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PASSION, REASON AND ACTION: EXPLORING EMOTIONAL INTELLIGENCE, PERSONAL PROJECTS AND WELL-BEING

Limor Zomer

**A thesis submitted to the Department of Psychology in partial fulfillment of the
requirements for the degree of Master of Arts.**

**Department of Psychology
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May, 2001**

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Abstract

Implementing a new method for assessing emotional intelligence (EI), this research attempts to answer the question: “How do our emotions, thoughts, and actions influence our well-being?” Part one examines how EI relates to action as assessed by Personal Projects Analysis (PPA), and reveals EI relates to more adaptive forms of project orientation. Findings support the proposed extended EI model, requiring the element of action in EI assessment, and the Social Ecological model. Part two investigates emotionally charged, interpersonal and intrapersonal projects, and gender differences associated with trait EI. Results reveal differences in EI skills for emotionally charged and interpersonal projects, and gender differences in EI skills and PPA negative affect. Results in parts one and two are discussed. Part three consists of case studies exploring the more nuanced influences of EI on daily life.

A summary and integration follows, discussing limitations, theoretical and practical implications, and recommendations on future directions in the study of EI.

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And, thank-you G-d. I'm finally home!

**I am speaking here of ethical virtue,
for it is this which is concerned with feelings and *actions*, in which there is
excess, deficiency, and moderation.... We may have the feelings
of fear, courage, desire, anger, pity, and any pleasure or pain in general
either more or less than we should, and in both cases this is not a good
thing; but to have these feelings at the right times, and for the right things
and towards the right men and for the right purpose and in the right manner,
this is the mean and the best, and it is precisely this which belongs to virtue.
In *actions*, too, there is excess, deficiency, and moderation
in a similar manner.**

Aristotle, The Nicomachean Ethics

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Introduction

The concept of “emotional intelligence” is very recent in psychology, the term having been employed on occasion in the academic literature from the mid-1960s, but emerging as a sound construct only as early as 1990 (see Mayer & Cobb, 2000; Salovey & Mayer, 1990). At the root of this late development is what has traditionally been considered unreasonable: the integration of the emotional and intellectual worlds. Plato, Descartes, and Kant are prominent representatives of the tradition that considers the intellect as the true essence of the mental realm, and of the being. In opposition, represented by Hume and Rousseau, is the view that the emotional system is of greater value and ought to be preferred to intellectual reasoning (see Ben-Ze’ev, 2000). In an earlier, integrative approach articulated in *The Nicomachean Ethics*, Aristotle’s challenge is to manage our emotional life with intelligence, to use our passions with reason – this, he considers a virtue.

Modern theoretical and experimental interest in the psychology of emotion stems from the work of Darwin (1873) on the expression of emotion and theory of evolution, as well as from the work of American psychologist and philosopher, William James. James’ theories of the physiological precursors and foundation of emotional experience continue to influence psychologists to the present day, and debates regarding his proposals are ongoing in these fields (see Davidson, Jackson & Kalin, 2000). As James (1902) states, without emotions, “...no one portion of the universe would then have importance beyond another; and the whole character of its things and series of its events would be without significance, character, expression, or perspective” (p. 150). Prevalent today is this very opinion that the role of emotions is so extensive in our lives that it would be difficult to

conceive of not having them (e.g., Davidson et al., 2000; Goleman, 1994; Martin, Berry, Dobranski & Horne, 1996; Mayer & Geher, 1996; Winter & Kuiper, 1997).

One approach to the study of emotions that has become quite prominent involves a cognitive orientation based on the principle that emotional experience is contingent upon a person's interpretation and evaluation of the *situation* for his or her well-being. The ability to use information provided by emotions can be adaptive, thereby, increasing well-being (see Darwin, 1873; Davidson et al., 2000; Frijda, 1994; Goleman, 1994; Lazarus, 1993; Martin, Berry, Dobranski and Horne, 1996; Pennebaker, 1995, 1997; Taylor, Parker & Bagby, 1999). In considering individual differences in ability to use the information conveyed by emotions adaptively, thereby providing evidence for the construct of emotional intelligence, individuals differ in the skill with which they can identify their feelings and the feelings of others, regulate these feelings, and use the information provided by their feelings to motivate adaptive behaviour. Thus, in contexts in which our behaviour may be otherwise inexplicable, identifying the emotions we feel provides reasons and sometimes even justification for our actions (Bar-On, Brown, Kircaldy & Thome, 2000; Martin et al., 1996; Mayer, Caruso & Salovey, 2000; Salovey & Mayer, 1990; Salovey, Mayer, Goldman, Turvey & Palfai, 1995; Schutte, Malouff, Hall, Haggerty, Cooper, Golden & Dornheim, 1998). Logically, it may be deduced that studying emotions and emotional intelligence with respect to our actions is crucial for an understanding of why we do what we do.

This brings us to the essence of what has been termed a "conative evolution" in personality psychology which focuses on the study of intentional personal action (Little,

1987, 1999). Little (1987) describes the integrative role of a conative psychology,

A conative psychology attempts to account for the genesis of acts, actions, and activities of individuals. Treated classically as independent of cognitive and affective propensities, conative processes appear to subsume aspects of the cognitive, the affective, the behavioural, and even the contextual features of human conduct (p. 234).

A conative personality psychology provides both conceptual and methodological instruments for integration within personality psychology (Little, 1999). Therefore, it is appropriate to use the framework of a conative psychology to better understand the integrative construct of emotional intelligence. The current investigation is designed to answer questions on the role of emotional intelligence in the context of adaptation to an individual's environment as reflected in his or her actions. Variability along these lines will, in turn, be used to predict an individual's well-being.

What Is Emotional Intelligence?

...Anyone can get angry or give money or spend it, and it is easy. But to give to the right person, the right amount, at the right time, for the right purpose, and in the right manner, this is not something that anyone can do nor is it easy to do; and it is in view of this that excellence is rare and praiseworthy and noble...

--Aristotle, The Nicomachean Ethics

The construct of emotional intelligence (EI) was first formally defined by Salovey and Mayer (1990) as a set of skills relating to “the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions” (p. 189)¹. They justify the label of “emotional intelligence” on the grounds that it demands processing of specific emotional information from within the organism, and because some level of competence at these skills is

required for adequate social functioning. They outline three mental processes involving emotional information: (1) the appraisal and expression of emotions in self and other; (2) the regulation of emotions in self and other; and, (3) the use of emotions adaptively to achieve one's goals². They also demonstrate that aspects of it can be measured (Mayer, DiPaolo, and Salovey, 1990; Salovey and Mayer, 1990).

This definition of emotional intelligence is, in part, derived from Gardner's earlier concept of personal intelligence. In Gardner's (1983) theory of multiple intelligences, he considers awareness of one's own and others' emotional states as interconnected components of what he calls "personal intelligence." This definition comprises two subtypes of personal intelligence – intrapersonal intelligence (the ability to access one's own feelings) and interpersonal intelligence (the ability to read the moods, intentions, and desires of others). Gardner (1983) examines the development of these two aspects of human nature. He describes the development of the internal aspects of a person:

The core capacity at work here is access to one's own feeling life.... Its most primitive form, amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such discrimination, to become more involved in or to withdraw from a situation. At its most advanced level, intrapersonal knowledge allows one to detect and to symbolize complex and highly differentiated sets of feelings (Gardner, 1983, p. 239).

Gardner (1983) further explains,

... The other personal intelligence turns outward, to other individuals. ...Its most elementary form, ... entails the capacity of the young child to discriminate among the individuals around him and to detect their various moods. In an advanced form, interpersonal knowledge permits a skilled adult to read the intentions and desires – even when these have been hidden – of many other individuals and, potentially, to act upon this knowledge ...(p. 239).

These two subtypes of personal intelligence are embedded in the construct of emotional intelligence, which requires emotional knowledge on both the intrapersonal and

interpersonal levels. Although this is a widely accepted definition for emotional intelligence, the construct itself is controversial.

Adams (1998) believes that emotional intelligence is simply a modern day version of the classical concept of wisdom. Wisdom has not fared well in society today, which seeks answers through technology and science as a way of knowing and has “excluded value and other humanistic concepts from [its] descriptive/explanatory conceptual system (p. 1).” As a result, society has no framework in which to educate, develop, critically analyze or rationally reconstruct our emotions. Instead of implementing an epistemic or educational model, emotions are thought of in terms of a therapeutic, treatment or causal approach when seeking to alter emotions regarded as beyond change by rational criticism.

Adams (1998) explains that we are now experiencing the consequences of value skepticism and the resultant subjectivism, and points to the fact that international data reveal high rates of common psychological problems and what appears to be a modern epidemic of depression (see Goleman, 1994; Ormel, VonKorff, Ustun, & Pini, 1994). For example, one study using data from three samples of adults ($Ns = 571, 472, \text{ and } 989$) and a sample of adolescents ($N = 1,710$) substantiated the possibility that the prevalence of major depression and relapse has been increasing in recent birth cohorts. Adults in recent birth cohorts were also found to show an elevated prevalence of other disorders (Lewinsohn, Rohde, Seeley, & Fischer, 1993).

Adams (1998) asserts that psychologists are attempting to rediscover wisdom from a scientific perspective and to develop a scientifically respectable theory of it. In doing so, psychologists direct their attention to individuals’ ability to regulate and control their feelings and impulses in ways that facilitate personal and interpersonal conflicts and

satisfy their desires. Adams (1998) points out that although current researchers in the field talk about emotional intelligence as the counterpart of cognitive intelligence, traditionally, the concept of emotional intelligence appears to be an oxymoron. However, emotional intelligence is, indeed, indicative of a rational process, "...Emotions and desires are appraised and embraced, modified, or vanquished for reasons" (p.5). The manner in which emotions are changed then, is clearly cognitive.

Although Adams (1998) makes a good argument about why many psychologists are turning to emotional intelligence to increase well-being, it appears that there is a flaw in his conclusion that, "A wise person has emotional intelligence" (p. 14). This is not equivalent to wisdom *is* emotional intelligence or emotional intelligence *is* wisdom. Here, it simply denotes that a property of wisdom is emotional intelligence. Emotional intelligence as defined today does also not appear to be the same as the concept of wisdom defined by Aristotle, "...It is clear that wisdom is scientific knowledge and intuition of the objects which are most honorable by their nature [Individuals who are wise]...have understanding of things which are great and admirable and difficult to know and divine" (pp. 106-107). Therefore, wisdom appears to be a broader concept that may subsume emotional intelligence, but emotional intelligence is considered to be something that individuals have on its own¹. We will further examine current definitions, operationalizations, and the validity of emotional intelligence in the next section.

Is Emotional Intelligence a Valid Construct?

The construct of emotional intelligence has been criticized on various grounds. Two criticisms that have had the most impact on the reassessment of emotional

intelligence as a valid construct are that: (i) intelligence is an inappropriate and misleading metaphor in that it falsely casts dispositions, such as interpersonal warmth, as abilities; and (ii) there are no important abilities connected with emotion. Other criticisms include (iii) the inadequacy of measures for the assessment of EI, and that (iv) EI is not independent from other analogous concepts. These criticisms are addressed respectively below.

(i) The classification of emotional intelligence as an intelligence. Mayer and Salovey (1993) questioned whether there really is intelligence in emotional intelligence. In response to the criticism that intelligence is an inappropriate metaphor for EI, Mayer and Salovey (1993) explain,

Personality traits such as extraversion involve dispositions toward behavior; intelligence involves organismic abilities to behave. Although a trait such as extraversion may depend on social skill, or result in it, a trait is a behavioral preference rather than an ability. Knowing what another person feels, in contrast, is a mental ability (pp. 434-435).

This led to their refinement of the construct, and the reclassification of emotional intelligence according to two models. Mayer, Caruso & Salovey (2000) distinguished between mixed and ability models of EI. Mixed models encompass a wide range of personality variables, and are considered to be more stable indicators of EI. They are measured by instruments, such as the Bar-On EQ-i (Bar-On, 1997), the TMMS (Salovey et al., 1995), and the Emotional Intelligence Questionnaire (Schutte et al., 1998). In comparison, Mayer et al.'s. (2000) ability model (see figure 1), based on Mayer & Salovey's (1997) ability definition, represents a cognitive ability definition of EI, and is measured by the Multifactor Emotional Intelligence Scale (MEIS),⁴ and a "spin-off" from the MEIS, the Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT) (Bar-

On & Parker, 2000; Mayer et al., 2000; Mayer & Salovey, 1997).

According to their ability definition, emotional intelligence is the capacity to process emotional information accurately and efficiently, including the capacity to perceive, assimilate, understand, and manage emotion (Mayer et al., 2000). In this definition of emotional intelligence, four broad classes of abilities are included, hierarchically organized from lower, more molecular skills to higher, more molar skills (see figure 1): perception, integration, understanding, and management of emotion. The first ability, which involves the lowest level skills, is perceiving emotions and this includes appraising and recognizing feelings, as in a facial expression or piece of art. The second ability, integrating or assimilating emotion in thought, involves using personal emotions in thought and mental life. This involves weighing emotions against other thoughts and permitting emotion to direct attention. The third ability, understanding emotions, concerns reasoning with feelings. This is based on the premise that each emotion follows its own specific rules, for instance, fear often turns to relief, sadness segregates us from others, and anger arises from perceived injustice. Emotional intelligence involves the ability to understand and reason about such emotions and where they stem from. The fourth ability and highest level requires regulation and management of emotion, for example, knowing how to relax after feeling angry or being able to alleviate the anxiety of another person (Mayer et al., 2000; Mayer & Salovey, 1997).

Figure 1. Emotional Intelligence Ability Model

Note. A four-branch model of the skills involved in emotional intelligence adapted from "Emotional Intelligence Meets Traditional Standards for an Intelligence" by J. D. Mayer, D. R. Caruso, & P. Salovey (2000). Intelligence, 27, 267-298.

Petrides and Furnham (2000a) provide a similar distinction between trait EI and information-processing EI. Trait EI, evaluated through self-report, is embedded within the personality framework and relates to behavioral dispositions. Trait EI measures personality variables, such as empathy, impulsivity and optimism. On the other hand, information-processing EI deals exclusively with actual abilities and their relationship to traditional intelligence. Thus, it must be measured using maximum performance measures and assessed relative to the main ability factors, such as the MEIS. Petrides and Furham (2000b) maintain that self-report inventories of EI measure trait EI regardless of whether they are formulated based on a strictly cognitive model, such as Mayer and Salovey's (1997).

Providing additional evidence in support of emotional intelligence meeting traditional standards for an intelligence, Mayer et al. (2000) describe three standard criteria for scientific legitimacy. The first criterion is conceptual, demanding that it be capable of being operationalized as a set of abilities. The second is that it should meet certain correlational criteria: "The abilities defined by the intelligence should form a related set (i.e., be intercorrelated), and be related to pre-existing intelligences, while also showing some unique variance" (p. 267). The third is that it must be able to progress over time, developmentally with age and experiences. In a study of adults (N = 503), and adolescents (N = 229) using the MEIS, the researchers did, indeed, show that emotional intelligence meets these three classical criteria of a standard intelligence.

(ii) Important and unique abilities associated with emotional intelligence. In response to the criticism that there are no important or unique abilities connected with emotion, Mayer and Salovey (1993) advocate the contrary. They point out several

mechanisms that may underlie emotional intelligence which discriminate the construct from general intelligence, as well as other forms of intelligence (e.g., social intelligence). The first is emotionality itself. They suggest that much like those who are verbally fluent in that they can rapidly and effectively generate words, those who are emotionally fluent can rapidly and effectively generate emotions and emotion relevant thought. Because emotions are closely related to thoughts which accompany them, those who experience a wide range of emotions and their associated moods will also “experience concomitantly dramatic changes in their likelihood estimates of future events depending upon the valence of those events” (Mayer & Salovey, 1993, p. 436). Mayer & Salovey (1993) explain that “Such changes may, in consequence, enhance their fluency in generating alternative outcomes; they may therefore generate a larger number of future plans for themselves and thereby be better prepared to take advantage of future opportunities” (p. 436).

If we consider Gibert, Pinel, Wilson, Blumberg, and Wheatley’s (1998) concept of affective forecasting, we see that individuals in general base their actions largely on their implicit and explicit predictions of the emotional consequences of future events. However, the researchers explain that, “Even if people can estimate with some accuracy the valence and intensity of the affect that future events will evoke, they may be less adept at estimating the duration of that affect, and it is often the prediction of duration that shapes an individual’s decisions (Gilbert et al., 1998, p. 617)”. They refer to this as the durability bias and it leads to the overestimation of the duration of emotional reactions to future events. Wilson, Wheatley, Meyers, Gilbert & Axsom (2000) maintain,

This durability bias is important because people typically wish for and

work toward events that they believe will cause lasting happiness, not just a moment's pleasure. If they overestimate how long their pleasure will last, they might be working toward the wrong things (pp. 821-822).

In relating this to emotional intelligence, it may be speculated that individuals higher in EI, having more fluency in emotions and emotional awareness, are better able to estimate the duration of that affect, and consequently, are able to make better decisions about their futures. Thus, more emotionally intelligent individuals may more readily recognize that maximizing their happiness in the long term requires them to think about not only how an event will make them feel at first, but more importantly how long those feelings will actually last before acting on them (see Gilbert et al., 1998).

Mayer and Salovey (1993) also argue that emotions and moods facilitate prioritization of life goals and tasks. They explain that emotions direct our attention to stimuli in need of processing, "Because moods and emotions sometimes arise when there is a mismatch between personal expectations and environmental realities, moods direct attention to the self, perhaps to clarify the experience and facilitate adaptive responses to it" (Mayer & Salovey, 1993, p. 437). Moreover, emotional individuals may place more importance on the higher level processes indicated in their ability model (see figure 1). As a result, these individuals have been shown to be able to repair their moods more rapidly and effectively following failure and other distressing situations (Mayer & Salovey, 1993; Salovey, Mayer, Goldman, Turvey & Palfai, 1995).

This relates back to research on affective forecasting. It may be that even if more emotionally intelligent individuals have a durability bias in affective forecasting, they may use this to their advantage and more adaptively than less emotionally intelligent individuals. For example, they may see emotions related to positive or negative event

outcomes as motivators to get a task done. However, even if they fail and experience the resulting moods, they may be able to repair them more easily and have greater control over their psychological immune system by strategically “explaining away” setbacks, failures and tragedies when they happen so that they may proceed to new challenges, and focus on other concerns. In contrast, less emotionally intelligent people might overpredict how long their reactions to future negative events will last as “...they do not appreciate the extent to which they will transform the events psychologically in a way that blunts their impact (Wilson et al., 2000, p. 822)”. This directly relates to emotional well-being (Gilbert et al., 1998; Wilson et al., 2000).

This also relates to another important ability of emotions, and that is the facilitation and inhibition of emotional information flow necessary for problem solving, even under stressful conditions. Here, Mayer & Salovey (1993) point to studies revealing that creating more emotionally stable testing environments can dramatically increase scores for some individuals on IQ tests suggesting an increased ability to manage emotions for certain individuals. Finally, they point to different neurological and structural mechanisms that may be responsible for emotional intelligence so as to distinguish it from general intelligence, appealing to the discriminant validity of emotional intelligence on these grounds as well.

(iii) Adequate measures of emotional intelligence. Both trait EI and information-processing EI have been further critiqued by Davies, Stankov & Roberts (1998) on the grounds that there is inadequate methodology for this construct's assessment. They concluded that the status of the EI construct is limited by measurement properties of its tests. Nonetheless, it is reported elsewhere (see Parker et al., 2001) that Davies et al.'s

(1998) conclusion about the reliability and validity of the EI measures is compromised since these investigators failed to reverse the scoring on the negatively keyed items on one of the scales (i.e., the Toronto Alexythymia Scale). Even so, after assessing intelligence and personality using a variety of instruments the researchers did find evidence for a separate Emotion Perception factor that represents the ability to monitor another individual's emotions, but argue that this factor is narrower than that postulated within current models of emotional intelligence. That it was found to be narrower might be a reflection of insufficient measures used in their research to assess EI, though other measures do exist. This points to another shortcoming of the Davies et al. (1998) study; that is, it preceded publication of the MEIS which is a highly reliable measure of EI, as well as either neglecting to acknowledge, or preceding a number of recent studies which have provided some validity for existing measures of both trait and information-processing EI (e.g., Bar-On et al., 2000; Dawda & Hart, 2000; Fox & Spector, 2000; Lee & Lee, 1997; Mayer, Caruso & Salovey, 2000; Parker et al., 2001; Salovey et al., 1995).

(iv) The Independence of Emotional Intelligence as a Construct. Although Davies et al. (1998) criticize the construct of EI on the grounds that it is not independent from other seemingly analogous concepts, such as social intelligence, personality traits, and optimism, that there emerged an aspect of EI in their research (i.e., emotion perception), does support that EI has some merit on its own, particularly in regard to problem-solving and human behaviour. More specifically, the researchers recommend that it may provide a clue about the reasons for discrepancy between human behaviour under conditions of uncertainty, as well as the need to use emotional information in various problem-solving situations, especially in jobs requiring interaction with the public, for example, sales,

advertising or hospitality. Davies et al.'s (1998) claim that Emotional Intelligence is not anything other than personality traits seems inadequate, for not only did a separate emotion perception factor still emerge, but evidence also exists suggesting that individual traits do not predict success highly on their own, as does emotional intelligence. For example, a study of approximately 24, 000 workers found that the Big Five personality trait, Agreeableness, which includes altruism and modesty, to be irrelevant to job success (Barrick and Mount, 1991). Similarly, extraversion, which involves warmth and positive emotions, did not predict success among teachers, lawyers, or accountants, although it did among salespeople.

Although Mayer and Cobb (2000) agree that popular claims, such as 'emotional intelligence is twice as important as traditional intelligence in predicting success' seem overblown, current research on emotional intelligence measured as an ability may predict important outcomes, such as reduced rates of problematic behaviours. For example, lack of emotional perception, organization and control, what we conceive as emotional intelligence, is associated with various problems, such as aggressive behaviour, crime, sexual difficulties and sexually transmitted diseases, as well as various psychological and physical illnesses, such as psychosomatic illness, cancer, depression, cardiovascular disease, and reduced cellular immune function (Cloninger, 1996; Goleman, 1994; Schore, 1994). Thus, it appears that EI has a certain appeal and utility to it as a construct even if it is simply a configuration of personality traits. However, it has also been shown that there is a component of information-processing or cognitive abilities (Mayer, Caruso & Salovey, 2000).

The validity of emotional intelligence as a construct has been demonstrated, and

current models and research show that our emotions bear closely on our behaviours, actions, and well-being. Since our actions often depend on the situation in which they occur, and human lives are embedded in the context of others and their surrounding environments, it is clear that measures of emotional intelligence must also provide ecological validity. For this, we must look to aspects of the conative evolution.

Personal Action Constructs: Aspects of the Conative Evolution

Emotions have a function within the actual individual-environment interaction, or one's immediate goal achievement. The best characterization of what they aim at is the production of relational behaviour; that is, they motivate behaviour meant to maintain or modify a particular kind of relationship with the environment. They aim to change (or maintain) the relationship, not the environment itself.

--Frijda, 1994, p. 114

The potential importance of emotion to daily functioning has been noted. It has considerable impact on learning and memory⁵, aids in decision-making, and supplies the motivation for critical action in one's encounters with different environments and situations (Buss et al., 2001; Davidson et al., 2000; Pinker, 1997). Every emotion provides us with a distinctive readiness to act and directs us in certain ways so as to handle well the recurring challenges we face in human life (Buss, 2000; Ekman & Davidson, 1994; Goleman, 1994). Goleman (1994) explains, "All emotions are, in essence, impulses to act, the instant plans for handling life that evolution has instilled in us. The very root of the word emotion is [movere]... the Latin verb "to move," plus the prefix "e-" to connote "move away," suggesting that a tendency to act is implicit in every emotion" (p. 6). Thus, our emotions motivate our behaviour and actions, and these, in turn, can stimulate our emotions (Frijda, 1994; Lazarus, 1991).

Psychologists have changed how they view human motivation over the past few decades. The shift has been away from theories of implicit unconscious motives (particularly Freudian), and away from more restrictive cognitive theories, toward the study of intentional personal action. The study of intentional personal action explores what people are typically trying to do in their daily pursuits, in their personal projects, goals and life tasks. The units that have been developed to explore intentional personal action have been termed Personal Action Constructs (Little, 1999). Little (1999) maintains that, "Such constructs serve as "carrier units" for motivation and are at the heart of the emerging conative perspectives in personality psychology (p. 505) ".

Over the past 20 years, several PAC units have emerged and are increasingly being used as practical alternatives to other units of analysis in personality research. Examples of such units include personal projects (Little, 1983), current concerns (Klinger, 1975), personal strivings (Emmons, 1986), and life tasks (Cantor, 1990). These units can be used methodologically as investigative tools that provide insight into the content of an individual's life in order to enhance well-being. Little (1999) explains that PAC units can be differentiated along an internal-external continuum. For example, personal strivings and current concerns are relatively more "internal" PAC units, meaning that they are essentially regulated by internal, as opposed to external factors. Life tasks can be seen as a more external unit, whereas personal projects are considered to be located midway along the spectrum (Little, 1999).

One of the criticisms of cognitive appraisal research used to investigate motivation, measures for which participants are often asked to provide their emotional reactions to hypothetical events, is that they lack ecological validity (see Chambers &

Little, in preparation; Little & Chambers, 2000). This is also a problem for established measures of EI. For example, in the MEIS which measures information-processing EI, individuals are presented with vignettes and are asked to solve emotional problems, as well as questions such as the following:

Contempt most closely combines which two emotions?

1. anger and fear
2. fear and surprise
3. disgust and anger
4. surprise and disgust (see Mayer and Cobb, 2000, p. 173)

Although this format is appealing because it parallels some of the existing measures of "g" (Petrides & Furnham, 2000b), it lacks personal relevance and ecological validity, and this is important particularly when looking at emotions and how individuals are able to manage them within themselves, as well as use this information in their relationships with others in their immediate context. Although individuals may have the knowledge for these types of questions, a component of the definition of EI is that individuals, being aware of their emotions and the emotions of others, should also be able to manage their emotions and "use this information to guide [their] thinking and actions" (Salovey & Mayer, 1990, p. 189). Therefore, it is obvious that a measure of thinking and action is required, and Personal Projects Analysis (PPA) provides an ideal and more sophisticated methodological tool to this end, one not used previously in EI research. PPA allows us to access the motivations underlying the actions of individuals – the ways they think and feel about what they are doing (Chambers & Little, in prep.; Little, 1999).

The Applicability of the Social Ecological Perspective and Personal Projects Analysis for Investigating Emotional Intelligence

The Social Ecological Perspective is the theoretical foundation for personal projects methodology (see figure 2). Although this model takes into account the stable aspects of the person, that is, their traits, the basis for personal change is the portrayal of the individual as active and always creating and recreating him/herself through actions. In fact, PAC units in general represent a shift from a “having” to a “doing” emphasis in personality (Cantor, 1990). Personal Projects Analysis (PPA) provides us with an investigative technique by which we can obtain insight into the many domains comprising an individual’s life through the examination of these very actions or “doings” of the person. Little (in press) defines personal projects as,

...extended sets of personally salient action that are influenced jointly by personal and contextual variables in dynamic interaction...[they] can range from banal routines to ventures of surpassing importance. They may be solitary or communal; onerous or easy....

PPA is useful for studying people in a variety of contexts (e.g., social, physical, temporal, etc.), and reflects cognitive, affective, and behavioural aspects of the individual (Little, 1983). Consistent with its Kellian roots (Kelly, 1955; Little, 1972), PPA takes a credulous approach in the study of the person. Every participant provides personally relevant content for his or her own units of analysis (i.e., the projects) and the dimensional ratings of these projects are initially taken at face value. Such credulity is advantageous in a number of ways. For example, because personal projects are self-generated and personally salient, these units are ecologically sensitive and more likely to evoke rich and conscientiously reported data in comparison to conventional standardized test items (Little, 1987). In consideration of the certain limitations inherent in all self-

report methods, in PPA these personally salient units may be challenged and clarified later on in the inquiry of the individual, especially in clinical assessments. Little explains, “Credulity is the starting point but not the termination point of project analytic assessment” (Brian Little, personal communication, April 22, 2000).

In exploring the relationship between individuals and their projects, traditionally, individuals are initially asked what they think about what they are doing. Individuals’ subjective well-being is appraised on five basic dimensions: The extent to which individuals find their personal projects are worthwhile (meaning), managed efficiently (structure), supported by others (community), likely to succeed (efficacy) and not unduly onerous (low stress) (Little, 1989). More recently, individuals are also asked how they feel about what they are doing, and so PPA has adopted a project appraisal rating system which discriminates between both cognitive and affective appraisal dimensions⁶. With the addition of the new affective dimensions, a slightly different factor structure emerges. The three more cognitively based factors, (meaning, structure/efficacy and community), remain, while two emotion-oriented factors, (positive and negative affect), emerge (Little & Chambers, 2000; Little, 1987). As PPA takes into account both affect and cognition in the appraisal of one’s actions, it is an ideal assessment instrument for investigating emotional intelligence. Because PPA is so intimately linked with one’s social ecology and because of its highly modular nature, a PPA diagnosis can also offer strategies for clinical intervention in increasing well-being (Little, 1987).

In the perspective of the Social Ecological model, human well-being is postulated as being influenced by stable aspects of the person, such as trait and temperamental variables and stable aspects of the environmental context (see figure 2). These influences

are thought to have direct, indirect, bi-directional and interactive effects upon well-being. However, well-being can also be increased indirectly or directly through the personal projects system. This is the most strategic path, for it provides opportunities for intervention that are not possible within the trait framework. Since there is increasing evidence that personality traits are stable and biologically based dispositions, attempts to alter these traits, at least psychologically, are difficult, perhaps impossible (Costa & McCrae, 1988). However, the projects framework introduces a level of inquiry in which change is possible; that is, traits can be expressed in many ways, and PPA is an optimal point of intervention as it is here that the 'havings' become 'doings' (Little & Chambers, 2000).

The application of the social ecological model in the exploration of the construct of EI is readily discernable. For example, in figure 2, stable personal features encompass trait EI and the appraisal of projects is representative of information-processing EI. Also, as the projects framework reflects a level of analysis in which change is possible, it may provide ways in which to enhance EI. Moreover, PPA allows an examination of the various domains of individuals' lives (e.g. interpersonal, intrapersonal, academic, etc.). As interpersonal and intrapersonal components form part of the definition of EI (Salovey & Mayer, 1990), and individuals may not reflect equal EI in every domain of life, it is important to examine these two domains independently using PPA.

A critical point to make is that PPA has been shown to be useful at discerning among various emotional factors, which contributes to its applicability for the study of emotional intelligence. For example, in distinguishing features of depression from anxiety using PPA, Lecci et al. (1994) found that both depression and anxiety were found to

reflect a “negative” appraisal pattern characterized by goals rated low in control, structure, perceived skill and positive outcome expectancy, and high in difficulty and stress. However, depression also revealed unique features not found in anxiety, for example, goals that are identified as less visible to important others characterized depression, social meaning was inversely related to depression but not anxiety, and efficacy/structure was significantly more highly correlated with depression than anxiety. They concluded that a goal-based approach could significantly contribute to the prediction of depression, as well as provide diagnostic validity for some of the clinically derived conditions outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R). Recent research reveals that PPA is useful and successful at differentiating among various discrete emotions, as well (Chambers & Little, in preparation; Chambers, Goodine & Little, 1999). Past research in the Social Ecology Laboratory has also consistently linked several project dimensions with a variety of indices of adaptation including social competency⁷ (Lecci, 1988), depression, negative affect (Blake, 1994), optimism (Little, 1988) and procrastination (Szawłowski, 1987). These relationships, having been replicated at different times and for different samples, appear to be robust (Dowden, Chambers, Hunt, Richardson-Taylor, Hargrave & Little, under review; Wilson, 1990).

The present research, exploratory in nature, investigates the utility of this approach in studying emotional intelligence.

Figure 2. Social Ecological Model

Note. Adapted from "Free Traits and Personal Contexts: Expanding a Social Ecological Model of Well-Being," by B. R. Little, 1998, p.110. In W.B Walsh, K. H. Craik, & R. H. Price (Eds.), *New directions in Person-Environment Psychology*. Copyright 1998, Hillsdale, NJ. Adapted with permission.

Purpose of the Present Investigation

The purpose of present investigation is to study the relationship between emotional intelligence and individuals' environments, and how this may influence well-being. Individuals' evaluation and adaptation to their environment will be assessed through PPA (Little, 1983, 1999). In an initial pilot study based on archival data, it was found that emotional intelligence is, indeed, related to project dimensions, thereby establishing valid grounds for pursuing the present investigation⁸.

The current study consists of three parts. In part one, we will examine two central hypotheses that are intended to provide evidence for the newly proposed extended EI model (see Figure 3), as well as additional support for the Social Ecological Model. In the primary hypotheses (see Figure 4), it is expected that (1) trait EI will be map on to PPA dimensions. More specifically, greater EI will be positively related to an adaptive form of project orientation. For example, it is expected that individuals higher in emotional intelligence will have projects that are more meaningful and supported, experience more efficacy, and more positive affect and less negative affect with regards to their projects⁹.

Moreover, it is expected that (2) PPA will make a unique contribution in predicting well-being once the variability associated with traits is accounted for. This analysis will provide evidence to legitimize the extension of Mayer, Caruso & Salovey's (2000) proposed model of the skills involved in emotional intelligence by adding to it the element of personal action using personal projects to demonstrate the interchange between emotions, cognition and actions (see figure 3). As depicted in figure 3, it is postulated that PPA can tap into the various cognitive and affective aspects depicted in Mayer, Caruso & Salovey's ability model – it is here, in the manifestation of one's actions,

that emotional skill, and cognitive and adaptive abilities come into play and are defined, in particular by the PPA EI dimensions that have been formulated (see Table 2 for the PPA EI dimensions). In this second hypothesis, it is also expected that results will support the Social Ecological Model by demonstrating that the PPA cognitive dimensions account for well-being over and above that accounted for by emotional intelligence (both trait and ability EI). Thus, this particular hypothesis is intended to make the case for PPA as a well-rounded measure of emotional intelligence and predictor of well-being

In part two of the study, other areas of interest pertaining to emotional intelligence will be explored, including projects which participants indicate as emotionally charged, both interpersonal and intrapersonal projects, and gender differences pertaining to EI. In particular, it is expected that (3) projects or situations which are strongly emotionally charged will generally be appraised more positively by individuals higher in EI because they know how to regulate their emotions in a more adaptive manner. In addition, it is expected that (4a) individuals higher in EI will have significantly fewer intrapersonal and interpersonal projects as they are not troublesome aspects of the system and therefore are more often not “projectified” (i.e., they are so habituated that they are not as frequently translated into projects). When these projects are “projectified”, those higher in EI will (4b) appraise intrapersonal and interpersonal projects significantly more positively than those lower in EI. In the final hypothesis, it is expected that on the basis of previous studies on gender differences in EI (Petrides & Furnham, 2000; Schutte et al., 1998), (5) some gender differences will emerge with females higher in EI having more positive project appraisals, particularly with respect to interpersonal projects. Here, we also attempt to replicate research that has found significant gender differences to emerge on

ability EI, with women performing somewhat higher than men (Mayer, Caruso and Salovey, 2000), as well as findings revealing women to score somewhat higher on trait EI (Schutte et al., 1988)¹⁰.

Part three of this study consists of case studies of two individuals, (one high in EI and one low in EI), that explore the more nuanced influence of this construct on daily life by examining more closely the project systems of these individuals, as well as narrative formats describing how our participants cope with stressful situations.

Figure 3. Proposed Extended Model of Emotional Intelligence

Figure 4. Primary Hypotheses

Method

Sample

The participants were 117 undergraduate students attending Carleton University. The majority of participants (64.1%, $n = 75$) were native English speakers¹¹. Approximately 13.7% ($n = 16$) of the remaining participants were Asian, 12% ($n = 14$) were European, and 6.8% ($n = 8$) had indicated middle-eastern and African native languages. Four participants did not indicate their native language. Ages ranged 34 years, from 17 to 51 ($M = 24.15$, $SD = 6.95$); one participant did not indicate age. Of the participants, 27.4% ($n = 32$) were men, and 72.6% ($n = 85$) were women. A total of 83 students (70.9%) were enrolled full-time in their degree program, 10 students (8.5%) were enrolled part-time, and 19 (16.2%) held special status; five respondents did not indicate their enrollment status. The respondents in this sample represented all four years of an honours undergraduate degree: 40 (34.2%) were in their first year, 30 (25.6%) were in their second year, 25 (21.4%) were in their third year, 14 (12.0%) were in their fourth year, and 2 (1.7%) were in their fifth year; there was one (0.9%) Ph.D. student and five students (4.3%) held special status. Altogether this sample consisting of 117 respondents seems reasonably representative of a Canadian undergraduate population.

Description of Measures

Measures are categorized below according to the social ecological model, with the exception of general background information, which is presented first. Given the exploratory nature of this study, and due to the extensive and variable nature of the factors being investigated, it was necessary to incorporate a broad band of assessment

instruments of known reliability. All measures used in the study can be found in appendix A. Measures in the questionnaire packages issued, but not used in the current investigation can be found in appendix B.

General Background Information. Data were collected on the participant's level of education, gender, year of study, parents' professions, native language, age, etc. (see appendix A).

Person Attributes

Trait Meta-Mood Scale. This scale was developed by Salovey et al. (1995) to assist in identifying stable individual differences that may characterize emotionally intelligent individuals capable of disclosing their feelings to themselves and other people. This scale seeks to evaluate core individual differences in skills in identifying one's own feelings and feelings of others, regulating these feelings, and using information provided by feelings to motivate adaptive social behaviour. The researchers claim that these skills are expected to be associated with the use of feelings to motivate, plan, and achieve in life. This scale parallels Salovey and Mayer's (1990; 1993) earlier delineation of the mental processes associated with emotional intelligence.

The TMMS consists of scales based on a stable three-factor solution: Attention to Feelings (the degree of attention that individuals devote to their feelings), Clarity of Feelings (the clarity of their experience of these feelings), and Mood Repair (their beliefs about repairing or terminating negative mood states and prolonging positive ones). This scale is based on earlier work by Mayer & Gaschke (1988) which revealed an ongoing process accompanying most mood states whereby individuals consistently reflect upon their feelings, evaluating, monitoring and regulating them. They referred to this process as

the meta-mood experience and developed the State Meta-Mood Scale (SMMS) which measures an individual's moment-by-moment changes in thoughts about an ongoing mood state. However, this scale does not deal with more stable attitudes about mood in general, nor enduring strategies with which people manage mood experiences.

Salovey et al. (1995) developed the Trait Meta-Mood Scale (TMMS) to assess relatively stable individual differences in individuals' tendencies to attend to their moods and emotions, discriminate clearly among them, and regulate them; the scale taps into the construct of emotional intelligence. Each scale contains 10 items that are rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Studies demonstrate that the TMMS has both concurrent and predictive validity and internal consistency (Cronbach's alpha coefficients reported as Attention: .86; Clarity: .88; Repair: .82) (Salovey et al., 1995). Criterion validity is also demonstrated via correlations of TMMS scales with the Mood Awareness Scale (MAS; 10 items), the Negative Mood Regulation (NMR) Scale (30 items), the Emotional Expressivity Scale (EES; 17 items), the Ambivalence over Emotional Expressiveness Questionnaire (AEQ; 28 items), and the Toronto Alexithymia Scale (TAS; 26 items). All scores from the subscales of these measures were correlated with the alexithymia score to examine the predictive validity of the TMMS subscales by discriminant analysis. Results indicated that the TMMS subscales measuring emotional intelligence have good psychometric properties (Lee & Lee, 1997).

Scales based on the three factors are shown to be reliable as well as sufficiently distinguished from related constructs such as neuroticism and repression (Fox & Spector, 2000; Salovey et al., 1995). Furthermore, the Clarity scale proved particularly valid in the

prediction of unpleasant quality of ruminations after a stressful experience. Salovey et al. (1995) assert that the TMMS is a reasonable operationalization of aspects of emotional intelligence,

Individuals differ in their understanding of and ability to articulate their affective states (and those of others as well). And they vary in their ability to regulate such feelings and use them adaptively to motivate behavior. Attention to, Clarity, and Repair of feelings seem fundamental to the self-regulatory domain of emotional intelligence (p. 147).

A serious shortcoming of the TMMS and most current measures of emotional intelligence, as pointed out by Fox & Spector (2000), is that although such measures assess the extent to which individuals report engaging in mood-regulatory and empathic behaviours, they do not measure the success or accuracy of such behaviours¹². They argue that measures of successful use of these competencies might be better predictors of performance or evaluation outcomes. An alternative to using existing measures of related constructs (such as empathy) might be to develop or test new measures specifically designed to tap the various facets of emotional intelligence.

Toronto Alexithymia Scale (Taylor et al., 1985). Alexithymia is a construct which refers to difficulty in describing feelings and a tendency to turn attention to external events rather than inner feelings and fantasies. Individuals with alexithymia tend to suppress their emotions. Lack of and/or conflict over emotional expression can contribute to a number of psychosomatic disorders (see Cloninger, 1996). The Toronto Alexithymia Scale (TAS) was designed as a 26-item, self-report measure of the alexithymia construct, a hypothetical personality construct related to somatization disorders, psychosomatic diseases, and several other psychiatric and medical disorders (Bagby et al., 1990; Lessor, 1985; Taylor et al., 1984). The TAS has demonstrated exceptional psychometric

properties demonstrating a 4-factor structure which theoretically corresponds with the alexithymia construct (Taylor et al., 1990). In a series of studies of college students, the TAS established good split-half and test-retest reliability, convergent and divergent validity and internal consistency (Bagby et al., 1986; Bagby et al., 1988; Taylor et al., 1985; Taylor et al., 1990). Cross-validation of the TAS also provides evidence for its applicability to normal adult and clinical samples and scores were not significantly associated with education, age, or socioeconomic status (SES) (Taylor et al., 1986; Taylor et al., 1990). Parker et al. (2001) studied the empirical relationship between the apparently similar constructs of emotional intelligence and alexithymia (n=734) using the TAS and Bar-On Emotional Quotient Inventory (EQ-I). They revealed that the constructs overlap considerably and are strongly and inversely associated, although they are still independent.

Emotional Intelligence Questionnaire (Schutte et al., 1998). This 33-item self-report measure is based on the definition of emotional intelligence developed by Salovey and Mayer (1990). This questionnaire has demonstrated adequate internal consistency and test-retest reliability, as well as good convergent validity with theoretically related constructs (e.g., alexithymia, attention to feelings, mood repair, clarity of feelings, optimism, and impulse control).

Mood Awareness Scale (MAS). The construct of mood awareness refers to a form of attention directed toward one's mood¹³ states. Two dimensions of mood awareness are: (1) mood monitoring, and (2) mood labeling. Mood monitoring is described as a "tendency to scrutinize and focus on one's moods" (Swinkels & Giuliano, 1995, p. 934) and predicts the experience of greater rumination on negative mood, intense

affective reactions, negative affect, and neuroticism. Mood labeling refers to “the ability to identify and categorize one’s moods” (p. 934) and predicts the experience of high self-esteem, greater satisfaction with social support, positive affect, and extraversion^{14, 15}.

The MAS is a paper-and-pencil, self-report measure of individual differences in awareness of one’s mood states. It is comprised of two 5-item dimensions scored on a 6-point scale (1 = disagree very much, 6 = agree very much). The measure demonstrates adequate internal consistency and test-retest reliability. It also has been found to possess good convergent validity and predictive validity.

The New Emotional Intelligence Scale (NEIS). I developed this scale, consisting of 32 items, especially for this study. This questionnaire was formulated to more broadly assess the construct of trait EI. It was constructed based on a deductive strategy, which has been recommended by Burisch (1984) as a preferred method for personality scale construction¹⁶. The deductive approach is based in part on theoretical, rational, and construct-oriented strategies (Burisch, 1984). This approach assumes that the person constructing the questionnaire is, “...intrepid enough to believe she or he knows quite a bit about the language and human personality, if only by virtue of common sense (Burisch, 1984, p. 215).

The first step in developing a questionnaire using this approach is to choose traits to be covered and to set up definitions for them. The deductivist then starts formulating items that fit these definitions. The definition selected for this scale was a combination of Salovey and Mayer’s (1990) and Gardner’s (1983) definitions of emotional intelligence. Moreover, the NEIS includes more of the emotional-behavioural aspects of EI (e.g., items 2, 3, 4, 8, 10, 13, 22, 25). A factor analysis will be conducted to reveal the number and

type of factors measured by the scale.

The Big Five Inventory (John, Donahue, & Kentle, 1991). The Big Five Inventory (BFI; John, Donahue & Kentle, 1991) is a 44-item self-report questionnaire developed to represent the prototype descriptions of the Big Five personality traits derived through expert ratings and subsequent factor analytic verification in observer personality ratings. This brief inventory assesses the five dimensions without differentiating measurement of individual facets (as does, for example, the NEO Personality Inventory). The BFI uses short phrases based on the trait adjectives which are typical markers of the Big Five. Although only eight to ten items comprise each scale, they still maintain both content coverage and good psychometric properties. The alpha reliabilities of the BFI in U.S. and Canadian samples range from .75 to .90 and average above .80; three-month test-retest reliabilities range from .80 to .90. Validity research has revealed substantial convergent and divergent relations with various other personality measures, as well as peer ratings (John & Srivastava, 1999).

Personal Projects

Personal Projects Analysis (PPA). PPA will be used to investigate the content of individuals' lives. Using the PPA assessment package (Little, 1983), participants are first primed with examples of personal projects and given ten minutes to generate a list of personal projects that they are "engaged in or intending to begin over the next month or so." From the elicitation module, they are requested to select seven projects which are emotionally charged. Subjects then complete a Project Dimension Rating Matrix in which they rate their seven projects along an eleven point Likert-type scale on the dimensions (see Appendix A for the PPA questionnaire and the descriptions of the

dimensions used).

Given its modular nature, not all standard dimensions were included in the dataset (see table 1). In addition, several non-standard emotion dimensions were used to assess how individuals feel about what they do (see table 1). Nine dimensions were specifically designed to assess ability EI (or, information processing EI) on the basis of the ability EI model proposed by Mayer, Caruso & Salovey (2000) (see Table 2).

Table 1. Personal Project Factors and Standard Dimensions in Dataset

FACTORS	Meaning	Structure Efficacy	Community	Positive Affect	Negative Affect
	Importance*	Control*	Support*	Acceptance	Stressed/
	Value-	Competence*	External*	Full of	Tense
	Congruency*	Commitment*		wonder/awe	Disinterested/
	Self-	Stage*		Happy/	Bored
	identity*	Progress/		enjoyment	Angry
	Intrinsic/	Meeting		Serene/	Ambivalent/
	Extrinsic*	expectations *		Relaxed	Uncertain
		Anticipated		Love/Full of	Full of dread
		Success*		love	Rejection
		Difficulty*		Ecstatic	Guilty/
		Challenge*		Excited/full	Ashamed
		Autonomy*		of energy	Sad
		Time		Joyful	Fearful/
		Adequacy*		Enjoyment	Scared
		Initiation*			

*These are more cognitive dimensions.

Note. The standard dimensions not used in the present study are: Visibility, Other's View, Positive Impact, Negative Impact, Absorption.

Table 2. Personal Project EI Dimensions

<p>2. We all feel emotions as we work towards our goals and undertake daily activities, and sometimes being able to manage our emotions effectively may help our projects along, and help us reach our goals. To what extent can you manage and regulate your own emotions with respect to each project? (Use 0 if you are not at all able to effectively manage and regulate your emotions, and use 10 if you are able to effectively regulate your emotions) (Regulation/Management – self; Project facilitation)</p>
<p>Many times, our projects and goals involve others and their feelings and concerns for us. To what extent do you understand others' emotions with respect to your projects? (Use 0 if you do not at all understand why others feel the way they do about your project and 10 if you fully understand why others feel the way they do about your project.) (Understanding – others)</p>
<p>4. Emotions communicate things to us and to others. When you feel an emotion as you are working on a project, do you generally understand and rationalize why you are feeling that emotion and what it means to you? (Use 0 if you do not at all understand why you are feeling the way you do with respect to the project and 10 if you fully understand why you are feeling the way you do) (Understanding – self)</p>
<p>5. Many times, our projects and goals involve others and their feelings and concerns for us. To what extent do you understand others' emotions with respect to your projects? (Use 0 if you do not at all understand why others feel the way they do about your project and 10 if you fully understand why others feel the way they do about your project.) (Understanding – others)</p>
<p>6. People can be aware of their emotions, but not necessarily use them as a guide to influence the way they think about what they do, and to help them make sense of the things they do. In using emotions in this way, we may weigh certain emotions against other emotions and against other sensations and thoughts, and this in turn may guide us in directing our attention about the project. To what extent do you use your emotions in guiding the way you think about and attend to your projects? (Use 0 if you do not at all use your emotions in the way you think about the project and use 10 if you always use your emotions in the way you think about the project) (Assimilating emotion in thought; Emotions as guide)</p>
<p>7. To what extent are you aware of your own emotions while engaged in this project? (Use 0 if you are not at all aware of your emotions and 10 if you are fully aware of your emotions) (Awareness/Perception – self)</p>
<p>8. To what extent are you aware of others' emotions while engaged in this project? (Use 0 if you are not at all aware of other's emotions and 10 if you are fully aware of others' emotions; if others are not involved in the project, use N/A) (Awareness/Perception – other)</p>
<p>9. We all feel emotions as we work towards our goals and undertake daily activities, but we do not always express our emotions to others around them much more openly. When you are engaged in a project, how do you express your emotions to others? (Use 0 if you are not at all open about your emotions and 10 if you are an open book) (Expression)</p>

Personal Project Categories. In order to provide a framework to examine the types of projects within which university students engage, every project was categorized according to the criteria established by the Social Ecology Laboratory, Carleton University. A number of modifications have been made to the categorization system in order to meet the needs of the various populations being studied (Little, 1988; Lecci, 1990), and a broader definition used to classify intrapersonal projects was implemented for the purposes of this study (Zomer, 2000). The categorization system comprises seven broad-based categories, each of which is divided into several subcategories which capture the general types of activities that individuals engage in (see appendix C). For example, the health/body category includes activities relating to appearance, health or fitness (e.g., lose or gain weight, work out). See Appendix C for the categorization and subcategorization systems implemented in this study and examples.

Outcome Measures: Psychological Well-Being

The Center for Epidemiological Studies Depression Scale. The Center for Epidemiological Studies Depression Scale (CESD; Radloff, 1977) is a 20-item measure used to evaluate current depressive symptoms in the general population. The CES-D scale is less oriented towards a dispositional assessment and more attuned to current levels of depressive symptomatology, with an emphasis on the affective component. As this scales evaluates state rather than trait depression, it will be used as one of the primary criterion measures for general adaptation and well-being.

Subjects rate every item on a four-point scale indicating the degree to which they experience the symptom in the previous week. Approximately one-third of persons meeting a 16-point criterion for a significant level of depressive symptoms also meet

diagnostic criteria for major depression. The CES-D has shown significant correlations with PPA dimensions (Little, 1989) and although it taps various aspects of depression, it emphasizes the affective component (Gotlib & Cane, 1990; Radloff, 1977). The scale has split-half reliability coefficients ranging from 0.77 to 0.92 and good internal consistency with reported alphas of 0.84 for the general population (Corcoran & Fisher, 1987). The scale has good convergent validity and sensitivity, as well (Gotlib & Cane, 1990).

The CES-D is expected to be negatively correlated with indexes of emotional intelligence, and reveal negative appraisals of personal projects as in previous research (Little, 1988; Blake, 1994; Salmela-Aro, 1996; Zomer, 2000).

Diener-Emmons Affect Scale (1985). This scale was developed to assess the independence of positive and negative affect ecologically, at random moments and across days in the daily lives of individuals. The researchers found that the relation between positive and negative affect significantly differed depending on the time frame. The strongest negative correlation between the two affects occurred during emotional times, and the correlation declined in a linear manner as the time span covered increased logarithmically. Thus, positive and negative affect are independent in terms of how much people feel in their lives over longer time periods. The scale consists of nine items that may describe the way individuals feel; five items measure negative affect, four measure positive affect. Individuals are asked to rate their current feelings, that is, how much each adjective describes how they feel at the present on a scale ranging from 0 to 10 (not at all to extremely). The scale has demonstrated reliability and validity (Diener, & Emmons, 1985).

Positive and Negative Affect Schedule (PANAS). The Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988) was developed to measure two dominant and relatively independent dimensions of affect: positive and negative affect. Positive affect reflects the extent to which a person feels enthusiastic, active and alert. Negative affect is a general dimension of subjective distress and unpleasurable engagement. It encompasses several aversive mood states, such as anger, fear, nervousness, disgust and guilt. The PANAS consists of two 10-item mood scales that have demonstrated high internal consistency, stability, and convergent and discriminant validity.

Domain-Specific & Global Life Satisfaction Scales. The Global Life Satisfaction (Lecci, 1988; Little, 1987) scale was used to assess the extent to which one is satisfied with life in general. This single-item scale captures the cognitive component of life satisfaction. Of the five domain-specific scales (Lecci, 1990), the emotional life satisfaction scale was used to evaluate subjective well-being within specific domains of individuals' lives, in this case, the emotional domain. These scales use an eleven-point rating scale ranging from (0) "Completely Dissatisfied" to (10) "Completely Satisfied". These scales have been shown to be strongly correlated with personality/NEO-PI-R dimensions and PPA variables (Lecci, 1990; Palys, 1979; Palys & Little, 1983).

Outcome Measures: Physical Well-Being

Body Symptom Checklist. Physical symptomatology was assessed by the body symptom checklist consists of 38 items of health problems, each rated on a 3-point scale of severity (not at all a problem, moderately problematic, very much a problem). Participants were asked to check off each symptom in terms of how problematic it is for

them. The scale was adapted from a Brief Medical Inventory used in Sirois & Gick (2001) and the Carleton Symptom Checklist (Little, 1984; Mickelson, 1984), and has been used in previous research in the Social Ecology Laboratory, Carleton University (e.g., MacDiarmid, 1990, Mickelson, 1984).

Procedure

The data for this study were collected in the 2001 Winter and Summer terms. Participants agreed to participate voluntarily in order to receive partial credits as part of their course requirements and enter a draw to win \$100.00. The study was announced either in class or through advertisements posted around Carleton University (see appendix D¹⁷). The questionnaire package took approximately one and a half to two hours to complete. An informed consent form was issued with every package (see Appendix E). Participants completed the packages at their leisure and returned them within seven days of the time at which they were issued, constituting a return rate of 78%¹⁸. Upon returning their packages, a debriefing form was issued to the students (see Appendix E) explaining the purpose of the study, noting contact information in regards to any questions or concerns they may have, as well as noting instructions on how to obtain the final results of the study.

Results

Part One: Primary Hypotheses

Hypothesis 1: EI and Adaptive Personal Project Systems

Data Reduction

Trait EI. The first issue for analysis was the valid measurement of emotional intelligence since there is presently no single measure of the whole construct, only of its components and their parts (e.g., the various aspects of trait EI). Because a single measure of the emotional intelligence construct has yet to be developed, to provide stability and robustness to the measurement of emotional intelligence several measures were entered into a principal components analysis (PCA). A supplementary instrument was developed to assess emotional intelligence which incorporated more emotional-behavioural items not used in other EI scales. Because this new EI scale was devised for the purposes of this study as a broader measure of trait EI, before entering it into the factor analysis, construct validity was first tested through an examination of correlations with other trait EI measures (see Table 3). The new EI scale was significantly moderately to highly correlated with all measures of trait EI, and was subsequently entered into the principal components analysis with the other trait EI measures.

As a functional way of operationalizing the construct, a PCA was performed on all trait EI measures used in this study (i.e., TMMS, TAS, Mood Awareness Scale, Big Five Inventory, the NEIS Scale, and the Schutte et al. Emotional Intelligence Questionnaire)¹⁹. Two principal components emerged, the first of which clearly represented trait EI, and the second represented mood monitoring (see Table 4)²⁰. It

should be noted that the new EI Questionnaire had the highest loading on the trait EI factor. This serves as confirmation that this scale likely captures greater variability in trait EI than any of the other measures used, provides further evidence for its convergent validity and suggests it may warrant further tests as a potentially more reliable measure of EI²¹. Discriminant validity for trait EI was obtained by comparing trait EI with the Big Five trait variables (see Table F6; appendix F).

Table 3

Pearson Product Moment Correlations Between Trait EI Measures and the New Trait EI Scale

	The New Trait EI Scale
TAS	-.70**
MAS – monitoring	.07
MAS – labeling	.56**
Schutte EI Questionnaire	.66**
TMMS – repair	.53**
TMMS – attention	.54**
TMMS – clarity	.61**

Note. Ns vary as a result of using a pairwise deletion procedure for missing data. N = 116, 117. All tests of significance are two-tailed.

****p<.01**

Table 4**Principal-Components Analysis of Trait EI**

	Factor 1 Trait Emotional Intelligence	Factor 2 Monitoring
TAS	-.80	
MAS – Labelling	.72	
EI Questionnaire (Schutte et al.)	.80	
TMMS – Repair	.71	
TMMS – Clarity	.80	
New EI Questionnaire	.86	
MAS -- Monitoring		.90
TMMS – Attention	.50	.70

Note. N = 117. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: Trait EI (49.17%), Monitoring (19.47%).

Project Factors. Although all project dimensions provide distinct information about every project in the PPA matrix, some of the standard PPA dimensions were not used for the present analyses, while the large number of variables that were used presented a problem for analysis. In order to obtain a better n to variable ratio and for comparative purposes, PCA was performed on the PPA dimensions for the general project system. PCA was conducted on cognitive dimensions with the emotion dimensions, without the emotion dimensions (i.e., only on the cognitive dimensions), as well as with both emotions and cognitive dimensions. The principal components presented here are based on the respective dimensions separately²². A three-factor solution emerged for the cognitive dimensions and a two-factor solution emerged for the emotions dimensions. These solutions are supported by past PPA research (Little & Chambers, 2000).

In Table 5 it is evident that participants with high scores on factor one were engaged in projects over which they had a sense of autonomy, competence, control, and commitment. These projects were also achievable, reflective of their self-identity, consistent with their core values and intrinsically motivated. Similarly, they were self-initiated and engaged in for internal rather than external rewards. This factor was labelled “Personal Meaning/Competency” after a similar factor structure that emerged in Goodine (1999). Participants with high scores on factor two, labelled Support/Efficacy, were engaged in projects which were supported by others, progressing well, for which they had adequate time and which were nearing their final stages of completion. The Obstacles factor included projects which were challenging, required lots of effort, difficult, and yet important. Table 6 reveals the principal components of the PPA emotions dimensions.

As past research has found, these dimensions comprise two factors: Negative Affect (PPA – NA) and Positive Affect (PPA – PA) (Little & Chambers, 2000). It was interesting that the dimension of ambivalent loaded on NA only, as one would have expected it to load equally on both NA and PA.

Factor analysis of the PPA emotional intelligence dimensions revealed a two-factor solution (Table 7). Factor one, labelled PPA Lower Level EI Skills, included those skills in Mayer, Caruso and Salovey's (2000) model associated with awareness and expression of emotions, and assimilation of emotion in thought and understanding of emotions. These are identified as lower to middle level skills in EI. Factor two, labeled PPA Higher Level EI Skills, included the highest level skills associated with emotional intelligence, that is, emotional management and regulation.

Table 5

Principal-Components Analysis of Personal Projects Cognitive Dimensions (Mean Level Analysis)²³

	Factor 1 Personal Meaning/ Competency	Factor 2 Support/Efficacy	Factor 3 Obstacles
Control	.57		
Autonomy	.79		
Competence	.69		
Anticipated Success	.53		
Intrinsically motivated	.66		
External	-.53		
Value Congruency	.72		
Self-Identity	.59		
Commitment	.60		
Initiation	.71		
Progress		.82	
Support		.67	
Time Adequacy		.82	
Stage		.57	
Difficulty			.74
Importance			.60
Effort			.76
Challenge			.79

Note. N = 117. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: Meaning/Efficacy (25%), Structure (17%), Obstacles (15%).

Table 6

Principal-Components Analysis of Personal Projects Emotions Dimensional Means

	Factor 1	Factor 2
	PPA Negative Affect	PPA Positive Affect
Sad	.76	
Fearful	.81	
Angry	.85	
Disinterested	.61	
Stress	.74	
Ambivalent	.66	
Full of Dread	.89	
Guilty	.77	
Rejection	.77	
Depression	.89	
Joyful		.81
Acceptance		.47
Full of Wonder		.65
Happy		.89
Hopeful		.65
Serene		.72
Love		.81
Excitement		.86
Ecstatic		.83

Note. N = 117. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: Negative Affect (34%), Positive Affect (27%).

Table 7

Principal-Components Analysis of Personal Projects Emotional Intelligence Dimensional Means

	Factor 1	Factor 2
	PPA Lower Level EI Skills	PPA Higher Level EI Skills
Expression	.49	
Own Awareness	.65	
Other Awareness	.73	
Emotions as Guide	.73	
Own Understanding	.72	
Other Understanding	.64	
Project Facilitation		.77
Project Hindrance		-.79
Regulation - Other		.48

Note. N = 117. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: PPA Lower Level EI Skills (32%), PPA Higher Level EI Skills (22%).

Correlational Analyses

Relationship Between Trait EI and PPA Cognitive, Emotions, and Ability EI Factors

Pearson product moment correlations used to assess the relationships between trait EI and the PPA factors for the general project system are shown in Table 8. It was expected that individuals higher in emotional intelligence would have more adaptive project systems (i.e., projects that are more personally meaningful, more supported, more efficacious, and less considered as obstacles). Similarly, they were expected to experience more positive affect and less negative affect with regards to their projects. It was also expected that EI would be more strongly associated with the personal projects EI factors than the other PPA factors. This hypothesis was simplified in figure 4 (H1) and is supported to a degree by the following results.

Generally, trait EI was associated with high personal meaning/competency and support/efficacy. Trait EI was also related to PPA positive affect, as well as both lower and higher level EI skills. That trait EI was moderately related to latter two factors suggests that while these overlap significantly, they are not redundant. This provides both convergent and discriminant validity for these as EI ability measures. Moreover, that the PPA Lower Level EI Skills were more strongly associated with Trait EI may signify that the Trait EI measures pick up on more of these lower level EI skills than they do higher level skills. In any case, it was supported that PPA skills were more related to Trait EI than any of the other factors. Unexpectedly, trait EI was neither inversely related to appraising one's projects as obstacles nor to PPA negative affect which implies that these are independent of emotional intelligence (i.e., both individuals higher and lower in EI may experience these equally; having high EI does not safeguard individuals from

experiencing negative affect in or obstacles in their project pursuit, but individuals higher in EI may be better able to handle these because of a “repair element” partly comprising the construct; this will be further addressed in the discussion).

Table 8

**Pearson Product Moment Correlations Between Trait Emotional Intelligence and
Personal Projects Analysis Cognitive, Emotions, and Ability EI Factor Scores**

	Trait EI
Personal Meaning/Competency	.38**
Support/Efficacy	.32**
Obstacles	-.14
PPA Negative Affect	-.13
PPA Positive Affect	.35**
PPA Lower Level EI Skills	.57**
PPA Higher Level EI Skills	.46**

Note. Ns vary as a result of using a pairwise deletion procedure for missing data. N ranges from 90 to 113. All tests of significance are two-tailed.

****p<.01**

The Relationship Between Trait EI and PPA: Cognitive, Emotions, and Ability

Dimensions

Pearson correlations were used to look more closely at which dimensions comprising the factors most relate to EI and revealed the following pattern of results. The cognitive dimensions most strongly related to EI (see Table 9) are intrinsic motivation, competence, support and control (all $p < .01$). Value congruency, self-identity, autonomy, and progress are also among the cognitive dimensions most related to EI (all $p < .01$). Other associations with EI include the dimensions of initiation, anticipated success, and stage, all in the positive direction, and difficulty and external²⁴ in the negative direction (all $p < .05$). The emotions dimensions most strongly related to trait EI (see Table 10) are ecstatic, serene, hopeful, happy and excitement (all $p < .01$). Joyful, full of wonder, and love were also positively related to trait EI (all $p < .05$). Of the negative emotions, ambivalent, depressed, fearful and guilty were all inversely related to trait EI (all $p < .05$). It is evident that trait EI is more related to positive emotions than to negative ones, indicating that emotional intelligence does not shield individuals from experiencing negative emotions, but that there is an increased likelihood of experiencing more positive emotions. In looking at the EI skills dimensions (see Table 11), it is evident that with the exception of project hindrance, all dimensions are significantly correlated with Trait EI.

Table 9

Pearson Product Moment Correlations Between Trait EI and Personal Project Cognitive Dimensional Scores

	Trait EI – Computed Factor
Difficulty	-.22*
Control	.30**
Importance	.02
Autonomy	.29**
Competence	.31**
Progress	.27**
Anticipated Success	.21*
Support	.30**
Intrinsically Motivated	.35**
External	-.19*
Value Congruency	.29**
Self-Identity	.29**
Time Adequacy	.12
Effort	-.02
Commitment	.18
Challenge	-.03
Initiation	.23*
Stage	.20*

Note. Ns vary as a result of using a pairwise deletion procedure for missing data. N

ranges from 108 to 116. All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$

Table 10

Pearson Product Moment Correlations Between Trait EI and Personal Project EmotionsDimensional Scores

	Trait EI – Computed
Joyful	.23*
Sad	-.15
Fearful	-.20*
Acceptance	.09
Angry	-.07
Disinterested	-.03
Full of Wonder	.23*
Happy	.29**
Hopeful	.30**
Serene	.36**
Stress	-.17
Love	.21*
Ambivalent	-.24*
Full of Dread	-.10
Guilty	-.20*
Excitement	.28**
Rejection	-.09
Ecstatic	.36**
Depressed	-.21*

Note. Ns vary as a result of using a pairwise deletion procedure for missing data. N

ranges from 99 to 108. All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$

Table 11

Pearson Product Moment Correlations Between Trait EI and Personal Project Emotional Intelligence Dimensional Scores

	Trait EI – Computed
Expression	.28**
Own Awareness	.36**
Other Awareness	.37**
Emotions as Guide	.55**
Own Understanding	.50**
Other Understanding	.32**
Project Facilitation	.23*
Project Hindrance	-.12
Regulation - Other	.25**

Note. Ns vary as a result of using a pairwise deletion procedure for missing data. N ranges from 105 to 116. All tests of significance are two-tailed.

***p<.05, **p<.01**

Hypothesis 2: Impact of Trait EI, Ability EI, and Personal Projects Appraisals on Well-being

Data Reduction

Well-Being. Well-being was distinguished in terms of psychological and physical well-being. All measures of psychological well-being, including the CESD, Diener-Emmons Affect Scale, PANAS, and General Life Satisfaction Scale, were entered into a PCA. In an attempt to simplify, stabilize and increase power for data analyses, and to obtain a more robust measure for psychological well-being, all of the outcome measures were reduced to a single psychological well-being factor. This factor comprises measures referring to affect and general satisfaction in life (see Table 12).

Table 12**Principal-Components Analysis of Psychological Well-Being**

	Factor 1 Psychological Well-Being^a
General Life Satisfaction	-.77
Diener-Emmons Positive Affect	-.65
Diener-Emmons Negative Affect	.78
CESD	.86
PANAS Positive Affect	-.74
PANAS Negative Affect	.78

Note. N = 118. Only loadings in absolute magnitude above .35 are presented.

Percentages of variance accounted for were as follows: Psychological well-being (59%).

^a Because the dimensions that load most strongly in this factor do so negatively, the signs of the correlations in all further analyses have been reversed for ease of communication.

Statistical Analyses

Predicting Psychological Well-Being from Trait EI. The direct impact of trait EI and all PPA variables on well-being was evaluated. It was expected that trait EI would predict well-being (see H2b, figure 4), and this was supported. Trait EI was found to significantly predict psychological well-being ($r = .60$, $p < .001$). The EI project dimensions developed for the purposes of this investigation to measure ability EI were next assessed to determine whether they further contribute to well-being, thereby supporting the proposed model (see Table 2).

Predicting Psychological Well-Being from Trait EI and EI PPA Factors. The EI skills factors (EI lower level skills and EI higher level skills) were entered into a hierarchical multiple regression analysis to determine if they explain incremental variance to the prediction of psychological well-being after variability in the dependent variable was accounted for by trait EI (see Table 13). The hierarchical regression model demonstrates that both of the PPA EI skills factors add significantly to the prediction of psychological well-being, i.e., after controlling for individuals' levels of trait EI, these variables still contribute an additional 6% to the explanation of psychological well-being. Both of the Beta weights for the EI skills factors are significant (see Table 13). These results support the proposed model and suggest that these PPA factors are measuring aspects of emotional intelligence that are not accounted for in current trait EI measures and are capable of enhancing psychological well-being since they are derived from project-level appraisal. These aspects are claimed here to be individuals' skills and ability at managing and regulating their emotions with respect to their projects (i.e., EI higher level skills), and an emotional information-processing component when it comes to

**awareness, expression, integration and understanding of one's emotions in project pursuit
(i.e. EI lower level skills).**

Table 13

Hierarchical Multiple Regression Analysis of Psychological Well-Being on EI Personal**Projects Factors****Dependent Variable—Psychological Well-being****Block 1: Trait EI**

Multiple R	0.60	F(1, 100)=55.26, p<.001
R Square	0.36	
Adjusted R Square	0.36	

Block 2: EI PPA Factors

Multiple R	0.65	F(3, 95)=23.63, p<.001
R Square	0.43	
Adjusted R Square	0.41	R Square change .06, p<.01

Independent Variables in the equation

<u>Independent Variables</u>	<u>Beta</u>	<u>Semi-Partials</u>	<u>p</u>
Trait EI	0.62	.50	.001
EI lower level skills	0.28	.20	.01
EI higher level skills	0.31	.24	.001

Predicting Psychological Well-Being from Trait EI, PPA EI Skills Factors, and PPA Cognitive Factors²⁵. It was hypothesized that the cognitive personal project factors would account for well-being over and above that accounted for by trait EI, as well as ability EI (see H2a, figure 4). As depicted in the Social Ecological model (see figure 2), this can be explained by virtue of cognitive project appraisals which capture variability in traits and emotions as do all trait EI measures, and adaptive emotional processing as do the PPA EI skills dimensions, but they also reflect more general cognitive processes. Consequently, a hierarchical multiple regression was conducted in three blocks, with trait EI forced into the regression first, then the PPA EI Skills factors, and then the PPA cognitive factors (Personal Meaning/Competence, Support/Efficacy and Obstacles), to determine if the PPA cognitive factors explain variance in the prediction of psychological well-being after considering the contribution of both trait EI and ability EI (Table 14).

After considering the contribution of Trait EI and the EI PPA factors, the hierarchical regression model also indicated that the cognitive PPA factors added significantly to the prediction of psychological well-being, contributing an additional 8% to the explanation of the variability in the criterion. The Beta weights for the personal meaning/competency and obstacles PPA factors were statistically significant. These results suggest that although emotional intelligence (both trait and ability aspects), predict much of our psychological well-being, we can increase our psychological well-being even further through enhancing other aspects of our project pursuit. In particular, the more meaningful and efficacious one's projects are, the higher one's psychological well-being. In contrast, the more one's projects are construed as obstacles – regardless of how highly emotionally intelligent an individual may be²⁶ – the lower is psychological well-being.

Although meaning and efficacy are related to higher emotional intelligence, the former are much broader factors and do not explicitly look at how individuals manage, understand, etc. only their emotions with respect to their projects as does the construct of EI. These results support the Social Ecological Model, which maintains that the personal projects individuals are engaged in, in part reflect aspects of their traits in explaining well-being, but also reflect more adaptive appraisals of their environments in general.

Table 14

**Hierarchical Regression of Psychological Well-Being on Trait EI, PPA EI Skills
Factors, and PPA Cognitive Factors**

Dependent Variable—Psychological Well-being

Block 1: Trait EI

Multiple R	0.60	F(1, 88)=50.13, p<.001
R Square	0.36	
Adjusted R Square	0.36	

Block 2: PPA EI Skills Factors

Multiple R	0.65	F(3, 86)=21.39, p<.001
R Square	0.43	
Adjusted R Square	0.41	R Square change .06, p<.01

Block 3: PPA Cognitive Factors

Multiple R	0.71	F(6, 83)=14.18, p<.001
R Square	0.51	
Adjusted R Square	0.47	R Square change .08, p<.01

Independent Variables in the equation

<u>Independent Variables</u>	<u>Beta</u>	<u>Semi-Partial</u>	<u>p</u>
Trait EI	.52	.40	<.001
EI lower level skills	.21	.13	n.s.
EI higher level skills	.14	.10	n.s.
Personal Meaning/Competency	.23	.19	<.05
Support/Efficacy	.07	.06	n.s.
Obstacles	-.25	-.22	<.01

Predicting Physical Well-Being from Trait EI. It was expected that trait emotional intelligence would predict physical well-being, and again, this was supported. Trait EI was found to significantly predict physical well-being ($r = .27, p < .005$). These results confirm the enduring impact of traits on one's physiological health. The EI skills project dimensions were next assessed to determine whether they further contribute to physical well-being.

Predicting Physical Well-Being from Trait EI and EI PPA Skills Factors. Both EI skills factors were entered into a hierarchical multiple regression analysis to determine if they add incremental variance to the prediction of physical well-being after variability in the dependent variable was accounted for by trait EI (see Table 15). The hierarchical regression model indicates that the addition of the PPA EI skills factors do, indeed, contribute to the prediction of physical well-being. After controlling for individuals' levels of trait EI, these variables uniquely contribute an additional 5% to the explanation of physical well-being, which is marginally significant. However, it is theoretically interesting that the Beta weight for the EI higher skills factor is statistically significant (discussed below).

Table 15

Hierarchical Regression of Physical Well-being on Trait EI and PPA EI Skills Factors

<u>Dependent Variable—Physical Well-being</u>			
Block 1: Trait EI			
Multiple R	0.27	F(1, 94)=7.42, p<.01	
R Square	0.07		
Adjusted R Square	0.06		
Block 2: EI PPA Factors			
Multiple R	0.35	F(3, 92)=4.23, p<.01	
R Square	0.12		
Adjusted R Square	0.09	R Square change .05, p<.09	
<u>Independent Variables in the equation</u>			
<u>Independent Variables</u>	<u>Beta</u>	<u>Semi-Partials</u>	<u>p</u>
Trait EI	.28	.23	.05
EI lower level skills	.23	.16	.10
EI higher level skills	.27	.21	.05

Predicting Physical Well-Being from Trait EI, PPA EI Skills Factors, and

Cognitive PPA Factors. A hierarchical multiple regression was conducted in three blocks, with trait EI forced into the regression first, followed by the PPA EI Skills factors, and then the PPA cognitive factors (Personal Meaning/Competence, Support/Efficacy and Obstacles), to determine if they add incremental variance to the prediction of physical well-being after considering the contribution of both trait EI and ability EI (Table 16). The hierarchical regression model indicates that the cognitive PPA factors do not add significantly to the prediction of physical well-being.

These results suggest that when it comes to individuals' physical health and well-being, that the more enduring aspects of traits are of great importance. However, that having higher EI skills also contributes to physical health may permit a point for intervention (for example, by helping individuals see how they can use their EI skills to their capacities; this will be described in greater detail in the discussion that follows).

Table 16

Hierarchical Regression of Physical Well-Being on Trait EI, PPA EI Skills Factors and PPA Cognitive Factors

Dependent Variable—Physical Well-being

Block 1: Trait EI

Multiple R	0.27	F(1, 88)=6.95, p<.01
R Square	0.07	
Adjusted R Square	0.06	

Block 2: PPA EI Skills Factors

Multiple R	0.35	F(3, 86)=3.96, p<.01
R Square	0.12	
Adjusted R Square	0.09	R Square change .05, n.s.

Block 3: PPA Cognitive Factors

Multiple R	0.38	F(6, 83)=2.28, p<.05
R Square	0.14	
Adjusted R Square	0.08	R Square change .02, n.s.

Independent Variables in the equation

<u>Independent Variables</u>	<u>Beta</u>	<u>Semi-Partial</u>	<u>p</u>
Trait EI	.22	.17	.01
EI lower level skills	.18	.11	n.s.
EI higher level skills	.20	.14	n.s.
Personal Meaning/Competency	.04	.03	n.s.
Support/Efficacy	.06	.05	n.s.
Obstacles	-.15	-.13	n.s.

Part Two: Secondary Hypotheses

Hypothesis 3: Highly Emotional Projects and EI

Data Reduction

Project Factors for Emotionally Charged Projects Only. As this hypothesis investigates only those projects towards which participants indicated feeling strong emotions, separate PCAs were conducted on the project dimensions once the non-emotionally charged projects were removed from the project system²⁷. PCAs with varimax rotations were performed on all emotionally charged projects, resulting in very similar factor solutions for all PPA dimensions when compared to that of the general project system, and so the factor names were retained (see Tables 17 to 19). However, small differences did emerge for the Cognitive Factors (see Table 17), with anticipated success loading on Support/Efficacy, and commitment on Obstacles. A subtle difference also emerged for the EI Skills factors (see Table 19), in that Own Understanding and Other Understanding loaded moderately on both factors. If we look at Mayer, Caruso and Salovey's (2000) model, we see that these are middle to upper level EI skills, and so it makes sense that they slightly overlap the two factors. However, it should be pointed out that this structure emerged for the emotionally charged projects and not the general project system. It should also be pointed out that when it came to emotionally charged projects, the dimension of Own Awareness, which is associated with more lower level EI skills in the general project system, also loaded moderately on the higher level EI skills. Moreover, both EI skills factors accounted for about equal variance when examining only emotionally charged projects, (in comparison to the general project system in which lower skills accounted for 10% more of the variance).

Table 17

PCA of Personal Projects Cognitive Dimensional Means for Emotionally Charged Projects

	Factor 1 Personal Meaning/ Competency	Factor 2 Support/Efficacy	Factor 3 Obstacles
Control	.50		
Autonomy	.76		
Competence	.63		
Anticipated Success	.45	.39	
Intrinsically motivated	.68		
External	-.58		
Value Congruency	.69		
Self-Identity	.52		
Commitment	.58		.46
Initiation	.68		
Progress		.81	
Support		.65	
Time Adequacy		.81	
Stage		.53	
Difficulty		.39	.72
Importance			.51
Effort			.76
Challenge			.77

Note. N = 109. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: Personal Meaning/Competency (22.17%), Support/Efficacy (16.37%), Obstacles (13.28%).

Table 18

PCA of Personal Projects Emotions Dimensional Means for Emotionally Charged Projects

	Factor 1 PPA Negative Affect	Factor 2 PPA Positive Affect
Sad	.76	
Fearful	.81	
Angry	.83	
Disinterested	.59	
Stress	.75	
Ambivalent	.65	
Full of Dread	.87	
Guilty	.75	
Rejection	.78	
Depression	.89	
Joyful		.79
Acceptance		.53
Full of Wonder	.48	.61
Happy		.88
Hopeful		.63
Serene		.68
Love		.78
Excitement		.83
Ecstatic		.82

Note. N = 109. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: PPA Negative Affect (33.21%), PPA Positive Affect (25.91%).

Table 19

PCA of Personal Projects Emotional Intelligence Dimensional Means for Emotionally Charged Projects

	Factor 1	Factor 2
	PPA Higher Level EI Skills	PPA Lower Level EI Skills
Expression		.37
Own Awareness	.47	.53
Other Awareness		.72
Emotions as Guide		.73
Own Understanding	.59	.59
Other Understanding	.57	.44
Project Facilitation	.77	
Project Hindrance	-.72	-.40
Regulation - Other	.50	

Note. N = 109. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: higher level EI skills (25.22%), lower level EI skills (25.13%).

Analysis of Variance for Emotionally Charged Projects²⁸. It was hypothesized that projects which individuals indicated were strongly emotionally charged would be appraised more positively by individuals higher in EI because those higher in EI would know how to better regulate their emotional projects in an adaptive manner. Thus, they were expected to use their emotions in positive ways that would facilitate rather than hinder their project pursuit. Participants were classified according to three groups: high (top 25% of sample), average (middle 50% of sample), and low (bottom 25% of sample) in trait EI.

This was followed by a series of one-way ANOVAs using only those projects that participants checked off in their personal project elicitation list as being associated strongly with their emotions (i.e., emotionally charged projects). Initial differences were found along the following PPA dimensions: Personal Meaning/Competency ($F_{(2, 97)} = 3.87, p < .05$), Support/Efficacy ($F_{(2, 97)} = 3.03, p < .05$), Positive Affect ($F_{(2, 88)} = 3.92, p < .05$), EI higher level skills ($F_{(2, 89)} = 8.79, p < .001$), and EI lower level skills ($F_{(2, 93)} = 13.75, p < .001$). Pairwise comparisons were then conducted for these factors, maintaining a family wise error rate of .10 using a Bonferroni correction ($.10/7 = .014$)²⁹. Individuals high in EI were found to use significantly more of the higher level EI skills than those lowest in EI ($\underline{M} = 18.42, \underline{S.D.} = 5.75$, and $\underline{M} = 13.20, \underline{S.D.} = 3.54$, respectively; $p < .001$). Those higher in EI were also using more lower level EI skills for emotionally charged projects in comparison to the low EI individuals ($\underline{M} = 28.26, \underline{S.D.} = 3.46$, and $\underline{M} = 22.05, \underline{S.D.} = 4.96$, respectively; $p < .001$). Those average in EI were also found to use significantly more of these higher level ($\underline{M} = 17.34, \underline{S.D.} = 4.51$ for average EI group, $p < .002$) and lower level ($\underline{M} = 25.63, \underline{S.D.} = 4.03$ for average EI group; $p < .002$) EI skills

than those lowest in EI. No significant differences emerged between the groups for the cognitive factors.

Hypothesis 4: Intrapersonal and Interpersonal Projects and EI

Hypothesis 4a: Trait EI and Frequency of Intrapersonal and Interpersonal Projects

Preliminary Analyses

Project Frequency. An analysis of project frequency and percentage of projects within each category is presented in Table 20. The principle investigator categorized the total 826 projects listed by the students. An independent judge was also requested to categorize these projects, yielding a concordance rate of 98.2 %³⁰. Interpersonal projects were the most frequently reported, followed by academic and then intrapersonal projects. Occupational projects were least frequently reported. Two projects could not be classified because of inadequate information and were labelled as “other”. The pattern revealed is representative of past research findings on project frequencies for a student population (Zomer, 2000).

Table 20**Frequency and Percentage of Projects in the Major Project Categories**

Project Category	# of Projects	% of Projects
Interpersonal	222	26.9
Academic	175	21.2
Intrapersonal	108	13.1
Leisure	100	12.1
Administrative/Maintenance	97	11.7
Health/Body	89	10.8
Occupational	33	4.0
Other	2	0.2
Total	826	100

Correlational Analyses. Although it was expected that individuals higher in EI would have significantly fewer intrapersonal and interpersonal projects as these come so naturally to these individuals that they are not “projectified”, this was not the case. Pearson product moment correlations revealed that both the number of intrapersonal projects and interpersonal projects were not at all related to trait EI ($r = .29$, n.s. and $r = .13$, n.s., respectively).

Hypothesis 4b. EI and Intrapersonal and Interpersonal Project Appraisals

It was expected that individuals high in EI would appraise intrapersonal and interpersonal projects significantly more positively than those lower in EI.

Data Reduction

Project Factors for Interpersonal Projects Only. As this hypothesis investigates only interpersonal projects, separate PCAs were conducted on the project dimensions once the other project categories were removed from the project system³¹. PCAs with varimax rotations were performed on all interpersonal projects, resulting in a slightly different factor solution for the cognitive PPA dimensions when compared to that of the general project system (see tables 21 to 23). The Personal Meaning and Obstacles factors did emerge, but instead of Support/Efficacy, there emerged what was labelled a Social Meaning factor. This was a combination of the Social Meaning factor found in Little (1988) which loaded the standard dimensions of project visibility, others’ view, progress, enjoyment and time adequacy, and the Community/Support factor emerging in Goodine (1999) which loaded project visibility, others’ view, support and self-identity. It is interesting to note that the current Social Meaning factor accounted for more variance than the other two factors for interpersonal projects. The dimensions of external, self-

identity, commitment, importance and anticipated success, as well as the four dimensions from the Support/Efficacy factor in the general project system (i.e., support, time adequacy, stage and progress), loaded most heavily on the Social Meaning factor. The dimensions comprising Personal Meaning and Obstacles were also different for interpersonal projects in comparison to the general project system. The dimensions of control, anticipated success, and commitment no longer loaded on the former; the dimension of importance no longer loaded on the latter, and instead, control and progress loaded negatively on it.

Small differences also emerged for the emotion factors with Joyful, happy, serene, and excitement loading negatively on the Negative Affect factor. A subtle difference also emerged for the EI Skills factors, in that Own Understanding and Other Understanding loaded moderately on both factors (as in the emotionally charged projects). However, for interpersonal projects, other understanding loaded much more heavily on the higher level EI skills factor. It should also be pointed out that when it came to interpersonal projects, the dimension of Expression had a marginal loading on the higher level EI Skills factor. The EI higher level skills also accounted for 2% more of the variance for interpersonal projects than for projects in the general system.

Table 21

PCA of Personal Projects Cognitive Dimensional Means for Interpersonal Projects Only

	F1	F2	F3
	Social Meaning	Personal Meaning	Obstacles
Initiation		.61	
Autonomy		.62	
Value Congruency		.70	
Competence	.40	.57	
Intrinsically motivated	.36	.77	
External	.41	-.49	
Self-Identity	.55	.58	
Commitment	.67		
Importance	.66		
Anticipated Success	.65		
Support	.74		
Time Adequacy	.53		
Stage	.57		
Progress	.65		-.53
Difficulty			.78
Control			-.41
Effort			.69
Challenge			.86

Note. N = 99. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: Social Meaning (22.3%), Personal Meaning (17.7%), Obstacles (16.5%).

Table 22

PCA of Personal Projects Emotions Dimensional Means for Interpersonal Projects Only

	Factor 1	Factor 2
	PPA Negative Affect	PPA Positive Affect
Sad	0.72	
Fearful	0.80	
Angry	0.75	
Disinterested	0.50	
Stress	0.73	
Ambivalent	0.82	
Full of Dread	0.83	
Guilty	0.65	
Rejection	0.72	
Depression	0.79	
Joyful	-0.35	0.75
Full of Wonder	0.51	0.65
Happy	-0.46	0.78
Serene	-0.46	0.59
Excitement	-0.35	0.78
Hopeful		0.62
Acceptance		0.53
Love		0.65
Ecstatic		0.76

Note. N = 99. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: Negative Affect (34.37%), Positive Affect (24.89%).

Table 23

PCA of Personal Projects Emotional Intelligence Dimensional Means for Interpersonal Projects Only

	Factor 1	Factor 2
	PPA Higher Level EI Skills	PPA Lower Level EI Skills
Expression	0.36	0.48
Own Awareness		0.67
Other Awareness		0.70
Emotions as Guide		0.75
Own Understanding	0.48	0.63
Other Understanding	0.67	0.45
Project Facilitation	0.72	
Project Hindrance	-0.71	
Regulation - Other	0.73	

Note. N = 99. These are varimax-rotated principal components. Only loadings in absolute magnitude above .35 are presented. Percentages of variance accounted for were as follows: PPA Higher Level EI Skills (28.56%), PPA Lower Level EI Skills (26.56 %).

Analysis of Variance for EI and Interpersonal Projects Only³². It was hypothesized that individuals higher in EI would appraise interpersonal projects more positively. Participants were classified according to three groups: high (top 25% of sample), average (middle 50% of sample), and low (bottom 25% of sample) in trait EI. This was followed by a series of one-way ANOVAs using only those participants who had listed at least one interpersonal project in their project matrix. No differences were found among the cognitive PPA dimensions (but, remember that a new Social Meaning factor did emerge for interpersonal projects). However, initial differences were found for both the PPA EI skills dimensions: EI higher level skills ($F_{(2, 78)} = 4.68, p < .01$), and EI lower level skills ($F_{(2, 88)} = 3.67, p < .05$). More specifically, significant differences were found between low vs. high trait EI groups along the high skills EI factor, with the former scoring lower on these skills than the latter ($\underline{M} = 12.93, \underline{S.D.} = 7.30$, vs. $\underline{M} = 19.10, \underline{S.D.} = 5.42$, respectively; $p < .01$) after the Bonferroni correction procedure was applied³³.

Cluster Analysis

Project Factors for Intrapersonal Projects Only. Because of an insufficient n to variable ratio for intrapersonal projects which resulted in unstable and uninterpretable PCA solutions, McQuitty's (1964) Elementary Linkage Analyses were performed on the dimensions instead. Linkage analysis of the cognitive project dimensions identified four separate clusters (see Figures 5-8). The first cluster, labelled Personal Meaning, amalgamated core dimensions of meaning and efficacy, seeding self-identity with intrinsically motivated. The second cluster, labelled Commitment, seeded commitment with value congruency. The third cluster consisted of dimensions constituting

Support/Efficacy, and seeded progress and time adequacy. The fourth cluster to emerge was labelled Obstacles, and revealed a significant positive correlation between challenge and difficulty.

Linkage analysis of the emotions dimensions identified four different clusters (see figures 9-12). The first cluster grouped together all of the positive affect dimensions, seeding happy and joyful, and was labelled Happy. The remaining clusters were comprised of negative affect dimensions, and cluster two, labelled depression, was seeded by full of dread and depressed, cluster three, labelled anxiety, by fearful and stressed, and cluster four, labelled anger, by sad and angry (see Watson & Greer, 1983).

A McQuitty's Elementary Linkage Analysis showed that the nine dimensions designed to measure EI Skills formed a single cluster for intrapersonal projects, labelled EI Skills – Own Understanding. The cluster was seeded by the pair Own Understanding and Other Understanding.

McQuitty's Elementary Linkage Analysis for PPA Cognitive Dimensions

Figure 5. Personal Meaning

Figure 7. Commitment

Figure 6. Support/Efficacy

Figure 8. Obstacles

McQuitty's Elementary Linkage Analysis for PPA Emotions

Figure 9. Happy

Figure 10. Depression

Figure 11. Anxiety

Figure 12. Anger

McQuitty's Elementary Linkage Analysis for PPA EI Skills

Figure 13. EI Skills – Own Understanding

Analysis of Variance for EI and Intrapersonal Projects Only. It was hypothesized that individuals higher in EI would appraise intrapersonal projects more positively. Participants were classified according to three groups: high (top 25% of sample), average (middle 50% of sample), and low (bottom 25% of sample) in trait EI. This was followed by a series of one-way ANOVAs using only those participants who had listed at least one intrapersonal project in their project matrix. Although initial differences were found for anxiety, the Bonferroni correction procedure revealed these to be non-significant. No significant differences were found among any of the other clusters.

Hypothesis 5: Gender Differences in EI

T-tests on Gender Differences and Trait EI, PPA EI Skills, and PPA Cognitive Dimensions. Although it was hypothesized that gender differences would emerge with respect to trait EI, no such differences emerged in the present investigation. However, in examining the PPA dimensions for the entire project system, differences did emerge for the PPA negative affect and EI lower skills factors, with males scoring lower on both (see Table 24). In looking at interpersonal projects only, no gender differences at all emerged (see Table 25).

Table 24

T-tests on Gender Differences for the Overall Project System

Variable	Males		Females		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Trait EI	147.03	37.77	152.46	33.33	t(114)=-0.76, n.s.
Personal Meaning	44.72	7.95	45.21	7.12	t(104)= -.31, n.s.
Support/Efficacy	20.50	4.49	20.22	4.24	t(106)=.30, n.s.
Obstacles	24.82	4.43	26.03	4.19	t(112)=-1.36, n.s.
PPA Negative Affect	17.98	11.79	27.75	13.19	t(89)=-3.33, p<.001
PPA Positive Affect	36.65	12.20	36.08	12.13	t(98)=.21, n.s.
PPA EI Lower level skills	24.97	6.73	27.57	5.31	t(111)=-2.16, p<.05
PPA EI Higher level skills	14.23	5.60	12.79	4.08	t(36.69)=1.24, n.s.
Psychological well- being	-7.36	25.49	-.98	28.52	t(115)= -1.11, n.s.

Table 25

T-tests on Gender Differences and Interpersonal Projects Only

Variable	Males		Females		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Social Meaning	43.10	11.85	42.12	8.30	$t(72)=-.40$, n.s.
Personal Meaning	39.45	14.96	39.98	13.79	$t(80)=-.15$, n.s.
Obstacles	10.33	5.73	8.47	6.36	$t(87)=1.20$, n.s.
PPA Negative Affect	12.56	20.32	16.58	19.32	$t(72)=-.80$, n.s.
PPA Positive Affect	38.57	11.85	37.70	12.61	$t(76)=.27$, n.s.
EI Lower level skills	26.43	6.59	27.34	5.47	$t(90)=-.66$, n.s.
(PPA)					
EI Higher level skills	16.46	7.01	15.97	6.79	$t(80)=.28$, n.s.
(PPA)					

Discussion of Results: Part One and Part Two

Part One: Primary Hypotheses

Hypothesis One: EI and Adaptive Personal Project Systems

The first main hypothesis of this research was that trait EI would relate to personal project systems that were more adaptive in nature. Initially, however, a robust measurement of trait EI was required. The approach used in this investigation was to enter several existing measures of trait EI into a factor analysis, including a new EI questionnaire designed to more broadly cover the trait EI construct. What was encouraging was that one clear trait EI factor emerged, with the new EI questionnaire emerging as the highest loading variable on it. Thus, a stable measure of trait EI was derived from the factor score associated with this analysis, and the new EI questionnaire appears to be a most promising measure of the construct. It is recommended that other studies investigating the construct of EI use this approach to obtain increased stability, consistency, and reliability – in whole, a more robust measure of trait EI.

The results for hypothesis one for the most part confirmed our expectations. Indeed, the projects of individuals higher in EI were appraised as more personally meaningful, supported, and efficacious. Referring back to James' (1902) quote in the introduction, he explained that without emotions individuals would not be able to designate importance to the various domains of life; they would lack expression, character and perspective. Having more awareness and a better understanding of our own and others' emotions, then, contributes meaning to our projects in our daily lives and assists us in gathering support for the things we do so as to help us in our projects. Therefore, it is not surprising that those higher in EI derive more meaning from their

actions, since human interaction does not only consist of reactions to the behaviours of others or situations, but also to what these behaviours and situations signify and the meaning attributed to them. Greenberg & Johnson (1988) further explain, “Meaning involves both cognition and affect; in fact, emotion is often regarded as containing tacit meaning and has been spoken of as involving intuitive appraisal ...and evaluation...(p. 22)”.

Our emotions also guide us in prioritizing our projects and goals in a way so that we can obtain more efficacy from them. Indeed, the results suggest that individuals who are highly emotionally intelligent have a better grasp of their own and others’ emotions, and that this may help to maximize meaning, support, and efficacy in their projects. In light of the similarities between the constructs of EI and self-regulation (or, self-control), it should also be pointed out that the PPA dimension of control was positively related to EI. Since the correlation was still low, it seems to indicate that trait EI is not simply a measure of self-control, although what it may be capturing here is emotional control since this dimension loads on the factor of personal meaning.

As stated in the definition of EI, one of the components of EI is an interpersonal component, so the results indicating a relationship between support and EI is consistent with the literature. Not only can individuals high in EI perceive and understand the emotions of others, but they are also able to control and regulate others’ emotions in an adaptive manner, for example, in order to facilitate project pursuit. Often, we need the support of others in order to help us achieve our projects and goals. Those who can effectively regulate their emotions and the emotions of others can obtain greater support. Research shows, for example, that persuasiveness can be increased by positive feelings

(see Worchel, Cooper & Goethals, 1988). In addition, emotional communication is essential for forming positive relationships, particularly for success in romantic relationships (Greenberg & Johnson, 1988).

Highly emotionally intelligent individuals are posited to have an increased ability to regulate emotions and integrate emotions rationally into actions so as to obtain more positive outcomes and less negative outcomes. These outcomes, in turn, elicit their respective emotions towards their goals and projects (Gilbert et al., 1998; Greenberg & Johnson, 1988). Therefore, emotional intelligence was expected to relate to more positive affect and less negative affect. Nonetheless, it was found that trait EI was related to more positive affect, but not less negative affect. That trait EI was related to positive affect and not at all related to negative affect with respect to one's projects provides evidence that EI is not simply a measure of positive and negative affect, and neuroticism as some researchers have claimed (e.g., Newsome et al., 2000). Rather, it seems that what may be salient to those high in EI is what Salovey et al. (1995) refer to as Repair (in the Trait Meta-Mood Scale), which is essentially one's inherent tendencies in being able to overcome a negative mood (this partly comprised EI in this research). Therefore, although those higher in EI may be just as likely to experience negative emotions as those lower in EI, they may be able to overcome these emotions more effectively (i.e., because they are more aware of them and have a better understanding of them, etc.). In this way, they appear to be more emotionally equipped to handle such emotions. This is perhaps more clearly seen in the next observation, that the cognitive factor of obstacles is not inversely related to EI. Although having obstacles in project pursuit seems to be independent of EI, results reveal that those higher in EI have less difficulty when it comes to overcoming

obstacles; this is again suggestive of a repair element and will be further examined shortly.

In looking at the factor structure for the PPA EI skills dimensions, it was encouraging to find that the first factor measured the more basic (expression and awareness) to middle level skills (emotions as a guide, and understanding) in Mayer, Caruso and Salovey's (2000) model, and the second factor, the highest level EI skills (emotional regulation and management), as this supports the utilization of PPA in assessing and discriminating among emotional abilities. In looking more closely at the relationships between the EI skills dimensions and trait EI, the only dimension that was not correlated with trait EI was project hindrance (i.e., the extent to which one's emotions hinder project pursuit). However, project facilitation (i.e., the extent to which one's emotions facilitate project pursuit), was positively related to trait EI. This again may signify a repair element, and is of theoretical value in the factor compositions. Because of the exploratory nature of this study, it will be necessary to replicate such findings before drawing any final conclusions.

Nonetheless, this repair element is similar to the concept of resiliency when it comes to the various obstacles that life can sometimes present. For example, in a study by Werner and Smith (1955), findings revealed that the likelihood of long-term difficulties increased if birth trauma was severe. Among moderately stressed children, however, the best predictor of how well they did in later years was the quality of their home environments. But the most intriguing cases were the handful of exceptions to the rule. A few children with fairly serious birth complications and troubled family environments grew into competent adults who fared as well as controls in career attainment and

psychological adjustment. The researchers found that these resilient children relied on factors outside the family and within themselves to overcome stress. Some had especially attractive personalities that caused them to receive positive responses from relatives, neighbors, and peers. In other instances, a grandparent, aunt, uncle or baby-sitter established a warm relationship with the child and provided the needed emotional support (see Werner, 1993).

Hypothesis Two: Impact of Trait EI, Ability EI, and Personal Projects Appraisals on Well-Being.

“...the language of the emotions, as it has sometimes been called, is certainly of importance for the welfare of mankind.”

--Darwin, 1873, p. 367

“Indeed, keeping our distressing emotions in check is the key to emotional well-being.”

--Goleman, 1995, p. 56

It was expected that trait EI would predict both psychological and physical well-being and this expectation was confirmed, lending the construct of trait EI predictive validity and utility. A hierarchical regression revealed that the PPA EI skills factors added incremental variance to the prediction of psychological well-being. This also confirmed our expectations and suggested that although these EI skills factors were capturing some of the variability in trait EI, they were also measuring a theoretically distinct ability EI in their unique contribution to psychological well-being. A hierarchical regression using these variables was also conducted in the prediction of physical well-being. What was revealed was that although the EI skills factors do not contribute incremental variance when considered together (i.e. R square change for block two), in

looking more closely at these factors individually, the higher level EI skills do contribute significantly to the prediction of well-being after variability in the dependent variable was accounted for by trait EI.

This finding implies that while the prolonged nature of trait EI largely influences physical well-being, it is possible that using our predispositions to the extent possible in managing and regulating our emotions can also enhance physical well-being. This suggests a point for intervention, where individuals who are not using information-processing EI to their fullest capacities can learn how to better manage their emotions to facilitate project pursuit in their daily lives. This reinforces the promotion of socioemotional learning which seeks to teach the skills required for navigating the social world, such as the ability to communicate effectively, plan, and exert emotional self-control in the education curriculum (Mayer and Cobb, 2000). These findings essentially support the newly proposed model for EI in the present investigation, requiring a measure of how we understand and regulate our emotions in our personal actions, in addition to our trait EI predispositions to predict well-being.

This hypothesis was taken one step further. Because of the nature of personal projects in picking up variability in traits, and because of the broader basis of the cognitive PPA factors, it was expected these cognitive factors would account for well-being over and above that accounted for by trait EI. By broader basis, it is meant that these cognitive dimensions are not limited to how we manage our emotions (though they have been shown to relate to EI), but also to how we navigate through life. This was explored with respect to both psychological and physical well-being, and it was found that although the cognitive PPA dimensions contribute to increased psychological well-

being, they do not contribute to enhanced physical well-being. The practical implication of this finding is that unlike our trait EI predispositions, and even our levels of information-processing EI (i.e., PPA EI skills factors), PPA may offer a broader point of intervention in enhancing individuals' psychological well-being. However, the prolonged and enduring nature of our trait EI predispositions may have permanent consequences for our physical health and well-being, with a window of hope at direct intervention by learning how to better manage and regulate one's emotions. Additionally, if one's environment is complementary to one's trait EI predispositions, this may also be a contributing factor to well-being, as prolonged "acting out of character" may have autonomic costs (i.e., prolonged seems to be key) (Little, 1998).

In sum, the results of this hypothesis provide evidence to legitimize the extension of Mayer et al.'s (2000) proposed model of the skills involved in emotional intelligence by adding to it the element of personal action as measured by personal projects to demonstrate the interchange between emotions, cognition, and one's actions in the prediction of well-being (see figure 3). Part one of this study also provides evidence that supports the validity of the emotional intelligence measures, established on the following grounds: (1) Convergent validity on the basis that all trait EI measures were highly correlated; (2) Discriminant validity on the basis that sufficient variance beyond trait EI variables was accounted for by PPA EI and cognitive variables, and; (3) Predictive validity on the basis that EI predicted psychological and/or physical well-being.

Part Two: Secondary Hypotheses

Hypothesis Three: Highly Emotional Projects and EI

This hypothesis examined only those projects with which individuals associate strong emotions and sought to determine whether these emotionally charged projects would be appraised more positively by individuals higher in EI. The reasoning for this was that since those higher in EI are more aware of their emotions, have a better understanding of emotions, and are more effectively able to manage and regulate their emotions, it should reflect in overall adaptive appraisals of projects which are emotionally charged. The hypothesis was not fully confirmed. What was found was that only the PPA EI skills factors were significantly differentially appraised, with those highest to average in trait EI scoring higher on both of these factors in comparison to the group lowest in trait EI. This appears, essentially, to provide further evidence and construct validity that these EI skills dimensions are detecting differences with respect to ability EI.

That significant differences did not emerge with respect to the PPA cognitive factors is surprising, and seems to indicate that there are no differences in how much personal meaning/competency, support/efficacy and obstacles these three groups have when it comes to emotionally charged projects. This could be explained because individuals lower in EI may derive meaning, and support/efficacy from other aspects of project pursuit (i.e., aspects that do not deal with the way we regulate our emotions). This is hopeful, as it makes the case for PPA as a method of intervention, particularly for those lower in well-being. Another point to consider is further investigation of these types of projects, not previously investigated. For example, what makes a project emotionally charged? Is it that they are more associated with negative emotions or positive emotions,

or equally associated with both? Do differences exist among high, average and low EI individuals and what they construe as emotionally charged? Do any gender differences exist?

A few other points should be discussed regarding the EI skills dimensions that were found to comprise the factors for these types of projects. Interestingly, one's own awareness of emotions loaded moderately on both EI skills factors. This makes sense, as the very task of individuals indicating which projects are highly emotional to them would seem to require a higher level of awareness of one's own emotions. Similarly, unlike the factor structure for the general project system which loaded only the highest skills dimensions on the EI higher level skills factor, emotionally charged projects seemed to split the hierarchy of EI skills almost 50-50, with own understanding loading equally on both factors, and other understanding loading more heavily on the higher level skills factor. This suggests that individuals may require and/or use a higher level of emotional information-processing and understanding when it comes to projects strongly associated with their emotions in general, whether they are low or high in trait EI. This may also explain why there were no significant differences in adaptive project appraisals found between the high, low, and average trait EI groups when it comes to these types of projects. Furthermore, since the EI dimension of other understanding loaded more heavily on the higher rather than lower level skills, it would be interesting for future research to also look at what types of projects individuals appraise as more emotionally charged in general. Since this study is exploratory, the results presented here should be confirmed in future research.

Hypothesis Four: Intrapersonal and Interpersonal Projects and EI

Hypothesis 4a: Trait EI and Frequency of Intrapersonal and Interpersonal Projects.

It was hypothesized that individuals high in EI would have fewer interpersonal projects and intrapersonal projects, as these types of projects would seem to come so naturally to these individuals that they are not “projectified”. However, this expectation was not confirmed. It was found that the frequency of these projects was not at all related to trait EI. If we examine past PPA research investigating intrapersonal projects, it has been found that although individuals higher in depression had more of these types of projects, no relationship was found between the frequency of these types of projects and creativity, or openness to experience (Zomer, 2000). As both openness and creativity are related to emotional intelligence, it is not surprising that no frequency relationship was found for trait EI, as well. However, as found in Zomer (2000), intrapersonal projects were related differentially to depression and creativity when examining the appraisals of these projects. Thus, the relationships among the various project dimensions and trait EI was investigated, and the results are discussed in the next section.

Hypothesis 4b: EI and Interpersonal and Intrapersonal Project Appraisals.

Individuals higher in EI were expected to appraise intrapersonal and interpersonal projects more positively than those lower in EI because they should be able to manage their own emotions and the emotions of others in a way so as to facilitate project pursuit. Although this hypothesis was not fully confirmed, a new Social Meaning Factor emerged for interpersonal projects that replaced the Support/Efficacy Factor for the general project system. Thus, individuals in general find social meaning in interpersonal projects, which makes good theoretical sense. What was found that did differentiate the three EI groups

was that those higher in EI used significantly more of the higher level EI skills when it came to interpersonal projects. This means that they saw themselves as being able to better regulate their own emotions and the emotions of others with respect to these types of factors. Their emotions also did not hinder their pursuit of interpersonal projects in comparison to individuals low in EI. It should also be pointed out that expression loaded on the high skills EI factor when it came to interpersonal projects, so it may be that when it comes these types of projects, that outward expression requires a slightly higher level of information-processing skills.

No significant differences emerged in the appraisal of intrapersonal projects. In past research, it has been shown that these self-focussed projects are rather diverse in nature, and that certain subtypes (e.g., self-improvement, coping/adjustment) are associated with depression, whereas others (e.g., spiritual/philosophical and self-regulatory), are related to openness to experience, or creativity. Thus, it is suggested that these results be followed up with research examining self-focussed projects at the subcategory level in relation to EI. It is interesting to consider that for self-focussed projects a single EI Skills factor emerged, but largely out of the dimension of “Own Understanding”, because what this implies is that understanding of own’s own emotions is central to emotional skills for these projects.

Hypothesis Five: Gender Differences in EI. There have been mixed findings in gender differences in total measured trait EI (e.g., Petrides and Furnham, 2000; Schutte et al., 1988). Although Schutte et al. (1988) found a significant difference in overall trait EI, Petrides and Furnham (2000) found a significant difference only on the “social skills” factor of trait EI. Similar findings have been revealed for ability EI using the MEIS.

Mayer, Caruso and Salovey (2000) found that significant gender differences emerged, with women performing somewhat higher than men on all 12 tasks comprising the measure and according to all scoring procedures used.

In the current study, replication of these findings was attempted using trait EI. However, no such differences emerged. This may be due to the different methodology used in this study to assess trait EI which, in any case, seems to be a more reliable measure of general trait EI. Rather than using single scales that only seem to capture some of the components of trait EI, we factor analyzed existing measures of trait EI and obtained a more robust trait EI measure.

Next, overall appraisals of projects were examined for gender differences. It was expected that some gender differences would emerge, with females higher in EI having more positive project appraisals with respect to interpersonal projects than males. However, it was found that few differences emerged, and that men and women are very similar in their appraisals. One of the differences revealed was that females generally appraised their projects as higher in negative affect, and this supports findings reported in the literature that women generally experience more depression (e.g., Blake, 1994). The only other difference found was that females were also higher in the EI lower ability skills. This is supported in the literature, in particular Mayer, Caruso and Salovey's (2000) findings that women score higher on ability EI. No gender differences were found with respect to project appraisals for interpersonal projects only, suggesting that men and women likely relate to these projects in similar, rather than different ways. This is consistent with Wilson's (1990) findings that there are few gender differences in PPA.

However, with the addition of the affective dimensions in PPA since then, future studies should investigate gender differences in PPA given these new dimensions.

Part Three: Comparison Case Studies

To provide a "window" into the lives of our participants, we selected two extremes and examined their personal projects, and two written pieces of narrative (see appendix A). The first narrative format asked participants to choose three projects they most want to do and why they wanted to do them. In the second narrative piece, we asked participants to tell us about an anxiety-provoking situation, event or project. After this piece of narrative, participants were asked to rate their current moods (Diener & Emmons, 1985). Below we compare "Tara", one of our participants who had a low score on trait EI, and "Darren", a participant who scored highly on trait EI (see Table 26 for participants' scores).

Case Studies

Tara is a 27-year-old, full time, fourth-year student enrolled in sociology. She was among the five lowest scorers in trait EI, with a total of 84.61 (almost two standard deviations below the sample mean; see table 26). She was also an extreme case when it came to both psychological and physical well-being, scoring -40.01 (i.e., more than one standard deviation below the mean), and 40 (i.e., approximately 3.5 standard deviations above the mean), respectively. This clearly shows the relationship found in hypothesis two, which found trait EI to be inversely related to both psychological and physical well-being.

On the other extreme, we have Darren, a 28-year-old, full time, fourth-year student enrolled in history. He was among the five highest scorers in trait EI, with a total of 213.42 (almost two standard deviations above the sample mean; see table 26). Darren

scored 25.03 on psychological well-being (i.e., over one standard deviation above the mean), and indicated only one body symptom (i.e., more than one standard deviation below the mean). In comparison to Tara then, Darren has much greater psychological and physical well-being, consistent with our findings.

While Tara's score on PPA Personal Meaning is below average, Darren's score on Personal Meaning is over one standard deviation higher than the mean, illustrating the relationship between the two variables found in hypothesis one. Although both participants had similar scores on Support/Efficacy, Darren's score was actually slightly higher and greater than one standard deviation above the mean of the sample. Both participants were also very similar on Obstacles, scoring about average and supporting our results that this factor is independent of EI. Nevertheless, Darren appraised his projects as much lower in Negative Affect and much higher in Positive Affect than did Tara (over one standard deviation than the mean in both cases). This suggests that although Darren may face as many obstacles in his projects as Tara, that he is able to "spin" these in more positive ways. This may be suggested in his relatively high score on EI higher level skills in comparison to Tara, where he seems to be able to better manage and regulate both his own and others' emotions, using his emotions to facilitate rather than hinder project pursuit. Although gender differences were revealed for EI lower level skills with females generally scoring higher, in this case, both had similar EI lower level skills scores. It should be noted that it appears that although Tara scores about average on both of these, that one factor contributing to her physical health-related problems is the enduring effect of her low score on Trait EI. Of course, there is also the heredity factor,

and various other factors which we did not examine (e.g., life events, abusive relationships, environmental teratogens, etc.), that may also play a role.

Table 26**A Comparison of Tara and Darren's Factor Scores to the Sample Means**

Variables	Tara	Darren	Sample	
	M	M	M	SD
Personal Meaning	43.37	53.45	45.08	7.32
Support/Efficacy	23.09	25.50	20.30	4.29
Obstacles	22.62	22.55	25.70	4.27
PPA Negative Affect	23.91	5.16	24.85	13.50
PPA Positive Affect	18.07	54.22	36.24	12.09
EI Lower Level Skills	29.86	32.57	26.86	5.82
EI Higher Level Skills	14.16	21.02	13.19	4.57
Trait EI	84.61	213.42	150.96	34.50
Psychological Well-being	-40.01	32.46	51.57	9.18
Physical Well Being	40.00	1.00	-2.73	27.76

In examining the content of the participants' projects, we see that both had indicated that all of their projects were emotionally charged. Six of the projects listed in Darren's matrix were leisure projects, and one was interpersonal. Tara had four academic projects, two maintenance/administrative projects, and one interpersonal project. It appears that in Darren's case, his projects are more "restorative", whereas Tara's projects have a more serious nature to them, and appear like these are more things that she has to do because the situations demands it. If we look at their appraisals of the dimension "external", Tara construes her projects as high on this dimension in comparison to Darren who does not at all see his projects as influenced externally. Indeed, this also comes out in their narratives. For example, Darren describes why he wants to go mountain climbing,

Climbing is like falling in love – not the romantic sense of the phrase, but in the discovery of passion. ...Summiting a rock face gives you an emotional high that goes unmatched, in my experience. I feel exhilarated at the top of a mountain, because as tiring or difficult as the effort may be, it is an unequivocal accomplishment. It's also a humbling experience: the sheer size of a mountain reminds me of how small human beings really are.

Here, we see clearly that although mountain climbing presents itself an obstacle to Darren, he sees that once the obstacle is overcome and he reaches his goal, that the experience is emotionally exhilarating. In another one of his projects, "writing," Darren explains that it was his "first creative outlet". Thus, Darren's projects appear to be taken on to do what he loves, for self-growth, and to feed his creative personality. Indeed, creativity and openness to experience have been found to relate to trait EI in the current study, as well as in past research (Bar-On & Parker, 2000). Such restorative outlets are referred to as "restorative niches" in personal projects research, and are theorized to be associated with increased well-being.

Tara describes why her project of graduating is desirable for her,

It has been a long and hard road to get to this point. I had a child at eighteen and didn't think I would find the time or money to go to university. Now, I look forward to finish school but I'm left feeling scared about future employment.

While it appears that this has presented a great obstacle that she is overcoming, something that Tara should be mighty proud of herself for achieving, we see that this accomplishment is not acknowledged by her. Rather, it is almost dismissed by her feelings as she quickly moves on, worrying about the next step of finding future employment. Instead of feeling wonderful and optimistic about such an accomplishment for her life and for her daughter's life, Tara is left feeling distressed. This brings us to another difference that emerged in our participants' narratives, and that is that the content of Darren's writing also appears to be more "emotionally rich", using such phrases as "falling in love", "discovery of passion", "emotional high", "feel exhilarated", etc., indicating that he is highly attuned to his emotions; Tara's narrative lacks this emotional richness as she only refers to her feelings once (and, when she did refer to them, it was to negative feelings).

Another difference apparent in our participants' projects is that Darren's project of "mountain climbing" presents itself as an obstacle to him, but it also seems to be something he is strikingly passionate about, whereas Tara's obstacle is one that has revealed itself through her life experiences and one that she is not so passionate about. It is probable that a person more emotionally equipped in her situation might have "spun" the same project in a different way, one that is quite encouraging, and heroic; for example, "being alone at a young age, with a child, I admit I was scared, but I rose above

the challenges of life, and obtained an education in order to provide for my daughter a life that holds more opportunities; now I feel courageous, like I am strong enough to overcome any other challenges that life brings my way.” Nevertheless, she did not construe her project in such a way, and did not have this tone of emotional strength, character, and passion. Rather than seeing that she has gained skills in overcoming her challenges that she can use in the future, she remains distressed about the future. This takes us back to research on affective forecasting, and suggests that indeed, individuals low in EI do not have the capabilities to “appreciate the extent to which they will transform [negative] events psychologically in a way that blunts their impact (Wilson et al., 2000, p. 822).”

Differences in coping techniques are also apparent in the participants’ narratives which ask them to write about an anxiety-provoking or stressful situation, event, or project which made them feel upset, sad, or worried. Tara writes,

A stressful situation was when I was put on academic probation. As a result of my first year as a student, my second year was spent studying under a lot of strain. I realized it was my own fault for not studying the first year and that started a situation in which I had to smarten up or would have to leave school. It left me feeling depressed and anxious but I studied the following year and got out of probation. I would never put myself in that situation again.

Again, even though Tara overcame an obstacle she remains distressed, depressed and her tone is self-deprecatory, as she engages in self-blame (e.g., “it was my own fault”...), instead of realizing her accomplishments. This is evidence of maladaptation (Bar-On & Taylor, 2000). Optimism, one of the elements comprising EI, is also lacking. Moreover, Tara does not go into great depth about her emotions, and we are left to guess why something that was a struggle that she overcame left her feeling depressed instead of

glorified. By her phrasing that she was in a situation that she “had to smarten up,” it can be speculated that she may have been put down at some point in her life, and that she now reflects this on herself even though she may have left that environment. Since individuals’ traits are generally more manipulable and impressionable at a younger age, it could have directly influenced how she deals emotionally with herself and others, that is, trait EI.

In Darren’s stressful event narrative, he talks about the death of his grandfather,

...an event that brought sadness into my life. All of my grandparents have died now, but it was that of my maternal grandfather that had the deepest effect on me. He was ninety-four when he died. My grandfather first had tragedy in his life as a twenty three year old man in Holland when his parents died, leaving him to raise his younger siblings. He later married and had four daughters, and the family lived through Nazi occupation during the Second World War, and then immigrated to Canada in the early 50s. Through all of that, he never lost his sense of humour, appreciation for life, or generous spirit.

In the last year of his life, my grandfather lived with my parents. I was away at school when he had his stroke, and on the day he died, I was on a train for home. I never did get a chance to say goodbye, but it isn’t something that I regret.

At his funeral, the church was packed with family and life-long friends speaking well of him. I think that helped the grieving process enormously. A well-lived life that consists of numerous family and friends tempers the sorrow of the loss. To know that he was so well regarded and loved helps to heal the sadness. I still miss him, but time really does heal all wounds.

In contrast to Tara’s narrative, Darren goes into depth about the event, and his emotions and how he has dealt with the event. He also appears to accept his loss, and at ease with the fact that he was absent when his grandfather passed away. Relevant to this narrative is research on meaning in the sense of how individuals make sense of loss, and benefit from the experience. In a prospective and longitudinal study of people coping with the loss of a family member, Davis, Nolen-Hoeksema, and Larson (1998) found that those

who made sense of the loss were less distressed, but only in the first year post-loss.

However, reports of benefit finding were most strongly related to adjustment at interviews 13 and 18 months post-loss.

In applying this to Darren's narrative, we see that he does a bit of both. He first makes sense of the loss, in that he explains that he was the last of his grandparents to live and he had lived a long, full life. Then, he talks about the benefits – a man who was a hero to him and to others, who raised a large family on his own at a young age, who had made a positive impact on the lives of many, including friends, family, and himself. Thus, we see that he obtains much meaning from this experience, (and this is also evident in his high appraisal on the Personal Meaning factor for his projects in general). This is evidence of an adaptive coping response which according to Lazarus (1991b), is in dynamic interaction with the appraisal of personal meaning. Adaptive coping is also often seen as central to emotional intelligence (Bar-On & Parker, 2000). Confirming this point that Darren seems to more adaptively cope with his stressful event are his scores on the Diener & Emmons (1984) Affect Scales following the stressful event narrative. He scores much more highly on all the positive emotions, and lower on most of the negative emotion scales in comparison to Tara.

In sum, we see how emotions, cognition, and action all interrelate, and how they are helpful in understanding the impact that emotional intelligence has on an individual's physical and psychological well-being. Trait EI reflects one's predispositions to handling emotions and emotional situations, and is a more stable element in a person's life, the enduring consequences of which are associated with a lowered physical and psychological well-being. This was evident in Tara, who had one of the lowest scores on

trait EI, and psychological well-being, and reported most highly on body symptoms. She lacked emotional depth in her narrative pieces, and used much self-blame regardless of her accomplishments in overcoming obstacles; this is reflective of maladaptive coping. On the other hand, Darren had one of the highest scores on trait EI, and enhanced psychological well-being, as well as one of the lowest scores on body symptoms. Darren's narrative pieces were optimistic, rich in emotional content, and reflected more adaptive coping strategies. These case studies have provided us with insight into how emotional intelligence plays out in the various domains of individuals' lives.

Summary and Integration: Uniting Our Passions, Reasons, and Actions

A theory of emotion is, in effect, a theory of how motivation and cognition produce emotions in adaptationally relevant encounters...

Without some version of a motivational principle, emotion makes little sense, inasmuch as what is important or unimportant to us determines what we define as harmful or beneficial, hence emotional.

--Richard S. Lazarus (1991)

Summary

Using a new method for assessing emotional intelligence, this study has examined the relationships between our passions, reasons, and actions. The present investigation, exploratory in nature, has revealed that trait EI is related to projects generally high in personal meaning/competency, support/efficacy, positive affect, and both lower and higher level EI skills. The results also provide evidence for construct, discriminant and predictive validity for EI. In addition, our results support the proposed extended model, requiring an element of personal action in the measurement of EI, and in the prediction of well-being. Indeed, it is evident that trait EI predicts both psychological and physical well-being, but that the EI skills factors further contribute to the prediction of well-being. When the PPA cognitive factors were assessed, they were found to account for the variance in well-being over and above that accounted for by trait EI and the EI Skills factors. Thus, it is not necessarily the case that emotional intelligence is inevitably associated with a decreased quality of life, as personal meaning, and support/efficacy can be achieved through other ways, that may be independent of one's emotional abilities. We can also equip individuals with the knowledge of how to more effectively cope with their

obstacles so as to promote greater adaptation in the challenges that individuals might face in their lives.

In our secondary areas of interest, our results suggest that emotionally charged projects can be differentiated with respect to individuals with high, average and low levels of trait EI and the amount of emotional information-processing skills that these individuals use. We found that the frequency of intrapersonal and interpersonal projects are not associated with trait EI, but that individuals high in trait EI use a higher level of emotional processing skills for interpersonal projects. With regard to gender differences, results revealed that women appraise their projects as being higher in negative affect, and use more lower level EI skills (e.g., expression, awareness, understanding), in comparison to men.

These quantitative analyses were followed by a qualitative inquisition into the lives of two individuals, one low and one high in EI. It is quite evident, by these case studies, that one's emotions, thoughts, and actions are quite richly embedded in the various disciplines of individuals' lives, and that emotional intelligence greatly influences one's perspectives regarding the self and others, one's abilities to cope with adversity, and one's physical health and psychological well-being.

In these last few sections, the limitations of the study will be outlined, followed by a discussion of the theoretical implications of this research, in particular as they relate to the conative evolution in personality, and finally, recommendations on future directions in the study of emotional intelligence.

Limitations

One of the most controversial aspects of this research was the differentiation between trait and information-processing, or ability EI, and the construction of the EI Skills dimensions on the theoretical basis outlined by Mayer, Salovey and Caruso (1999). Although the results seem rather fruitful, and support the newly proposed model, additional proof of the reliability and construct validity of these dimensions as measures of ability EI must be attained before these should be used as valid measures of the construct. Thus, it is cautioned that unless supported by future research regarding their reliability and validity, these measures should really not be used as measures of EI, especially on their own.

Moreover, although precaution was taken regarding the inclusion of the native language groups, and the results were interpreted cautiously, this still presents a minor limitation to this research as all participants were included regardless of the possible significant differences that seemed to emerge with respect to four of the project dimensions; it may be that findings were confounded by these differences. It may also be that gender differences found in EI lower skills and PPA Negative Affect might have confounded some of the results. It should be pointed out that this sample largely consisted of females, which warrants further investigation of gender differences, as well, with a more equal sample.

Another limitation of this study is what might have been a premature investigation of emotionally charged projects. As these types of projects have not been previously researched, it may very well be that individuals' differences in the interpretation of, and consequently selection of projects "strongly related to your emotions," may have

confounded the results. Although the results did not reflect any significant differences among the groups in relation to the PPA cognitive factors, that differences did emerge with respect to the PPA EI skills factors does seem to indicate different emotional processing levels with respect to these types of projects, making these findings theoretically relevant and exciting.

There are also the limitations inherent in all self-report measures. Although self-report measures have the advantage of obtaining direct information in a fast, convenient way from the person being evaluated, they have the disadvantage that the respondents may lack the ability or awareness needed to properly evaluate themselves, or may try to make themselves look good or bad; that is, they make fake good or bad. However, it should be noted that in most research uses of measures, faking is not likely to occur frequently because there is usually no motivation for it (Schutte and Malouff, 1999). This would seem particularly true for the present research, as participants were anonymous to the experimenter once their questionnaire packages were submitted. Therefore, what is of most concern is whether the participants had the needed awareness to properly evaluate themselves. As it will be discussed shortly, the units of personal project research may assist individuals in this process, as projects are things that individuals can “see”.

As this research was exploratory in nature, there is also need for confirmatory studies of the results.

Theoretical Implications: Aspects of the Conative Evolution

A trend in personality psychology has been a movement towards focusing on intentional personal action, representative a conative evolution in the field. The current

study shows that there are strong interrelationships between a person's actions, reasonings, and emotions, and that these relationships, for a large part, determine well-being. Although an individual's predispositions (i.e., trait EI) are rather stable and inflexible, by looking at personal action constructs as motivational units, we have the tools necessary to intervene and increase quality of life.

What is intriguing about personal projects as units of analysis is that they look at events which are personally salient to the individual. Little (1998) asserts, "Projects have inner representations as aspirations and goals, but they also have an external manifestation as observable acts that are impacted by and impact upon the social ecology (p.107)." By examining projects, then, we have direct access to the thoughts, emotions and aspirations, of the person and we begin to understand the person. As a measure of ability EI, these project units provide an assessment technique that allows individuals to appraise how they construe their abilities at emotional processing of information as it pertains to their own projects. PPA offers an element of personal saliency – an element missing in other EI ability measures, and an element that seems crucial to understanding the person. In addition, it provides ecological validity, an element which is also lacking in EI ability measures.

Furthermore, what makes PPA more accessible to individual's awareness of their abilities in comparison to self-report measures of trait EI is that it provides these personally relevant project and goal units. Thus, the process is made less abstract as individuals have a solid unit that they can identify with – that is, their projects. This is part of what makes Personal Projects Analysis incredibly useful and appropriate in the assessment of emotional intelligence. Additionally, since it is so intimately linked with

one's social ecology and because of its highly modular nature, a PPA diagnosis can offer strategies for intervention in increasing individuals' well-being. For example, if we see that individuals do not have strong capabilities in using their emotions to facilitate their project pursuit, we can examine this with them more thoroughly to determine what exactly is standing in their way, and help them discern why they feel the way they do about the project, and understand their emotions in relation to their activities. We can also help them in finding out what would make their projects more meaningful to them, perhaps provide them with an option of a support group if we see that they lack support in their undertakings, and find ways to help in making a project more manageable to increase their sense of efficacy. All of these are options that will assist individuals in increasing their well-being – options that are neither provided within the trait approach, nor in other ability measures of emotional intelligence.

Significance and Practical Implications

The construct of emotional intelligence is useful and pertinent to the study of personality because it examines the ways in which people reason about their emotions and the ways in which our emotions play into our thoughts and actions – processes that exist in our basic nature as humans, and have been shown to predict one's quality of life, both in psychological and physical domains. It is necessary to further examine the utility of this construct, as emotions play a major role in influencing many of our everyday cognitive and behavioural functions, including memory and decision-making. Emotions play a major role in our social interactions and relationships, as well. In addition, disorders of emotion plague patients with many neurological and psychiatric conditions

(Bechara, Tranel, & Damasio in Bar-On & Parker, 2000). Given emotion's importance in social interaction, in the ways we manage our lives, in the understanding of human suffering, and its value in the management of disease, a comprehensive understanding of human emotion is required to improve quality of life. This is what research on the construct of "emotional intelligence" seeks to provide.

Understanding the ways in which individuals use their emotions can have great implications for therapeutic intervention which can assist individuals in increasing their quality of life. For example, emotional intelligence is likely associated with the motivation and interest to pursue particular types of psychotherapeutic intervention, such as insight-oriented versus supportive forms of psychotherapy. EI is also likely related to successful outcomes from specific clinical interventions. For instance, successful insight-oriented therapy depends on the client's "ability to see relationships among thoughts, feelings, and actions, with the goal of learning the meanings and causes of his [or her] experiences and behavior" (Applebaum, 1973, p. 36). The abilities to recognize internal mental states and to link specific mental events with certain behaviours and situations, which have indeed been found to be associated with successful therapeutic outcomes (Greenberg & Safran, 1987), are essential components in the theory of emotional intelligence (Bar-On & Parker, 2000). In advancing our understanding of emotional intelligence, we can use this knowledge to advance the quality of human life.

With the development of a new approach to the study of emotional intelligence, this study contributes significantly to current research in that it provides an assessment method, as well as counselling intervention, which allows insight into ecologically relevant contexts within which individuals process both emotional and cognitive

information. In examining the relationships between emotion, reason, and action, we found that well-being, particularly psychological well-being, is greatly influenced by the ways in which individuals feel and think about what they are doing, even more so than the traits that individuals possess. Once again, PPA has proven to be an effective methodology in the investigation of adaptive behaviour and the etiology of psychological distress and illness. Using clinical methods developed from PPA methodology, clinical intervention could consist of providing the client with insight into project system changes that would enhance quality of life.

Future Directions

More integrative methods of assessing emotional intelligence must be developed in order to ensure that what we are tapping into is indeed emotional intelligence. In self-report measures, for example, it would be advantageous for researchers to develop and include scales that detect faking in their EI measures³⁴. Maximum performance tests, such as the MEIS, may be highly reliable, but they lack the components of personal saliency and ecological validity which seem essential for knowing how individuals manage and regulate their emotions. While PPA offers these components, it is still a self-report measure. What appears necessary, then, is an integration of various methods in the assessment of general emotional intelligence. It may be helpful to use observer ratings, as well, in the measurement of EI. Moreover, with progress in the physiological processes involved in emotionally intelligent reactions, such technologies may provide additional assessment options in the future.

Although the study found that for the most part there were only minor native language differences, it would be interesting for future studies to further investigate language and cultural differences which may have confounded the findings in the current research. In addition, gender differences should be investigated, as they may reveal themselves as a result of different cultural and societal expectations for men and women. Should this be the case, besides being an individual matter, emotional learning and EI would also be an issue to be addressed at the societal level.

With regards to the application of PPA to the study of EI, future research should examine the relationships between the different categories of projects and frequencies with trait EI. Although this was done here for intrapersonal and interpersonal projects, because of the theoretical relationships between these and EI it would be interesting to investigate whether other types of projects are associated with EI (for example, leisure projects may be used as a creative and emotional outlet for individuals high in EI, as evident in the case study of Darren). A content analysis of each category of projects may also be helpful in delineating which types of projects are more related to EI. Such an analysis has proved to be useful in past research, particularly in helping differentiate which types of intrapersonal projects are associated with depression, and creativity (Zomer, 2000). In future research, it would also be interesting to examine emotionally charged projects more closely to determine what makes projects emotionally charged for individuals, whether any differences exist for high, average and low EI groups as to what they construe as emotionally charged, and whether any gender differences exist. Additionally, it would be interesting to compare the PPA EI Skills measures with the MEIS and more recently, the Mayer, Salovey, and Caruso Emotional Intelligence Test

(MSCEIT) and to assess the construct validity of the measures used (see Bar-On & Parker, 2000).

It would also be useful to examine the literature on positive illusions (Taylor & Brown, 1988, 1994) in relation to emotional intelligence. Taylor and Brown's research on positive illusions suggests that mental health is characterized by "unrealistically positive self-perceptions, an illusion of personal control and unrealistic optimism about the future (Taylor & Gollwitzer, 1995, p. 213)." Since a component of EI is optimism, which may be especially useful in coping, it may very well be that individuals high in EI also have more positive illusions. This is similar to the notion of affective forecasting previously discussed in relation to emotional intelligence. Such research would add insight into the construct of EI.

Finally, there are many ethical issues to consider as we develop our knowledge about emotional intelligence. For example, is it fair to use the term emotional intelligence when an adult's early environment, and the nourishment and openness it provided may have had such a large impact on their current emotional constraints and abilities? Would it be appropriate to use the term when there may be cultural and gender differences? Is it right for companies to hire individuals based on their levels of emotional intelligence? And, what would the implications be if people knew that they were not emotionally intelligent? Thus, while this area of research is proving to be quite beneficial and valuable, we must use *our* knowledge in the *right* way to ensure, what Aristotle refers to as, *ethical virtue*.

¹ Self-regulation is a concept related to emotional intelligence. It refers to “people’s efforts to alter their own responses, such as overriding behavioral impulses, resisting temptation, controlling their thoughts, and altering (or artificially prolonging) their emotions” (Dale and Baumeister, 1999, p.139). More colloquially, it is known as self-control and self-discipline (Baumeister & Boden, 1998; Baumeister, Heatherton & Tice, 1994). It is distinguishable from emotional intelligence, EI referring to the level of skill that individuals have in regulating their emotions to guide their thoughts and actions (Baumeister, Heatherton & Tice, 1994). Several other concepts are more-or-less closely related to Mayer and Salovey’s (1990) definition of emotional intelligence. What Buck (1991) refers to as “emotional competence” is the ability to deal effectively with the internal environment of one’s feelings and desires. He argued that emotional competence develops through social feedback mechanisms, and is essential for competence in social interaction. Social competence, is the ability to deal and act adaptively in social situations (Lecci, 1998). Averill and Nunley (1992) refer to emotional creativity as a way of becoming more aware of our own thoughts and feelings, managing our emotions in a creative yet disciplined way, and living to the full extent of human potential. Thorndike (1920) defined social intelligence as the ability to understand others and “act wisely in human relations”. He considered this to be an aspect of IQ, or general intelligence. However, none of these concepts clearly possess all the components of emotional intelligence, and it appears that emotional intelligence has discriminant validity among these concepts (Salovey & Mayer, 1990; Mayer Caruso & Salovey, 2000).

² This third component clearly indicates the value of examining one’s goals and projects

in the study of emotional intelligence, though Personal Action Constructs have surprisingly not yet been implemented in the literature.

³ Mayer and Cobb (2000) maintain that teaching emotional knowledge is possible, but that it does not make sense to speak of teaching emotional intelligence. An intelligence refers to a capacity to learn. While socioemotional learning is acceptable, the ready acquisition of emotional intelligence is questionable. This is congruent with the general intelligence literature (i.e., one cannot alter one's IQ, although one can advance one's general knowledge). This implies that there is a maximum level at which such knowledge (e.g., general or emotional) can be absorbed moderated by individuals' intelligence levels (Conley, 1984).

⁴ The MEIS consists of 12 tasks, divided into four classes or "branches" of abilities including (1) perceiveing, (2) assimilating, (3) understanding, and (4) managing emotions, as indicated in Mayer & Salovey's (1997) ability model (Mayer, Caruso & Salovey, 2000).

⁵ LeDoux (1996) explains that although emotional responses are hard-wired into the brain's circuitry, the things that make people emotional are learned through experience; this may be the key to understanding and even altering emotional makeup. Many psychological problems, such as phobias or posttraumatic stress disorder (PTSD), involve malfunctions in the way emotion systems learn and remember. Le Doux (1996) suggests that understanding how these mechanisms normally work will have important consequences for how psychologists treat emotional disorders (see Davidson, Jackson & Kalin, 2000; LeDoux, 1996).

⁶ The new appraisal system was adopted after recent research conducted in the Social Ecology Laboratory, Carleton University, provided evidence that individuals do indeed describe their personal projects with discrete emotion labels (Chambers, Goodine & Little, 1999).

⁷ Social Competency is related to Emotional Intelligence, in particular to its interpersonal component.

⁸ The empirical association between the overlapping constructs of emotional intelligence and alexithymia (see Parker et al., 2001) permitted a primary investigation using archival data from a previous study in the Social Ecology Laboratory, Carleton University which included the Toronto Alexithymia Scale as a measure (Chambers, 1999). The data for the participants for this pilot study were drawn from the Social Ecological Assessment data bank (SEAbank) (Chambers & Little, 1999). The sample consisted of 41 participants. All subjects were undergraduates at Carleton University at the time of assessment taking a third year course on motivation and emotion. All subjects were native English speakers. 34% ($n = 14$) of the participants were men, and 66% ($n = 27$) were females. Ages ranged from 19 to 44 ($M = 24.4$, $SD = 5.4$). Data were collected using take-home packages. As expected, since emotional intelligence is related to the ability to express emotions, and because EI and alexithymia are inversely related, alexithymia was found to be associated with a negative appraisal of personal projects (see Parker et al., 2001). In particular, alexithymia was related to projects appraised as low in control ($r = -.47$, $p < .01$), responsibility ($r = -.55$, $p < .01$), autonomy ($r = -.40$, $p < .01$), competence ($r = -.52$, $p < .01$), anticipated success ($r = -.42$, $p < .01$), and value congruency ($r = -.43$, $p < .01$).

Alexithymia was also related to projects appraised as higher in anger ($r = .34, p < .05$) and fear ($r = .32, p < .05$). The results from the pilot study seem to indicate that at least one component of emotional intelligence -- emotional expression -- is likely required to facilitate adaptation to one's environment.

⁹ The factor structure in the current study may vary somewhat due to the different dimensions used.

¹⁰ The latter finding is mixed, with Petrides and Furnham (2000) finding gender differences only with respect to a social skills factor of trait EI (Petrides and Furnham, 2000). Again, because of the measures used a social skills EI factor may or may not emerge in the current study.

¹¹ Before including non-native speakers, it was necessary to examine differences in group means to ensure that there were no problematic interpretations of the questionnaires with respect to the translation of emotional concepts (Neil Chambers, personal communication, May 8, 2001). As such, native language differences were investigated before entering the non-native English speakers into the sample for subsequent analyses. Precaution was taken by comparing the means for the native language groups on all factors and dimensions. No differences emerged with respect to any of the factors used in the study (see Table F1, Appendix F). Of the 46 PPA dimensions, only four differences were identified for the dimensions of control, challenge, joyful and acceptance (English native language speakers were higher on the two cognitive dimensions, and "other" native language speakers were higher on the two emotion dimensions (see Tables F2, F3, and F4; Appendix F), and so participants were not excluded on the basis of these differences.

Of the eight EI scales, a difference emerged with respect to the TMMS Awareness scale (see Table F5; Appendix F). Because the scale loaded least significantly on the Trait EI factor, and no native language differences were found when it was included in the trait EI factor, the scale was included among the measures comprising trait EI. The t-test results should be interpreted cautiously since the large number of t-tests run increases the risk of Type I error, thereby increasing the probability of finding a significant difference where none exists.

¹² PPA is a unique tool, also applicable in counseling that allows us to do this.

¹³ Although controversial, moods are usually characterized as affective states that are nonspecific, pervasive, and capable of widely influencing cognition and behaviour (Swinkels, 1995).

¹⁴ It is likely that it relates more to the sociability rather than impulsivity components of extraversion.

¹⁵ Swinkels (1995) recognizes the conceptual link between mood labeling and alexithymia. He explains,

At their root, both labeling and alexithymia are concerned with a focus on feelings. In the case of mood labeling, the focus is on categorizing and naming feelings, whereas alexithymia focuses on deficits in identifying and communicating feelings....Other key components of alexithymia, however, show a clear divergence from mood awareness. That is, the condition involves cognitive and symbolic operations (i.e., concrete thinking, impoverished daydreams, blunt fantasy life) that are beyond the scope of mood awareness (p. 937).

¹⁶ In comparison to external and inductive approaches to the development of personality questionnaires, Burisch (1984) reports that in terms of validity or predictive effectiveness, studies have revealed no consistent superiority of any one strategy. However, he

maintains that deductive scales usually tend to communicate information in a more direct manner to the assessor; they are also more economical to construct and to administer.

¹⁷ Because of obvious ethical issues, participants were not made aware that this study assesses emotional intelligence. This would also seem to decrease participants' motivation to answer favourably.

¹⁸ 128 packages were returned out of a total of 164 packages issued; 4 packages were discarded because they were incomplete and 7 were not used in the present analyses because measures were not properly completed indicating that these participants might not have understood or followed instructions.

¹⁹ An examination of multivariate indicators of dispersion revealed no influential points (Cook's distances < 1), and so none of the participants comprising the sample were removed on this basis (see Stevens, 1996). The same procedures were conducted on all other variables of interest, none of them indicating influential points.

²⁰ The latter is not of interest in the present study and therefore was not considered in any analyses.

²¹ In further analysis of the new Trait EI measure, it was found that while it incorporates more behavioural items, it does not add incremental variability to the prediction of well-being as do the PPA EI skills factors. This contributes evidence that the units of PPA are unique in allowing access to individuals' emotional information processing as it relates to their projects and goals.

²² Project level factors were conducted, and the same factors emerged for project level data as for individual level data. Because this research focuses on the person-level rather

than the project-level, the factor analyses presented were all conducted at the individual level.

²³ As opposed to project-level; that is an individual's mean dimension scores were subjected to a PCA, rather than the individual project scores.

²⁴ This dimension asked participants to rate the extent they pursue their projects on the basis of others' wishes, situational demands, or reward (e.g., praise, money).

²⁵ It was decided that the PPA Emotions factors would not be entered into regression analyses because these seemed to be theoretically redundant measures. As the psychological well-being factor is largely comprised of positive and negative affect, it seemed redundant to use a measure of affect (with respect to one's projects) to predict what was largely a measure of affect. Indeed, when regressions using PPA affect were run, these factors seem to account for most of individuals' variability in well-being.

²⁶ Trait EI, and both PPA EI higher and lower level skills are not correlated with obstacles ($r = -.14$, n.s., $r = .18$, n.s., and $r = -.11$, n.s., respectively).

²⁷ Once non-emotionally charged projects were removed, there remained 109 participants, and 752 projects, (i.e., 74 projects were eliminated).

²⁸ Homogeneity of variance was assessed.

²⁹ Because of the exploratory nature of the study, a more liberal family wise error rate of .10 was used in this study. However, it should be noted that the comparisons in this particular section are also significant at the more conservative rate of .05.

³⁰ Initial interrater reliability was .92.

³¹ Once the other project categories were removed, there remained 99 participants, and 222 interpersonal projects, (i.e., 604 projects were eliminated).

³² ANOVAs were tested for homogeneity of variance.

³³ Again, a more liberal alpha level of .10 was used.

³⁴ It should be noted that it is unlikely faking would have occurred in the current research as participants were anonymous.

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Appendix A**TMMS****TAS****EI Questionnaire (Schutte)****MAS****NEIS****BFI****PPA****CESD****Diener-Emmons Affect Scale****PANAS****Domain-specific and global life satisfaction scales****Body symptom checklist****Narratives**

TMMS

Please read each statement and decide whether or not you agree with it. Place a number in the blank line next to each statement using the following scale:

- 5 = strongly agree
- 4 = somewhat agree
- 3 = neither agree or disagree
- 2 = somewhat disagree
- 1 = strongly disagree

- _____ 1. I try to think good thoughts no matter how badly I feel.
- _____ 2. People would be better off if they felt less and thought more.
- _____ 3. I don't think it's worth paying attention to your emotions or moods.
- _____ 4. I don't usually care much about what I'm feeling.
- _____ 5. Sometimes I can't tell what my feelings are.
- _____ 6. I am rarely confused about how I feel.
- _____ 7. Feelings give direction to life.
- _____ 8. Although I am sometimes sad, I have a mostly optimistic outlook.
- _____ 9. When I am upset I realize that the "good things in life" are illusions.
- _____ 10. I believe in acting from the heart.
- _____ 11. I can never tell how I feel.
- _____ 12. The best way from me to handle my feelings is to experience them to the fullest.
- _____ 13. When I become upset I remind myself of all the pleasures in life.
- _____ 14. My belief and opinions always seem to change depending on how I feel.
- _____ 15. I am often aware of my feelings on a matter.
- _____ 16. I am usually confused about how I feel.
- _____ 17. One should never be guided by emotions.
- _____ 18. I never give into my emotions.
- _____ 19. Although I am sometimes happy, I have a mostly pessimistic outlook.
- _____ 20. I feel at ease about my emotions.
- _____ 21. I pay a lot of attention to how I feel.
- _____ 22. I can't make sense out of my feelings.
- _____ 23. I don't pay much attention to my feelings.
- _____ 24. I often think about my feelings.
- _____ 25. I am usually very clear about my feelings.
- _____ 26. No matter how badly I feel, I try to think about pleasant things.
- _____ 27. Feelings are a weakness humans have.
- _____ 28. I usually know my feelings about a matter.
- _____ 29. It is usually a waste of time to think about your emotions.
- _____ 30. I almost always know exactly how I am feeling.

(TAS)

Instructions: Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements by circling the appropriate number. Give only one answer for each statement: (1) Strongly Disagree, (2) Moderately Disagree, (3) Neither disagree nor agree, (4) Moderately agree, (5) Strongly Agree.

	Strongly Disagree			Strongly Agree	
1. When I cry I always know why.	1	2	3	4	5
2. Daydreaming is a waste of time	1	2	3	4	5
3. I wish I were not so shy.	1	2	3	4	5
4. I am often confused about what emotion I am feeling	1	2	3	4	5
5. I often daydream about the future.	1	2	3	4	5
6. I seem to make friends as easily as others do.	1	2	3	4	5
7. Knowing the answers to problems is more important than knowing the reasons for the answers.	1	2	3	4	5
8. It is difficult for me to find the right words for my feelings.	1	2	3	4	5
9. I like to let people know where I stand on things .	1	2	3	4	5
10. I have physical sensations that even doctors do not understand.	1	2	3	4	5
11. Its not enough for me that something gets the job done; I need to know why and how it works.	1	2	3	4	5
12. I am able to describe my feelings easily.	1	2	3	4	5
13. I prefer to analyse problems rather than just describe them.	1	2	3	4	5
14. When I am upset, I don't know if I am sad, frightened, or angry.	1	2	3	4	5
15. I use my imagination a great deal.	1	2	3	4	5
16. I spend much time daydreaming when I have noting else to do.	1	2	3	4	5
17. I am often puzzled by sensations in my body.	1	2	3	4	5
18. I daydream rarely.	1	2	3	4	5
19. I prefer to just let things happen rather than try to understand why they turned out that way.	1	2	3	4	5
20. I have feelings that I can't quite identify.	1	2	3	4	5
21. Being in touch with emotions is essential.	1	2	3	4	5
22. I find it hard to describe how I feel about people.	1	2	3	4	5
23. People tell me to describe my feelings more.	1	2	3	4	5
24. One should look deeper for explanations.	1	2	3	4	5
25. I don't know what's going on inside me.	1	2	3	4	5
26. I often don't know why I am angry.	1	2	3	4	5

Please read each statement and indicate to what extent each item describes you. Place a number in the blank line next to each statement using the following scale:

- 5 = strongly agree
- 4 = somewhat agree
- 3 = neither agree or disagree
- 2 = somewhat disagree
- 1 = strongly disagree

- _____ (1) I know when to speak about my personal problems to others.
- _____ (2) When I am faced with obstacles, I remember times I faced similar obstacles and overcame them.
- _____ (3) I expect that I will do well on most things I try.
- _____ (4) Other people find it easy to confide in me.
- _____ (5) I find it hard to understand the non-verbal messages of other people.
- _____ (6) Some of the major events of my life have led me to re-evaluate what is important and not important.
- _____ (7) When my mood changes, I see new possibilities.
- _____ (8) Emotions are one of the things that make my life worth living.
- _____ (9) I am aware of my emotions as I experience them.
- _____ (10) I expect good things to happen.
- _____ (11) I like to share my emotions with others.
- _____ (12) When I experience a positive emotion, I know how to make it last.
- _____ (13) I arrange events others enjoy.
- _____ (14) I seek out activities that make me happy.
- _____ (15) I am aware of the non-verbal messages I send to others.
- _____ (16) I present myself in a way that makes a good impression on others.
- _____ (17) When I am in a positive mood, solving problems is easy for me.
- _____ (18) By looking at their facial expressions, I recognize the emotions people are experiencing.
- _____ (19) I know why my emotions change.
- _____ (20) When I am in a positive mood, I am able to come up with new ideas.
- _____ (21) I have control over my emotions.
- _____ (22) I easily recognize my emotions as I experience them.
- _____ (23) I motivate myself by imagining a good outcome to tasks I take on.
- _____ (24) I compliment others when they have done something well.
- _____ (25) I am aware of the non-verbal messages other people send.
- _____ (26) When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself.
- _____ (27) When I feel a change in emotions, I tend to come up with new ideas.
- _____ (28) When I am faced with a challenge, I give up because I believe I will fail.
- _____ (29) I know what other people are feeling just by looking at them.
- _____ (30) I help other people feel better when they are down.
- _____ (31) I use good moods to help myself keep trying in the face of obstacles.
- _____ (32) I can tell how people are feeling by listening to the tone of their voice.
- _____ (33) It is difficult for me to understand why people feel the way they do.

General Background Information

Age: _____ yrs Gender: M F Native Language: _____
Language spoken in the (current) home: _____

Marital Status (circle one):

1. single (never married)
2. currently married/living with common law spouse
3. divorced
4. widow/widower

Father's profession: _____

Mother's profession : _____

Do you have children? Y N

Do you work? Y N

If yes, how many hours per week? _____ hours

What is your academic major? _____

Are you a student who is: full-time part-time special

What is your current year of study at university? 1 2 3 4 5
other _____ (special/qualifying)

What is your approximate Grade Point Average at Carleton to date (out of 12) _____
(Use n/a, if this is your first university course)

MAS

Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements by circling your response.

1. I have a hard time labeling my feelings.

disagree very much 1 2 3 4 5 6 agree very much

2. I'm usually "tuned in" to my emotions.

disagree very much 1 2 3 4 5 6 agree very much

3. I find myself thinking about my mood during the day.

disagree very much 1 2 3 4 5 6 agree very much

4. I am sensitive to changes in my mood.

disagree very much 1 2 3 4 5 6 agree very much

5. I have trouble explaining my feelings.

disagree very much 1 2 3 4 5 6 agree very much

6. On my way home from work or school, I find myself evaluating my mood.

disagree very much 1 2 3 4 5 6 agree very much

7. Right now I know what kind of mood I'm in.

disagree very much 1 2 3 4 5 6 agree very much

8. I often evaluated my mood.

disagree very much 1 2 3 4 5 6 agree very much

9. I'm never really sure what I'm feeling.

disagree very much 1 2 3 4 5 6 agree very much

10. I don't pay much attention to my moods.

disagree very much 1 2 3 4 5 6 agree very much

IIEQ

On this questionnaire are questions related to emotions. Please read and answer and choose the response that **best** describes the way you feel. Check off the yes/no responses beside each question.

- Yes___ No___ 1. Can you easily tell how you are feeling, that is, your inner emotions, whether you are sad, happy, frustrated, enthusiastic, etc.?
- Yes___ No___ 2. Do your inner feelings guide your behaviour?
- Yes___ No___ 3. Is it important for you to have an understanding of why you behave certain ways as a result of how you feel?
- Yes___ No___ 4. Do you get involved in certain situations or withdraw from certain situations based on how you feel about the situation(s)?
- Yes___ No___ 5. Do you often feel worried?
6. If you had to choose one of the following as a career, which would you choose? (Please circle your answer.)
- a. engineer
 - b. counsellor
 - c. architect
 - d. teacher
- Yes___ No___ 7. Do you frequently experience sadness or anxiety?
- Yes___ No___ 8. Are you comfortable in social situations?
- Yes___ No___ 9. Do you find you can "read" what others are feeling?
- Yes___ No___ 10. When you experience a stressful event, are you easily able to reduce emotional tension?
- Yes___ No___ 11. Is it difficult for you to express your emotions?
- Yes___ No___ 12. Can you easily relate to how others are feeling?
- Yes___ No___ 13. In stressful situations, are you able to stay calm and feel in control?
- Yes___ No___ 14. Do you often respond quickly and effectively in your interactions with others?
- Yes___ No___ 15. Is it difficult for you to make others feel at ease?
- Yes___ No___ 16. Are you sensitive to the underlying motivations of others?
- Yes___ No___ 17. Do you find it easy to express your emotions when you are with others?
- Yes___ No___ 18. Are you often anxious?
- Yes___ No___ 19. Can you easily express your innermost thoughts and feelings?
- Yes___ No___ 20. Is it important for you to pay attention to your moods or emotions?
- Yes___ No___ 21. Do you feel it easy to understand how others feel?
- Yes___ No___ 22. Do you often act based on how you feel in situations?
- Yes___ No___ 23. Should individuals be often guided by their emotions?
- Yes___ No___ 24. Is it useless to examine emotions and feelings?
- Yes___ No___ 25. In most situations, is it better to act based on your thoughts rather than your feelings?
- Yes___ No___ 26. Do you tend to get emotionally involved with friends' problems?
- Yes___ No___ 27. Are you easily upset when things become stressful?
- Yes___ No___ 28. Do you consider yourself empathetic?
- Yes___ No___ 29. Do you feel it easy, almost "automatic" for you to identify your emotions?
- Yes___ No___ 30. When you are feeling down, do you find it difficult to make yourself feel better?
- Yes___ No___ 31. Do you really have to concentrate and/or focus on your emotions in order for you to both express and label them?
- Yes___ No___ 32. Is it easy for you to make yourself cheerful again when you get the blues?

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1
Disagree
strongly

2
Disagree
a little

3
Neither agree
nor disagree

4
Agree a little

5
Agree
Strongly

I see myself as someone who...

___ 1. is talkative

___ 2. tends to find fault with others

___ 3. does a thorough job

___ 4. is depressed, blue

___ 5. is original, comes up with new ideas

___ 6. is reserved

___ 7. is helpful and unselfish with others

___ 8. can be somewhat careless

___ 9. is relaxed, handles stress well

___ 10. is curious about many different things

___ 11. is full of energy

___ 12. starts quarrels (arguments) often

___ 13. is a reliable worker

___ 14. can be tense

___ 15. is ingenious, a deep thinker

___ 16. generates a lot of enthusiasm

___ 17. has a forgiving nature

___ 18. tends to be disorganized

___ 19. worries a lot

___ 20. has an active imagination

___ 21. tends to be quiet

___ 22. is generally trusting

___ 23. tends to be lazy

___ 24. is emotionally stable, not easily upset

___ 25. is inventive

___ 26. has an assertive personality

___ 27. can be cold and aloof

___ 28. perseveres until the task is finished

___ 29. can be moody

___ 30. values artistic, aesthetic experiences

___ 31. is sometimes shy, inhibited

___ 32. is considerate and kind to almost everyone

___ 33. does things efficiently

___ 34. remains calm in tense situations

___ 35. prefers work that is routine

___ 36. is outgoing sociable

___ 37. is sometimes rude to others

___ 38. makes plans and follows through with them

___ 39. gets nervous easily

___ 40. likes to reflect, play with ideas

___ 41. has few artistic interests

___ 42. likes to cooperate with others

___ 43. is easily distracted

___ 44. is sophisticated in art, music, or literature

PERSONAL PROJECTS ANALYSIS®

Part 1: Project Elicitation

We are interested in studying the kinds of activities and concerns that people have over the course of their lives. We call these *personal projects*. All of us have a number of personal projects/activities at any given time that we think about, plan for, carry out and sometimes (though not always) complete.

Some projects may be focussed on achievement (getting my degree) others on the process (enjoying a night out with friends); they may be things we choose to do or things we have to do; they may be things we are working towards or things we are trying to avoid. Projects may be related to any aspect of your daily life, university, work, home, leisure and community, among others. Please think of projects in this broad way.

Here are some examples of projects/activities:

***Pass my psychology course
Cut down on junk food
Play with my cat
Clean my apartment
Try not to make my parents mad
Clarify my religious beliefs
Exercise more often
Go to Europe this summer
Be a better parent
Break off with Bob
Climb the Matterhorn
Ask Susie for a date
Find a part-time job
Canoe in Algonquin Park
Stop putting off studying until the last minute***

We are also interested in finding out what you think and how you feel about these personal projects and activities, how important or stressful they are, and so on.

To start, please take 15 minutes and write down on the following pages as many personal projects and activities you can that you are currently engaged in or considering -- remember these need not be formal projects or even important ones -- we would prefer you to give us more of the everyday kinds of activities or concerns that characterize your life at present. © Brian Little, Ph.D., 1983

[illegible]

Part 2: Project Rating

Please go back to the projects/activities you listed in the elicitation list. You will see that there is a column to the right. Put a check mark beside any project/activity that you associate strong emotions with.

Part 3: Project Rating

Now, go back to the project elicitation list and choose 7 projects from among those which you put check marks beside. Copy these onto the matrix on the next page.

- **If you have more than 7 projects, choose those which *most strongly* relate to your emotions.**
- **If you have less than 7 projects that are strongly associated to emotions, still copy these projects on to the matrix. For the remaining projects, select from the elicitation list, (but do NOT checkmark the right column), up to 7 projects/activities that you feel are typical of your life and copy them on to the matrix on the next page.**
- **If you do not have any projects that are strongly related to emotions, then choose 7 projects typical of your life and copy them on to the matrix on the next page (do NOT checkmark the right column).**

Once you have written in all 7 projects you may begin to rate each one from 0 – 10 on the series of dimensions listed along the top of the page. If you feel a dimension is not relevant to a project, you may put an X in the space instead of a numerical rating, but please try to rate each project on all dimensions wherever possible. Attached to the back of this questionnaire is a list of these dimensions and a more detailed explanation of what each one means. Please detach the list for easy reference and refer to it as needed while you rate your projects.

Personal Project Rating Matrix: How do you feel about what you are doing?

Please take your time in completing the following matrix. Your responses are important to us. Thank-you!

Step 1: Please, please copy your projects from the previous matrices in boxes 1 to 7.

Step 2: Carefully read the descriptions below for each item you have to rate before rating it.

Projects/Activities						
1						
2						
3						
4						
5						
6						
7						

NOTE:

**MATRIX IS
CONTINUED
ON
REVERSE**

- 1. Expressing Emotions:** We all feel emotions as we work towards our goals and undertake daily activities, but some of us express that emotion to those around them much more openly than others. When you are experiencing emotions relating to how this particular project is coming along, to what extent do you allow others to see your emotion? (Use 0 if not at all and 10 if you are an open book.)
- 2. Awareness of own emotions:** To what extent are you aware of your own emotions while engaged in this project? (Use 0 if you are not at all aware of your emotions and 10 if you are fully aware of your emotions.)
- 3. Awareness of others' emotions:** To what extent are you aware of others' emotions while engaged in this project? (Use 0 if you are not at all aware of other's emotions and 10 if you are fully aware of others' emotions; if others are not involved in the project, use N/A.)
- 4. Understanding own emotions:** Emotions communicate things to us and to others. When you feel an emotion as you are working on a project, do you generally understand and rationalize why you are feeling that emotion and what it means to you? (Use 0 if you do not at all understand why you feel the way you do about the project and 10 if you fully understand why you are feeling the way you do.)
- 5. Understanding others' emotions:** Many times, our projects and goals involve others and their feelings and concerns for us. To what extent do you understand others' emotions with respect to your projects? (Use 0 if you do not at all understand why others feel the way they do about your project and 10 if you fully understand why others feel they way they do about your project.)

**CONTINUED -- PLEASE COPY PROJECTS AGAIN, and READ THE DESCRIPTIONS
BELOW BEFORE RATING YOUR PROJECTS -- THANKS!**

pen

Projects/Activities				
1				
2				
3				
4				
5				
6				
7				

6. **Emotions as guide:** People can be aware of their emotions, but not necessarily use them as a guide to influence the way they think about what they do, and to help them make sense of the things they do. In using emotions in this way, we may weigh certain emotions against other emotions and against other sensations and thoughts, and this in turn may guide us in directing our attention about the project. To what extent do you use your emotions in guiding the way you think about and attend to your projects? (Use 0 if you do not at all use your emotions in the way you think about the project and use 10 if you always use your emotions in the way you think about the project.)
7. **Project facilitation:** We all feel emotions as we work towards our goals and undertake daily activities, and sometimes being able to manage our emotions effectively may help our projects along, and help us reach our goals. To what extent can you manage and regulate your own emotions with respect to each project? (Use 0 if you are not at all able to effectively manage and regulate your emotions, and use 10 if you are able to effectively regulate your emotions.)
8. **Project hindrance:** We all feel emotions as we work towards our goals and undertake daily activities. However, sometimes our emotions may become "out of our control" and may prevent us, or slow us down, from achieving certain goals or projects we choose to pursue. To what extent does regulation of your emotions prevent or impede you from achieving your goals and projects? (Use 0 if your emotions do not at all hinder your project pursuit, and use 10 if your emotions prevent or delay you from achieving your goals and projects.)
9. **Emotional management of others:** Many times, our projects and goals involve others and their concerns for us. For example, the project "going bungee-jumping" may increase anxiety in one's parents and this may require us to know how to make those involved less anxious so that we may be able to proceed with these types of projects. In a similar way, to what extent do you feel you have emotional control over others with respect to each of your projects? (Use 0 if you are not able to effectively regulate the emotions of others in general, and 10 if you are able to effectively control and regulate the emotions of others in general; if others are not involved in the project, use N/A.)

Part 4: What do you want to do?

Please look at the projects which you listed in the project elicitation list on page 2. If you could choose only three of the projects, which would you most want to do? Please list these three projects below.

Project 1: _____

Project 2: _____

Project 3: _____

For each project you listed above, please circle your answer in the order you listed them:

Project 1:

To what extent to you want to do *project 1*?

slight 0 1 2 3 4 5 6 7 8 9 10 extreme

To what extent do other people want you to do *project 1*?

slight 0 1 2 3 4 5 6 7 8 9 10 extreme

Project 2:

To what extent to you want to do *project 2*?

slight 0 1 2 3 4 5 6 7 8 9 10 extreme

To what extent do other people want you to do *project 2*?

slight 0 1 2 3 4 5 6 7 8 9 10 extreme

Project 3:

To what extent to you want to do *project 3*?

slight 0 1 2 3 4 5 6 7 8 9 10 extreme

To what extent do other people want you to do *project 3*?

slight 0 1 2 3 4 5 6 7 8 9 10 extreme

Project 1:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page or a sheet of stationery. There is no handwriting or other markings on the page.

Project 1	Difficulty	Control	Importance	Autonomy	Competence	Progress	Anticipated Success	Support	Extrinsic-Intrinsic Motivation	External	Value Congruency	Self-Identity	Time Adequacy	Effort	Commitment	Challenge	Initiation	Stage
------------------	-------------------	----------------	-------------------	-----------------	-------------------	-----------------	----------------------------	----------------	---------------------------------------	-----------------	-------------------------	----------------------	----------------------	---------------	-------------------	------------------	-------------------	--------------

Project 1		Joyful		Sad		Fearful/Scared		Acceptance		Angry		Disinterested/ Bored		Full of Wonder/Awe		Happy/Enjoyment		Hopeful		Serene/Relaxed		Stressed/Tense		Love/Full of love		Ambivalent/ Uncertain		Full of Dread		Guilt/Ashamed		Excited/Full of Energy		Rejection		Ecstatic		Depressed
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Project 2:

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 no margins, text, or other markings on the paper.[illegible][illegible]

Project 3:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slightly textured appearance and is set against a dark background.

Project 3	Difficulty	Control	Importance	Autonomy	Competence	Progress	Anticipated Success	Support	Extrinsic-Intrinsic Motivation	External	Value Congruency	Self-Identity	Time Adequacy	Effort	Commitment	Challenge	Initiation	Stage
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Project 3	Joyful	Sad	Fearful/Scared	Acceptance	Angry	Disinterested/ Bored	Full of Wonder/Awe	Happy/Enjoyment	Hopeful	Serene/Relaxed	Stressed/Tense	Love/Full of love	Ambivalent/ Uncertain	Full of Dread	Guilt/Ashamed	Excited/Full of Energy	Rejection	Ecstatic	Depressed
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STOP

You may find yourself feeling a bit tired. But, the hardest part is over!

The rest of the questionnaires are, for the most part, simply putting ✓ s or ✗ s where applicable.

So, take a break, stretch and then continue....

This questionnaire consists of nine adjectives which may describe the way you feel. Again, using the scale below each item, please indicate how much each adjective describes how you feel right now. Indicate your choice by circling the appropriate number:

Now, please rate your current feelings:

Happy	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Frustrated	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Worried or Anxious	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Joyful	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Pleased	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Angry or Hostile	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Unhappy	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Depressed	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely
Full of Fun	Not at all	0	1	2	3	4	5	6	7	8	9	10	Extremely

Below is a list of the ways you might have felt or behaved. Please indicate how often you have felt this way **during the past week** by rating each item on the following scale:

- 0 = rarely or none of the time (less than 1 day)
 1 = some or little of the time (1 – 2 days)
 2 = occasionally or a moderate amount of time (3 – 4 days)
 3 = most or all of the time (5-7 days)

During the past week:

- _____ 1. I was bothered by things that usually don't bother me.
- _____ 2. I did not feel like eating; my appetite was poor.
- _____ 3. I felt that I could not shake off the blues even with the help from my family or friends.
- _____ 4. I felt that I was just as good as other people.
- _____ 5. I had trouble keeping my mind on what I was doing.
- _____ 6. I felt depressed.
- _____ 7. I felt that everything I did was an effort.
- _____ 8. I felt hopeful about the future.
- _____ 9. I thought my life had been a failure.
- _____ 10. I felt fearful.
- _____ 11. My sleep was restless.
- _____ 12. I was happy.
- _____ 13. I talked less than usual.
- _____ 14. I felt lonely.
- _____ 15. People were unfriendly.
- _____ 16. I enjoyed life.
- _____ 17. I had crying spells.
- _____ 18. I felt sad.
- _____ 19. I felt that people dislike me.
- _____ 20. I could not get "going".

PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate number in the space next to that word. Indicate to what extent you generally feel this way, that is, how you feel on the average. Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely
_____ interested		_____ scared		_____ ashamed
_____ distressed		_____ hostile		_____ inspired
_____ excited		_____ enthusiastic		_____ nervous
_____ upset		_____ proud		_____ determined
_____ strong		_____ irritable		_____ attentive
_____ guilty		_____ alert		_____ jittery
_____ active		_____ afraid		

Below are several scales that we would like you to use to tell us how satisfied you are with your life right now. In the first one, if you are 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 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 it is right now. The other scales work the same way.

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

Completely Dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely Satisfied
Neutral

- B. In general, how satisfied or dissatisfied are you with your **academic life** right now?

Completely Dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely Satisfied
Neutral

- C. In general, how satisfied or dissatisfied are you with your **social life** right now?

Completely Dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely Satisfied
Neutral

- D. In general, how satisfied or dissatisfied are you with your **home life** right now?

Completely Dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely Satisfied
Neutral

- E. In general, how satisfied or dissatisfied are you with your **emotional state** right now?

Completely Dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely Satisfied
Neutral

- F. In general, how satisfied or dissatisfied are you with your **physical health** right now?

Completely Dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely Satisfied
Neutral

Consider the different pursuits, activities, commitments and projects in which you are currently involved. We call this your "personal project system". On the whole, how would you evaluate your current project system on the following dimensions? Please circle the appropriate number.

On the whole, my current activities, commitments, pursuits and projects are:

meaningful (e.g. enjoyable, valuable)	10	9	8	7	6	5	4	3	2	1	0	meaningless (e.g. worthless, unenjoyable)
chaotic (e.g. out of control, not enough time)	0	1	2	3	4	5	6	7	8	9	10	well-organized (e.g. under control, adequate time)
supported (e.g. lots of help and affection from others)	10	9	8	7	6	5	4	3	2	1	0	totally lacking support (e.g. others don't care at all)
very stressful (e.g. lots of hassle and conflict)	0	1	2	3	4	5	6	7	8	9	10	unstressful (e.g. no hassle)
progressing well (e.g. likely to be very successful)	10	9	8	7	6	5	4	3	2	1	0	progressing poorly (e.g. very likely to fail)

Symptom Checklist

Over the past month, have you experienced any of the health problems listed below? If so, please indicate how severe (e.g., how frequently, how troublesome) it is by placing a check mark in the appropriate box on the same line as the problem.

	How much of a problem is this for you?		
	Not at all a problem	Moderately problematic	Very much a problem
Generalized weakness or fatigue			
Weight problems (e.g., overweight, underweight)			
Skin problems (e.g., rashes, acne, severe itching...)			
Headaches			
Vision problems			
Other eye problems (e.g., water, itchy...)			
Hearing problems			
Other ear problems			
Nasal problems (e.g., running, congested, bleeding) and/or sinusitis			
Dental problems			
Other mouth problems			
Throat problems and/or problems swallowing			
Appetite problems (e.g., very small or very large...)			
Problems with digestion (e.g., heartburn)			
Problems with stomach (e.g., nausea, abdominal pain)			
Ulcers (e.g., peptic ulcers...)			
Bowel problems (e.g., diarrhea, constipation...)			
Breathing problems (e.g., shortness of breath, asthma...)			
Problems with cough, phlegm			
Heart problems (e.g., chest pain, racing...)			
Neck or back problems or pain			
Joint problems			
Muscle problems (e.g., soreness, stiffness, cramps...)			
Problems with your arms or hands			
Problems with your legs or feet (e.g., swollen ankles...)			
Numbness or tingling			
Dizziness/faint, shakiness/twitching, cold sweat or chills			
Poor circulation (e.g., cold hands/feet even in hot weather)			
High blood pressure			
Problems with allergies			
Problems with kidneys, urine			
Problems with menstruation			
Genital problems			
Sexual difficulties (e.g., unusually low or absent sex drive...)			
Problems with drugs, alcohol			
Sleep problems (e.g., insomnia)			
Colds, flus, or fevers			
Other problems or illnesses (e.g., cancer, colitis, diabetes, atherosclerosis, cerebrovascular disease...) Please specify:			

We would like you to tell us about:

- **An anxiety-provoking or stressful situation, event, or project which made you feel upset, sad, or worried:**
 - It must involve yourself, and it may or may not involve others
 - It may be something current, recent or in the past
- **Why did it make you feel this way?**
- **How did you react to it?**
- **What was the outcome?**
- **What are your current feelings and/or thoughts about it?**

You may add any other information you would like. Please write a minimum of a paragraph, if possible, though you are encouraged to write as much as you would like. Remember that the information is kept confidential.

[illegible]

Now, we would like you to tell us about:

- An **exciting** or relaxing situation, event, or project which made you feel happy, cheerful or calm:
 - It must involve yourself, and it may or may not involve others
 - It may be something current, recent or in the past
- Why did it make you feel this way?
- How did you react to it?
- What was the outcome?
- What are your current feelings and/or thoughts about it?

You may add any other information you would like. Please write a minimum of a paragraph, if possible, though you are encouraged to write as much as you would like. Remember that the information is kept confidential.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slightly textured appearance and is set against a dark background.

Appendix B**Extra Measures not used in study**

ACS

Choose only one of the possible answers (A or B) by putting an X in the blank beside the statement that is most like you.

1. When I have lost something that is very valuable to me and I can't find it anywhere:
☐ A. I have a hard time concentrating on anything else.
☐ B. I put it out of my mind after a little while
2. When I know I must finish something soon:
☐ A. I have to push myself to get started.
☐ B. I find it easy to get it over with.
3. When I have learned a new and interesting game:
☐ A. I quickly get tired of it and do something else
☐ B. I can really get into it for a long time.
4. If I've worked for weeks on one project and then everything goes completely wrong with the project:
☐ A. It takes me a long time to adjust myself to it.
☐ B. It bothers me for a while, but then I don't think about it anymore.
5. When I don't have anything in particular to do and am getting bored:
☐ A. I have trouble getting up enough energy to do anything at all,
☐ B. I quickly find something to do.
6. When I am working on something that's important to me:
☐ A. I still like to do other things in between working on it.
☐ B. I get into it so much that I can work on it for a long time.
7. When I am in a competition and have lost every time:
☐ A. I can soon put losing out of my mind.
☐ B. The thought that I lost keeps running through my mind.
8. When I am getting ready to tackle a difficult problem:
☐ A. It feels like I am facing a big mountain that I don't think I can climb.
☐ B. I look for a way that the problem can be approached in a suitable manner.
9. When I am watching a really good movie:
☐ A. I get so involved in the film that I don't even think of doing anything else.
☐ B. I often want to get something else to do while I am watching the movie.
10. If I had just bought a new piece of equipment (for example, a tape deck) and it accidentally fell on the floor and was damaged beyond repair:
☐ A. I would manage to get over it quickly,
☐ B. It would take me a long time to get over it.
11. When I have to solve a difficult problem:
☐ A. I usually don't have a problem getting started on it.
☐ B. I have trouble sorting things out in my head so that I can get down to working on the problem.

12. When I have been busy for a long time doing something interesting (for example, reading a book or working on a project):
___ A. I sometimes think about whether what I am doing is really worthwhile
___ B. I usually get so involved in what I am doing that I never think to ask about whether it's worthwhile.
13. If I have to talk to someone about something important and repeatedly, can't find him /her at home:
___ A. I can't stop thinking about it, even while I'm doing something else.
___ B. I easily forget about it until I can see the person again.
14. When I have to make up my mind about what I am going to do when I get some unexpected free time:
___ A. It takes me a long time to decide what I should do during this free time.
___ B. I can usually decide on something to do without having to think it over very much.
15. When I read an article in the newspaper that interests me:
___ A. I usually remain so interested in the article that I read the entire article.
___ B. I still often skip to another article before I have finished the first one.
16. When I've bought a lot of stuff at a store and realize when I get home that I paid too much – but I can't get my money back :
___ A. I can't concentrate on anything else.
___ B. I easily forget about it.
17. When I have work to do at home:
___ A. It is often harder for me to get the work done.
___ B. I usually get it done right away.
18. When I am on vacation and I am having a good time:
___ A. After a while, I really feel like doing something completely different.
___ B. I don't even think about doing anything else until the end of my vacation.
19. When I am told that my work has been completely unsatisfactory:
___ A. I don't let it bother me for too long.
___ B. I feel paralyzed.
20. When I have a lot of important things to do and they must all be done soon:
___ A. I often don't know where to begin.
___ B. I find it easy to make a plan and stick with it.
21. When one of my co-workers brings up an interesting topic for discussion:
___ A. It can easily develop into a long conversation
___ B. I soon lose interest and want to go do something else.
22. If I am stuck in traffic and miss an important appointment:
___ A. At first, it's difficult for me to start doing anything at all.
___ B. I quickly forget about it and go do something else.
23. When there are two things that I really want to do, but can't do both of them:
___ A. I quickly begin one thing and forget about the other thing I couldn't do.
___ B. It's not easy for me to put the thing I couldn't do out of my mind.

24. When I am busy working on an interesting project:
___ A. I need to take frequent breaks and work on other projects.
___ B. I can keep working on the same project for a long time.
25. When something is very important to me, but I can't seem to get it right:
___ A. I gradually lose heart.
___ B. I just forget about it and go do something else.
26. When I have to take care of something important, but which is also unpleasant:
___ A. I do it and get it over with.
___ B. It can take a while before I can bring myself to do it.
27. When I am having an interesting conversation with someone at a party:
___ A. I can talk to him/her the entire evening.
___ B. I prefer to go do something else after a while.
28. When something really gets me down:
___ A. I have trouble doing anything at all.
___ B. I find it easy to distract myself by doing other things.
29. When I am facing a big project that has to be done:
___ A. I often spend too long thinking about where I should begin.
___ B. I don't have any problems getting started.
30. When it turns out that I am much better at a game than the other players:
___ A. I usually feel like doing something else.
___ B. I really like to keep playing.
31. When several things go wrong on the same day:
___ A. I usually don't know how to deal with it.
___ B. I just keep on going as though nothing had happened.
32. When I have a boring assignment:
___ A. I usually don't have any problem getting through it.
___ B. I sometimes just can't get moving on it.
33. When I read something I find interesting:
___ A. I sometimes still want to put the article down and do something else.
___ B. I will sit and read the article for a long time.
34. When I have put all my effort into doing a really good job on something and it doesn't work out:
___ A. I don't have much difficulty starting something else.
___ B. I have trouble doing anything else at all.
35. When I have an obligation to do something that is boring and uninteresting:
___ A. I do it and get it over with.
___ B. It usually takes a while before I get around to doing it.
36. When I am trying to learn something new that I want to learn:
___ A. I'll keep at it for a long time.
___ B. I often feel like I need to take a break and go do something else for a while.

Experiences in Close Relationships Inventory

Brennan, Clark, & Shaver (in press)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree		Neutral				Agree
Strongly		Mixed				Strongly

- ___ 1. I prefer not to show a partner how I feel deep down.
- ___ 2. I worry about being abandoned.
- ___ 3. I am very comfortable being close to romantic partners.
- ___ 4. I worry a lot about my relationships.
- ___ 5. Just when my partner starts to get close to me I find myself pulling away.
- ___ 6. I worry that romantic partners won't care about me as much as I care about them.
- ___ 7. I get uncomfortable when a romantic partner wants to be very close.
- ___ 8. I worry a fair amount about losing my partner.
- ___ 9. I don't feel comfortable opening up to romantic partners.
- ___ 10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
- ___ 11. I want to get close to my partner, but I keep pulling back.
- ___ 12. I often want to merge completely with romantic partners, and this sometimes scares them away.
- ___ 13. I am nervous when partners get too close to me.
- ___ 14. I worry about being alone.
- ___ 15. I feel comfortable sharing my private thoughts and feelings with my partner.
- ___ 16. My desire to be very close sometimes scares people away.
- ___ 17. I try to avoid getting too close to my partner.
- ___ 18. I need a lot of reassurance that I am loved by my partner.
- ___ 19. I find it relatively easy to get close to my partner.
- ___ 20. Sometimes I feel that I force my partners to show more feeling, more commitment.
- ___ 21. I find it difficult to allow myself to depend on romantic partners.
- ___ 22. I do not often worry about being abandoned.
- ___ 23. I prefer not to be too close to romantic partners.
- ___ 24. If I can't get my partner to show interest in me, I get upset or angry.
- ___ 25. I tell my partner just about everything.
- ___ 26. I find that my partner(s) don't want to get as close as I would like.
- ___ 27. I usually discuss my problems and concerns with my partner.
- ___ 28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- ___ 29. I feel comfortable depending on romantic partners.
- ___ 30. I get frustrated when my partner is not around as much as I would like.
- ___ 31. I don't mind asking romantic partners for comfort, advice, or help.
- ___ 32. I get frustrated if romantic partners are not available when I need them.
- ___ 33. It helps to turn to my romantic partner in times of need.
- ___ 34. When romantic partners disapprove of me, I feel really bad about myself.
- ___ 35. I turn to my partner for many things, including comfort and reassurance.
- ___ 36. I resent it when my partner spends time away from me.

SM Scale

Please consider whether each of the following statements accurately describes you. In the blank for provided before each statement, please put a T (for true) if it does accurately describe you, or an F (for false), if it does not.

- ___ 1. I find it hard to imitate the behavior of other people
- ___ 2. My behavior is usually an expression of my true inner feelings, attitudes and beliefs.
- ___ 3. At parties and social gatherings, I do not attempt to do or say things that others will like.
- ___ 4. I can only argue for ideas which I already believe.
- ___ 5. I can make impromptu speeches even on topics about which I have almost no information.
- ___ 6. I guess I put on a show to impress or entertain people.
- ___ 7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.
- ___ 8. I would probably make a good actor.
- ___ 9. I rarely seek advice of my friends to choose movies, books, or music.
- ___ 10. I sometimes appear to others to be experiencing deeper emotions than I actually am.
- ___ 11. I laugh more when I watch a comedy with others than when alone.
- ___ 12. In a group of people I am rarely the center of attention.
- ___ 13. In different situations and with different people, I often act like very different persons.
- ___ 14. I am not particularly good at making other people like me.
- ___ 15. Even if I am not enjoying myself, I often pretend to be having a good time.
- ___ 16. I'm not always the person I appear to be.
- ___ 17. I would not change my opinions (the way I do things) in order to please someone else or win their favour.
- ___ 18. I have considered being an entertainer.
- ___ 19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.
- ___ 20. I have never been good at games like charades or improvisational acting.
- ___ 21. I have trouble changing my behavior to suit different people and different situations.
- ___ 22. At a party I let others keep the jokes and stories going.
- ___ 23. I feel a bit awkward in company and do not show up quite so well as I should.
- ___ 24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
- ___ 25. I may deceive people by being friendly when I really dislike them.

Appendix C

PPA Categorization
PPA Subcategorization

Categories of Personal Projects

(Revised May 1994)

Personal projects can be sorted into content categories by considering the general types of activities involved in the elicited projects. A categorization scheme facilitates the examination of common academic pursuits more stressful than occupational tasks, or do leisure activities ameliorate the potentially negative effects of stressful projects?

Although categorization is an attempt to partition activities into specialized domains or core elements, some overlap of categories may exist with certain projects. When categorizing projects, coders should be aware that many activities are multifaceted, e.g. Sally's involvement in intramural basketball may be mainly for fun (LEISURE) but she knows that it will also help her to lose five pounds (HEALTH/BODY). Classification should be based on the primary focus of the activity, e.g. Sally's basketball should be categorized as a LEISURE activity.

1. OCCUPATIONAL/ACADEMIC

This category includes job-related courses (e.g. learn to type, learn French) or tasks on the job (e.g. finish report) and school-related projects (e.g. assignments, essay, exams, readings). The subcategories are:

1. Academic projects
2. Job-related projects
3. Professional organizations

NOTE: This category would not include recreational reading (LEISURE) or a course on learning to play bridge (LEISURE).

2. HEALTH/BODY

This category includes activities relating to appearance, health or fitness (e.g. lose or gain weight, work out, jog, sleep, play a sport with a fitness goal clearly stated and not for recreational purposes). The subcategories are:

1. Appearance
2. Health

INTERPERSONAL

This category includes projects dealing with others on a personal level. The subcategories are:

1. Family (projects involving parents, spouse, grandparents, etc. as focus either individually or in a group, e.g. visiting my grandmother, taking my mother to do her grocery shopping; projects involving family plans, e.g. plan wedding, get married, have children, organize kids for school).
2. Interpersonal intimate (projects involving intimate others such as spouse, boy/girlfriend or close friends e.g. getting over Mary, sexual activities not boy-watching (LEISURE) or girls (INTERPERSONAL secondary)).
3. Interpersonal secondary (assume interpersonal projects are secondary unless family members or intimate friends are specified; co-worker, etc., e.g. getting along better with my boss, entertaining, going out with the gang not partying (LEISURE)).
4. Community/supportive projects (projects involving activities related to groups of people other than family or friends, e.g. soccer coach, volunteer work, scouts/girl guides, helping people).
5. Meta-projects (e.g. getting my social life together).

INTRAPERSONAL/VALUE CONCERNS

This category includes projects dealing with outlook and attitudes relating to the self. The subcategories are:

1. Spiritual or philosophical projects (relating to the clarification or expression of religious beliefs, philosophical questioning)
2. Self-improvement projects (psychological as opposed to physical changes).
3. Meta-projects (e.g. maintaining some sense of order in my life, increase the scope of my knowledge, my ideas and expressions, get life in order).
4. Coping/adjustment projects (e.g. adjust to my new living situation; get over the abuse I suffered as a child).
5. Leisure withdrawal projects (e.g. watch less T.V., go out less, shop less, etc. not drink less (HEALTH/BODY)).
6. Transition projects (e.g. plan retirement, career switch).

LEISURE

This category includes recreational activities that are done alone or with others. The subcategories are:

1. Entertainment (e.g. television, movies, museums, theatre, rock or classical concerts).
2. Parties/Dances (e.g. social activities, entertaining).
3. Hobbies (e.g. stamp and coin collecting)
4. Consumer (e.g. pleasure shopping).
5. Drinking/Drugs e.g. (getting high not stop taking drugs (HEALTH/BODY)).
6. Pleasure projects (e.g. reading and writing).
7. Vacation projects (planning, packing, organization).
8. Recreational activities (may involve knitting or building projects; interest courses such as a quilting course; favourite pastimes such as tinkering with a car; learning or playing a game such as bridge, chess, Airborne).
9. Sports (sports played for recreational purposes and not specifically identified for health or fitness).
10. Enjoying you pet (e.g. playing with my cat not taking the dog for a walk (ADMINISTRATIVE/MAINTENANCE)).
11. Estate (e.g. landscape, fixing the house, gardening).

ADMINISTRATIVE/MAINTENANCE

This category includes projects relating to organization and administration.

The subcategories include:

1. Activities related to a) finding a place to live, selling or subletting b) obtaining employment (e.g. registering at the Employment Centre, filling out job applications not taking a French course to improve employability (OCCUPATIONAL/ACADEMIC).
2. Household/general projects (e.g. repairs, renovations, house-cleaning, shopping for necessities such as groceries).
3. Car maintenance (e.g. taking the car in for lub and oil change, changing the filter not buying a new car (LEISURE pleasure shopping)).
4. Paying bills, arranging finances, loans, letters
5. Activities related to getting registered for a course or program (e.g. Driver's licence, getting a bus pass, arranging a car pool, obtaining bus schedules).
6. Tasks involving your pet (e.g. taking your god for a walk, taking my pet to the vet for distemper shots not having fun with Spot (LEISURE)).
7. Meta-Projects (e.g. managing properties, organize the kids).

OTHER

This category includes projects that cannot be classified because of inadequate information. Before using this category an attempt should be made to gain more information in order to correctly classify the project. The project statement on the original elicitation list and the dimension rating scores for that project may be helpful sources. For example, if a project is listed only as "Mary", reference to the original elicitation list may show that the project was phrased as "breaking up with Mary" in which case the project could be correctly classified as INTERPERSONAL intimate. With a project listed as "Christmas shopping", an ambiguity for classification might arise between LEISURE pleasure shopping and ADMINISTRATIVE/MAINTENANCE. However, if the score on the *Enjoyment* column for that project was high, the project should be classified as LEISURE; conversely if that score was low, the project should be classified as ADMINISTRATIVE/MAINTENANCE.

OTES:

1) Revisions were made because some projects were difficult to code with previous subcategories yet appeared in sufficient number to warrant a new subcategory. Two new subcategories were formed under INTERPERSONAL/VALUE CONCERNS; Coping/adjustment projects (4.4) and Leisure withdrawal projects (4.5). Both of these had previously been subsumed under Self-improvement projects (4.2)

2) Other revisions involved providing more examples for subcategories in order to increase coding accuracy.

3) If computer coding combines both major categories and subcategories within one variable (e.g. 3:1 for INTERPERSONAL: Family) then to distinguish between 5.1 (LEISURE: Entertainment and 5.10 (LEISURE: Enjoy your pet), the latter is entered as 5.10

5.0

4. INTRAPERSONAL PROJECTS - REVISED

This category includes projects dealing with outlook and attitudes relating to the self. The subcategories are:

1. Spiritual or philosophical projects

- **Relating to the clarification or expression of religious beliefs, and philosophical questioning.**

2. Self-improvement projects

- **Psychological as opposed to physical changes; includes those self-improvement projects relating to others, e.g. stop trying to prove myself to others, be more understanding of Jen.**

3. Meta-projects

- **E.g. maintaining some sense of order in my life, increase the scope of my knowledge, my ideas and expressions, get life in order.**

4. Coping/adjustment (transition) projects

- **E.g. adjust to my new living situation, get over the abuse I suffered as a child, stop worrying so much about finances, plan retirement/career switch; i.e. must include element of planning or decision making.**

Self-regulatory

- **Includes leisure withdrawal, e.g. watch less T.V., go out less; includes habit-related projects, e.g. stop procrastinating, etc., but NOT drink less, stop smoking (HEALTH/BODY).**

Self-exploratory projects

- **E.g. Think seriously about whether I want to pursue relationship or be more career-minded; write in journal/diary; write for personal reasons, NOT writing for leisure/academic purposes (LEISURE or OCCUPATIONAL/ACADEMIC).**

Appendix D**Advertisements**

Psychology 49.101 or 49.102

Experiment Title: Emotions, Personal Projects and Well-Being

Experimenter's Name and Room#: Limor Zomer, Room A405 Loeb

Experimenter's Phone #: (613) 520-2600 ext. 2697

Location of Experiment: A405 Loeb to pick up take home packages

Experiment Number:

Faculty Advisor: Dr. Brian R. Little

Brief Description

The purpose of this study is to examine the role of emotions within the context of individuals' environments and their impact on well-being. You will be asked about how you feel about what you are doing, your projects/activities. We will be asking you to complete a set of questionnaires at home on your free time. The questionnaires in this take-home package will take approximately one and a half to two hours.

Participants will receive 2 credit(s) for this experiment.

You must keep a record of: The experimenter's name
Title of the experiment
Location and Time

It is your responsibility to know where and when the experiment is held.

Sign up sheets for this experiment are underneath. Please provide the information requested.

Are YOU Interested in EMOTIONS?

WE ARE LOOKING FOR PARTICIPANTS

- WHAT?** A study on Emotions, Personal Projects and Well-Being
- WHY?** For your own interest ... also, a chance to win \$100.00!
- DETAILS?** Take-home questionnaires about your projects and goals and how you feel about them
- WHERE?** A405 Loeb Building, The Social Ecology Laboratory,
Department of Psychology, Carleton University
- WHEN?** Drop by Mon.-Thurs., 3 - 6 p.m. to pick up a package, or
call us at 520-2600 ext. 2697 to arrange a time

WIN \$100.00!!! WIN \$100.00!!! WIN \$100.00!!!

Contact Info: Take a copy

Appendix E

Informed Consent Debriefing

Appendix B Informed Consent

An informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent has to provide sufficient information such that you have the opportunity to determine whether you wish to participate in the study. Please read the following carefully and sign below to indicate that you understand your rights as a voluntary participant in this research.

Research Title: Emotions, Personal Projects and Well-Being

Purpose and Task Requirements: The purpose of this study is to examine the role of emotions within the context of individuals' environments and their impact on well-being. We will be asking you to complete the questionnaires in the attached take-home package which will take approximately one and a half to two hours.

Potential Risk/Discomfort: There are no potential physical or psychological risks in this study. However, please be aware that some of the measures in this package may ask questions of a personal and potentially sensitive nature and that you may choose not to answer these questions.

Anonymity/Confidentiality: The data collected in this study are kept anonymous and confidential. The consent forms are kept separate from your responses and all packages are assigned a coded identification number so that your name will not be associated with the data.

Right to Withdraw: At any point during the study you have the right to not answer any questions or to withdraw with no penalty whatsoever.

Research Personnel: The following people are involved in this research project and may be contacted at any time:

- Limor Zomer (Principal Investigator, (613) 520-2600 ext. 2697)
- Dr. B. Little (Faculty Investigator, (613) 520-2600 ext. 1449)
- Dr. N. Chambers (Research Supervisor, (613) 520-2600 ext. 1449)

Should you have any ethical concerns about this study then please contact Dr. M. Sénéchal (Chair, Dept. of Psychology Ethics Committee, 520-2600, ext. 1155). Should you have other concerns about this study then please contact Dr. K. Matheson (Chair, Dept. of Psychology, 520-2600, ext. 2648).

Signatures: I have read the above description of the study concerning emotions, personal projects and well-being and understand the conditions of my participation. The data in the study may be used in research publications and for student theses. My signature indicates that I agree to participate in the study, and this in no way constitutes a waiver of my rights.

Date: _____, 2001

Participant's signature: _____

DEBRIEFING

Carleton University Social Ecology Laboratory Psychology Department

Study: Emotions, Personal Projects and Well-Being

Background and Purpose of Study:

In this study we are examining the role of emotions in the daily projects of individuals' lives. Much research in psychology has looked at the relationship between emotions and well-being. Of particular interest to us is to explore the different ways in which individuals handle their emotions and their everyday projects.

Results:

The results of this study will be available at Carleton University in Loeb A405 in August 2001, if you are interested in the outcome. Thank you very much for your participation.

Resources:

It is possible that even after returning this questionnaire package, you may feel that it has raised issues of a personal nature that you would like to discuss with a qualified professional. Please feel free to contact Student Life Services (Carleton University Unicentre room 501; 520-6600) or call the Ottawa Distress Centre at (613) 238-3111 at any time for support or an appropriate referral. For any health concerns, you can call Carleton University Health Services at (613) 520-6674.

Questions and Comments:

If you have any questions or comments about this research, please feel free to contact Limor Zomer, the principal investigation (520-2600 ext. 2697) or Neil Chambers, the research supervisor (520-2600 ext. 1449). Should you have any ethical concerns about this study then please contact Dr. Monique Senechal, Chair, Dept. of Psychology Ethics Committee, 520-2600, ext. 1115). Should you have other concerns about this study then please contact Dr. K. Matheson, Chair, Dept. of Psychology, 520-2600, ext. 2648.

Appendix F

Native Language Differences

Table F1: T-tests on Native Language for Factors

**Table F2: T-tests on Native Language Differences and PPA
Cognitive Dimensions**

**Table F3: T-tests on Native Language Differences and PPA
Emotions Dimensions**

**Table F4: T-tests on Native Language Differences and PPA EI
Skills Dimensions**

**Table F5: T-tests on Native Language Differences and Trait EI
Measures**

Trait EI and the Big Five

**Table F6: Pearson Product Moment Correlations Between
Trait EI and the Big Five Personality Traits**

Native Language and Factors

All factors were examined for native language differences. No differences emerged with respect to any of the PPA factors, the Trait EI factor, and the well-being factor (see Table 4)ⁱ. Therefore, none of the participants were removed from the study on the basis of native language.

Table F1

T-Tests on Native Language for Factors

Variable	English		Other		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Trait EI	151.83	34.24	144.56	34.66	t(110)=71.00, n.s.
Personal Meaning	45.71	6.69	43.36	8.37	t(101)=1.54, n.s.
Support/Efficacy	19.77	4.36	21.11	4.13	t(103)=-1.50, n.s.
Obstacles	25.94	3.96	25.25	4.92	t(109)=0.79, n.s.
PPA Negative Affect	26.10	13.91	26.10	12.26	t(86)=1.19, n.s.
PPA Positive Affect	35.01	12.08	36.89	11.32	t(94)=-0.70, n.s.
EI Lower level skills (PPA)	27.03	5.55	25.88	6.29	t(107)=0.98, n.s.
EI Higher level skills (PPA)	13.18	4.47	13.07	5.04	t(95)=0.11, n.s.
Psychological well-being	-1.70	28.92	-2.70	25.48	t(111)=0.18, n.s.

ⁱ The only native language difference to emerge was for the Monitoring factor which in any case was not of interest in the present study [t(111)=2.63, p<.01]. Those whose native language was English reported higher scores compared to those whose native language was not English (M=54.69, SD=8.45, and M=48.04, SD=9.55 respectively).

Table F2

T-Tests on Native Language Differences and PPA Cognitive Dimensions

Variable	English		Other		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Difficulty	6.15	1.82	5.86	2.21	t(111)=.71, n.s.
Control	7.20	1.52	6.50	1.54	t(110)=2.26, p<.05
Importance	8.34	1.27	7.99	1.66	t(111)=1.22, n.s.
Autonomy	7.70	1.86	7.37	2.04	t(105)=.82, n.s.
Competence	7.71	1.54	7.34	1.73	t(109)=1.13, n.s.
Progress	5.74	1.74	6.21	1.63	t(108)=-1.37, n.s.
Anticipated Success	7.29	1.42	7.41	1.35	t(111)=.41, n.s.
Support	6.35	2.41	6.96	1.83	t(111)=-1.37, n.s.
Intrinsically Motivated	7.40	2.00	7.51	1.77	t(110)=-.29, n.s.
External	4.70	2.41	5.27	2.37	t(109)=-1.19, n.s.
Value congruency	8.18	1.50	7.81	1.67	t(106)=1.14, n.s.
Self-Identity	7.34	1.70	7.40	1.48	t(108)=-.19, n.s.
Time Adequacy	6.13	1.99	6.37	1.63	t(110)=-.65, n.s.
Effort	6.51	1.73	6.88	1.89	t(111)= -1.01, n.s.
Commitment	7.64	1.51	7.29	1.79	t(111)=1.09, n.s.
Challenge	7.34	1.56	6.49	1.75	t(111)=2.60, p<.05
Initiation	7.70	1.79	7.43	1.47	t(108)=.78, n.s.
Stage	5.57	1.41	5.95	1.67	t(104)=-1.23, n.s.

Table F3**T-Tests on Native Language Differences and PPA Emotions Dimensions**

Variable	English		Other		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Joyful	5.78	2.51	6.85	1.82	t(103)=-2.49, p<.05
Sad	3.00	2.29	2.81	2.17	t(102)=.40, n.s.
Fearful	3.74	2.29	3.35	2.38	t(100)=.79, n.s.
Acceptance	5.71	2.50	6.82	2.29	t(100)=-2.15, p<.05
Angry	2.50	2.18	2.22	2.17	t(97)=.60, n.s.
Disinterested	2.71	2.15	2.57	2.18	t(101)=.31, n.s.
Full of Wonder	4.13	2.65	4.84	2.87	t(101)=-1.24, n.s.
Happy	5.92	2.28	6.27	2.24	t(103)=-.76, n.s.
Hopeful	7.26	1.86	7.29	1.76	t(103)=-.06, n.s.
Serene	4.59	2.23	5.27	2.38	t(100)=-1.43, n.s.
Stress	5.37	1.94	5.07	2.22	t(101)=.71, n.s.
Love	4.72	2.73	4.69	2.70	t(101)=0.05, n.s.
Ambivalent	4.21	2.26	4.38	2.45	t(100)=-.35, n.s.
Full of Dread	3.24	2.30	2.51	1.94	t(96)=1.52, n.s.
Guilty	2.71	2.45	2.03	2.03	t(97)=1.35, n.s.
Excitement	4.89	2.13	5.57	2.46	t(101)=-1.44, n.s.
Rejection	2.54	2.43	1.88	1.71	t(95)=1.36, n.s.
Ecstatic	3.92	2.68	4.42	2.72	t(98)=-.87, n.s.
Depressed	2.82	2.58	2.44	2.16	t(98)=.72, n.s.

Table F4**T-Tests on Native Language Differences and PPA EI Skills Dimensions**

Variable	English		Other		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Expression	5.63	2.09	6.16	1.83	t(111)=-1.32, n.s.
Own Awareness	7.76	1.81	7.58	2.20	t(111)=.44, n.s.
Other Awareness	6.45	2.29	5.66	2.63	t(108)=1.61, n.s.
Own Understanding	7.41	1.94	6.86	2.45	t(111)=1.32, n.s.
Other Understanding	6.80	2.21	6.36	2.62	t(109)=.92, n.s.
Emotions as Guide	6.70	1.84	6.83	1.63	t(111)=-.36, n.s.
Project Facilitation	6.24	1.90	6.61	2.00	t(110)=-.93, n.s.
Project Hindrance	4.57	2.01	4.34	2.44	t(100)=.52, n.s.
Emotional Regulation	5.53	2.37	5.45	2.28	t(105)=.18, n.s.

Table F5

T-Tests on Native Language and Trait EI Measures

Variable	English		Other		T-tests
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
TAS	62.30	11.32	65.11	13.29	$t(111)=-1.17$, n.s.
MAS- monitoring	19.42	5.19	18.03	4.94	$t(111)= 1.36$, n.s.
MAS – labelling	21.05	4.79	21.70	4.45	$t(111)=-.69$, n.s.
Schutte et al. EI	122.70	15.52	122.38	13.75	$t(111)=.11$, n.s.
Questionnaire					
TMMS – repair	20.41	4.78	20.24	4.21	$t(111)=.18$, n.s.
TMMS – attention	50.18	7.69	45.35	9.14	$t(111)=2.95$, $p<.01$
TMMS – clarity	38.01	7.56	37.87	7.74	$t(111)=.10$, n.s.
NEIS	21.76	5.99	20.04	5.20	$t(111)=1.50$, n.s.

Table F6

**Pearson Product Moment Correlations Between Trait Emotional Intelligence and
The Big Five Personality Traits**

	Trait EI
Neuroticism	-0.50**
Extraversion	0.46**
Openness	0.32**
Agreeableness	0.33**
Conscientiousness	0.30**

Note. N=115. All tests of significance are two-tailed.

****p<.01**