9. Family- activities with family members as the focus.
10. Spiritual- involving clarification or expression of religious beliefs.
11. Health/Body- relating to appearance, health, fitness, etc.
12. Community- involving work related to other groups of people, e.g. volunteer work.
13. Finance/Legal/Consumer- relating to money, investment, business.
14. Metaprojects- focussing upon orchestration and organization of other projects, e.g. planning a timetable.
15. Other- anything that cannot be classified in any of the above.

Could you again briefly list your projects from PAGE 5 and, beside each, write in the category or categories that seem best in classifying the particular project. (Don't think about the classification too much- whatever strikes you first is probably best.)

PROJECT	CATEGORY/CATEGORIES
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____

LIFE SATISFACTION SCALE

Below is a scale that we would like you to use to tell us how satisfied you are with your life as a whole right now.

If you're completely satisfied with your life as a whole as it is now, you would circle the number ten (10). If you are completely dissatisfied with your life as a whole as it is now, you would circle the number zero (0). If you are neither completely satisfied nor completely dissatisfied, you would use one of the numbers from 1 to 9 to indicate your current level of satisfaction. Remember, the higher the number, the more satisfied you feel with your life as a whole as it is right now.

In general, how satisfied or dissatisfied
are you with your life as a whole as it is
right now? Circle the number on the scale
below that comes closest to how you feel.

0 1 2 3 4 5 6 7 8 9 10

Completely
Dissatisfied

Neutral

Completely
Satisfied

Appendix B

Sample assessment booklet used in the
main study

INSTRUCTIONS FOR PERSONAL PROJECTS ANALYSIS

We are interested in studying the kinds of activities and concerns that people have at different stages of their life. 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.

Here are some examples of projects:

Completing my English essay.
Trying to help Gary get along better with others.
Overcoming fear of meeting new people.
Getting more outdoor exercise.
Trying to finish the book Allan loaned me.
Taking a trip to Ottawa.
Cutting the grass.
Finding a part-time job.
Redecorating my bedroom.
Trying to clarify my religious beliefs.
Losing ten pounds.
Making a birthday present for my friend.

We are also very interested in finding out how people feel about these personal projects, how enjoyable they are and so on. We would appreciate it if you could begin by just writing down in the next ten minutes as many personal projects as you can that you are engaged in or thinking about at the present time--remember these are not necessarily formal projects, or important ones--we would prefer you to give us more of the everyday kinds of activity or concerns that characterize your life at present.

List of Projects

PLEASE GO AHEAD AND WRITE DOWN AS MANY AS YOU CAN IN TEN MINUTES.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The paper appears to be from a notebook or a set of loose-leaf papers. There are several small, dark, irregular spots scattered across the surface, which could be ink splatters, dust, or scanning artifacts. A faint vertical line is visible on the left side, possibly indicating a margin. The overall appearance is that of a clean but slightly worn piece of stationery.

22

OF / DE

O.K. Now copy the projects in as brief a form as possible on
PAGE 6. Just make your description long enough to keep each project
clearly in mind. As you can see, there is space for 10 projects.
If your initial list contains more than 10, select the 10 that you
are most likely to engage in over the next month or so. If you
wrote down fewer than 10, see if you can think of several more, or
break down some of those you listed into several projects. It is
important for everyone to try to fill in 10 projects.

In columns 1 to 19 please rate each one of your projects using
any number from 0 to 10 on the following dimensions. Remember that
numbers between 0 and 10 can also be used.

- 1.- Importance : how important each project is to you at the present
time
(use 10 if the project is very important to you and
0 if it is not at all important to you)
- 2.- Enjoyment : how you enjoy working on each project
(use 10 if you enjoy it a great deal and 0 if you
do not enjoy it at all)
- 3.- Difficulty : how difficult you find it to carry out each project
(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)
- 4.- Visibility : how visible each project is to the relevant people
who are close to you, that is how aware are they
that you are engaged in this project
(use 10 for a project which is very visible to
those around you and 0 for a project which is not
at all visible to those around you)
- 5.- Control : how much you feel you are in control of each project
(use 10 for a project over which you feel in complete
control and 0 for a project over which you feel you
have no control at all)
- 6.- Initiation : how much you feel responsible for having initiated
each project
(use 10 if you feel fully responsible for having
initiated a project and 0 if you feel you have taken
no part whatsoever in initiating a project)

- 7.- Stress : how stressful it is for you to carry out each project
(use 10 if a project is very stressful to carry out
and 0 if a project is very relaxing to carry out)
- 8.- Time adequacy : how much you feel that the amount of time you spend
working on each project is adequate
(use 10 if you feel that the amount of time spent on
a project is perfectly adequate and 0 if you feel,
for one reason or another, that the amount of time
you spend working on a project is not at all adequate)
- 9.- Outcome : what you anticipate the outcome of each project to be
(use 10 if you think that a project will be extremely
successful and 0 if you think that a project will
turn out to be a total failure)
- 10.- Self-
identity : how typical of you each project is
(use 10 if a project is very typical of you and 0
if it is not at all typical of you)
- 11.- Others' view : how important each project is seen to be by
relevant people who are close to you
(use 10 if a project is seen by others as very
important and 0 if it is seen as not important at all)
- 12.- Value congruency: to what extent is each project consistent with the
values which guide your life
(use 10 if a project is totally consistent with your
values and 0 if a project is totally at odds with
them)
- 13.- Positive impact : how much you feel that each project helps the others.
Don't worry whether it hinders or not, we'll get to
that on the next dimension (use 10 to indicate that
a project greatly increases your chances of working on
other projects and 0 to indicate that a project has no
positive effect)
- 14.- Negative impact : how much you feel that each project hinders other
projects (use 10 to indicate that a project seriously
hinders your chances of working on other projects and
0 to indicate that it does not have any negative effect)
- 15.- Progress : how successful you have been in a project so far (use 10 to
indicate that you have been very successful and 0 to
indicate that you have had no success at all)
- 16.- Challenge : to what extent is each project demanding and challenging
to you (use 10 if a project is most challenging and 0
if it is not challenging at all)

17.-Satisfaction :how satisfying is it for you to engage in a particular project (use 10 if a project is extremely satisfying and 0 if it is not at all satisfying).

18.-Absorption :to what extent do you become engrossed or deeply involved in a project (use 10 if you generally become very rapt in an activity and 0 if you are uninvolved when doing it).

19.-Assistance :to what extent do other people support or assist you when you are engaged in a specific project (use 10 if you have all the support that you desire and 0 if you have no support or helpers when engaged in an activity).

GLOBAL PROJECT RATING

In order for us to have some idea of how you regard your project system as a whole, please rate your activities in general on the previously described dimensions. (Use the same rating scheme, with 10 indicating a high level on a particular dimension and 0 indicating a low level.)

PROJECT SYSTEM	Importance	1.
	Enjoyment	2.
	Difficulty	3.
	Visibility	4.
	Control	5.
	Initiation	6.
	Stress	7.
	Time Adequacy	8.
	Outcome	9.
	Self Identity	10.
	Others' View (of importance)	11.
	Value Congruency	12.
	Positive Impact	13.
	Negative Impact	14.
	Progress	15.
	Challenge	16.
	Satisfaction	17.
	Absorption	18.
	Assistance	19.

PERSONAL QUESTIONNAIRE

The following questions require only a "yes" or "no" answer.

If you would respond to the question in the affirmative, write "yes" in the space beside the question. If you would respond in the negative, write "no" in the space beside the question. Please try to answer all questions.

1. Do you sometimes feel happy, sometimes depressed, without any apparent reason? _____
2. Do you prefer action to planning for action? _____
3. Do you have frequent ups and downs in mood, either with or without apparent cause? _____
4. Are you happiest when you get involved in some project that calls for rapid action? _____
5. Are you inclined to be moody? _____
6. Does your mind ever wander when you are trying to concentrate? _____
7. Do you usually take the initiative in making new friends? _____
8. Are you inclined to be quick and sure in your actions? _____
9. Are you frequently "lost in thought" even when supposed to be taking part in a conversation? _____
10. Would you rate yourself as a lively individual? _____
11. Are you sometimes bubbling over with energy and sometimes very sluggish? _____
12. Would you be very unhappy if you were prevented from making numerous social contacts? _____

SCALE A

The following are some statements on feelings, attitudes, and behaviour. Read each statement carefully and decide whether it is true or false in reference to yourself. If it is true or mostly true, circle the letter "T" beside the question number. If it is false or mostly false, circle the letter "F" beside the question number.

Be honest, but do not spend too much time over any one statement. As a rule, first impressions are as accurate as any.

-
T	F	1. I tend to keep on at a thing until others lose their patience with me.
T	F	2. I frequently find myself worrying about something.
T	F	3. I sweat very easily on cool days.
T	F	4. I think of ways to get even with certain people.
T	F	5. Most of the people who know me would say that I am a cheerful person. (5)
T	F	6. I find discussions about sex slightly annoying.
T	F	7. I usually have to stop and think before I act even in trifling matters.
T	F	8. Sometimes when I am not feeling well I am cross.
T	F	9. I am more of a "happy-go-lucky" person than a deep thinker.
T	F	10. I try to plan in advance what to do if certain threatening situations were to arise.
T	F	11. I work under a great deal of pressure.
T	F	12. When things go wrong, I cannot rest until I've corrected the situation.
T	F	13. I like to let people know where I stand on things.
T	F	14. When I leave home, I tend to worry about such things as whether the door is locked and the windows closed.

- T F 15. I am easily awakened by noise.
- T F 16. I have very few quarrels with members of my family.
- T F 17. I rarely wonder what hidden reason another person may have for doing something nice for me.
- T F 18. I am often troubled with disturbing thoughts.
- T F 19. I have daydreams that I make a fool of someone who knows more than I do.
- T F 20. I never get angry.
- T F 21. Everything is turning out just like the prophets of the Bible said it would.
- T F 22. People have too much sex on their minds.
- T F 23. I sometimes tease animals.
- T F 24. Most nights I go to sleep without thoughts or ideas bothering me.
- T F 25. I tend to get along well with people and am liked by almost everybody.
- T F 26. Bad words, often terrible words, come into my mind and I cannot get rid of them.
- T F 27. I have a habit of counting things that are not important such as light bulbs on electric signs, and so forth.
- T F 28. Sex education should not be part of the high school curriculum.
- T F 29. I never get so mad as to feel like beating or smashing things.
- T F 30. I almost never think of things too bad to talk about.

LADDER OF LIFE SCALE

Below is a picture of a ladder of the quality of life. The top of the ladder represents the best quality of life that you hope to attain for yourself--your ideal state of life quality. The bottom of the ladder represents the worst quality of life that you could expect to attain--a situation where all your fears and worries come true. Think about those two situations for a moment, and try and imagine what each of them would be like.

Now, if the best quality of life that you hope to attain for yourself is represented by the number ten (10) at the top of the ladder, and if the worst quality of life that you could expect to attain is represented by the number zero (0) at the bottom of the ladder, where on the ladder would you place your present life situation? Mark this number with an N (Now).

Now try to imagine what life was like 5 years ago using the same scale. Indicate this with a P (Past).

Finally, imagine what your life will be like five years from now. Mark this with an F (Future).

10
9
8
7
6
5
4
3
2
1
0

Best quality of life you hope to attain

Worst quality of life you could expect to attain

LIFE MEANING SCALE

Below is a scale that we would like you to use to tell us how meaningful you see your life on the whole. If you find your life completely meaningful at present, circle the number 10. If you find your life completely lacking in meaning, circle the number 0. If your life is neither completely full nor lacking meaning, circle the appropriate number.

In general, how meaningful is your life at the present time? Circle the number on the scale below which comes closest to how you feel.

0	1	2	3	4	5	6	7	8	9	10
totally meaningless			neutral				completely meaningful			

SOCIAL FACILITATION SCALE

Below is a scale that we would like you to use to indicate the extent to which you believe that our present society is conducive to or facilitates the development and expression of your beliefs and attitudes toward life. If you feel that society is totally conducive to the development and expression of your beliefs, circle the number 10. If you feel that society is not at all conducive to the development and expression of your beliefs, circle the number 0. If society neither completely facilitates nor completely inhibits you, circle the appropriate number.

To what extent is our present society conducive to or facilitates the development of your own particular beliefs and attitudes toward life?

0	1	2	3	4	5	6	7	8	9	10
not at all conductive			neutral				completely conductive			

LIFE SATISFACTION SCALE

Below is a scale that we would like you to use to tell us how satisfied you are with your life as a whole right now.

If you're completely satisfied with your life as a whole as it is now, you would circle the number ten (10). If you are completely dissatisfied with your life as a whole as it is now, you would circle the number zero (0). If you are neither completely satisfied nor completely dissatisfied, you would use one of the numbers from 1 to 9 to indicate your current level of satisfaction. Remember, the higher the number, the more satisfied you feel with your life as a whole as it is right now.

In general, how satisfied or dissatisfied
are you with your life as a whole as it is
right now? Circle the number on the scale
below that comes closest to how you feel.

0 1 2 3 4 5 6 7 8 9 10

Completely
Dissatisfied

Neutral

Completely
Satisfied

GENERAL INFORMATION

1. Age: _____

2. Sex: _____

3. Income per annum:
(Please check one) Under \$10,000 _____
10,000-30,000 _____
Over \$30,000 _____

4. Marital status:
(Please check one) Single _____
Married _____
Divorced/ _____
Separated _____

5. Educational background:
(Please check highest level
completed to date)
High school _____
College _____
University _____
Professional
certification/ _____
Graduate school _____

6. Living situation:
(Please answer the following questions)

- a) Do you live in an urban or rural area? _____
- b) Do you live in a house, apartment, condominium, or other
type of dwelling? _____
- c) Do you live alone, with family (which can include parents,
mate, and/or children), or with friends. _____

INTEREST QUESTIONNAIRE

In this questionnaire, show how much you like to be in situations where you might be doing the things listed. Use the following scale and place the appropriate number in the space next to the sentence. Try, if possible, to use the full range of the scale, 0-4.

0	1	2	3	4
Not at all	Slightly	Moderately so	Quite a lot	Extremely so

- ___ 1. Join in and help out a disorganized children's game at a public park.
- ___ 2. Take upon yourself the building of a stereo set or a Ham radio.
- ___ 3. Interview people for employment in a large hospital.
- ___ 4. Explore the ocean floor in a one-man sub.
- ___ 5. Process computer cards in a large industrial setting.
- ___ 6. Breed rare forms of tropical fish.
- ___ 7. Climb a mountain on your own.
- ___ 8. Stop to watch a piece of machinery at work on the street.
- ___ 9. Listen in on a conversation between two people in a crowd.
- ___ 10. Become proficient in the art of glass-blowing.
- ___ 11. Interview people for a newspaper column.
- ___ 12. Remove the back of a mechanical toy to see how it worked.
- ___ 13. Strike up a conversation with a beggar on a street corner.
- ___ 14. Attempt to fix your own watch, toaster, etc.
- ___ 15. Observe the path of a comet through a telescope.
- ___ 16. Listen with empathic interest to an old-timer who sits next to you on a bus.
- ___ 17. Note the idiosyncracies of people about you.
- ___ 18. Make the first attempts to get to know a new neighbour.
- ___ 19. Attend an address given by a person whose character you admire without being aware of the topic of the address.
- ___ 20. Attempt to comfort a total stranger who has just met with tragedy.
- ___ 21. Do sky-diving.
- ___ 22. Gain a reputation for giving good advice for personal problems.
- ___ 23. Make a hobby of photographing nature scenes and developing and printing the pictures yourself.
- ___ 24. Help a group of children plan a Halloween party.

END

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FIN