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**A NOMINATION APPROACH
TO THE STUDY OF WISDOM IN OLD AGE**

Tracy Lynn Lyster

A Thesis
in
The Department
of
Psychology

Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montreal, Quebec, Canada

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ABSTRACT

A Nomination Approach to the Study of Wisdom in Old Age

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The purpose of this study was to contribute to the development of the wisdom construct in psychology by relating wisdom to standard measures of functioning. Six hypotheses which concerned the cognitive and emotional development of wise people, their personality structure, life experiences, control beliefs and gender identity were tested by conducting structured interviews with 78 community dwelling men and women, aged 55 and over, who had been nominated for their wisdom by their peers. The nominators and 22 participants who nominated themselves as wise functioned as comparison groups.

Measures of personality, intelligence, emotional awareness, paradigm beliefs, control beliefs, coping style, and life satisfaction were collected. Three questions from a videotaped structured qualitative interview were rated in terms of 5 theoretical criteria (Smith & Baltes, 1990): 1) factual knowledge; 2) procedural knowledge; 3) life-span contextualism; 4) relativism; 5) awareness of uncertainty. Two additional criteria, 6) generativity and 7) affect-cognitive integration were included to assess the character of wise people. Statistical analyses revealed that people with higher wisdom scores tended to be better educated, had higher emotional complexity of the self, were less absolute and more dialectical in terms of their paradigm beliefs, tended to be more intelligent and more open, coped with sadness with more reflection and less avoidance, endorsed fewer internal control beliefs, and were less dissatisfied with their lives than participants with lower wisdom scores. Participants nominated by others received higher wisdom ratings than those who were self referred. There was no

gender difference in wisdom scores after controlling for education. Further qualitative analyses examined the depth and breadth of the wise perspective and presented a model of wisdom as developing through a dynamic interplay between openness and critical reflection.

It was concluded that peer nominations can be used to increase the probability of identifying wise people and that wisdom appears to involve a combination of developmental and individual difference variables. Although there was a trend for lower wisdom scores with age, some of the oldest participants were among the top respondents lending support to the view that wisdom can serve as a prototype of intellectual competency in old age.

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Wisdom is as complex and ineffable as a psychological construct can be. Over the past decade, the construct has been extensively studied in the life-span developmental psychology literature. Interest in wisdom has emerged from a recognition that understanding the realities of old age must not only include a consideration of age associated cognitive losses but also a consideration of growth and potential development (Baltes, 1993). Thus the construct allows the challenge of unqualified assertions of general intellectual decline with age and offers an opportunity to examine progressive late life development. Discussion of wisdom encourages examination of an expanded framework of intelligence which emphasizes contextualism and the pragmatics of life.

Most of the wisdom literature has been speculative and theoretical lacking in empirical verification. The purpose of the present study is to contribute to the development of the wisdom construct in psychology by relating wisdom to specific intellectual abilities and personality variables. The goals of the present study will be: 1) to develop a set of criteria to assess wisdom; 2) to assess wisdom in a select sample of people nominated as wise; 3) and to utilize an empirical approach capable of incorporating the more elusive dimensions of wisdom, such as the relationship between affect, cognition and motivation .

Recent developments in the cognitive aging literature present a dynamic and differentiated model of intellectual development across the life-span which has enhanced the plausibility of wisdom existing in old age. Nonetheless, evidence that aging is associated with behavioral slowing (Salthouse, 1985) and decline in some areas such as fluid abilities, effortful processing, and explicit memory (Schaie, 1989) are well documented. In general, most cognitive abilities which demonstrate age associated decline involve the speed and accuracy of elemental processes of sensory input, visual and motor memory, and processes of discrimination, comparison, and categorization, or what Baltes (1993) refers to as "cognitive mechanics". These abilities

are frequently modifiable and display a wide range of intraindividual functioning (Baltes & Schaie, 1976). For example, memory training studies suggest that observed ability declines are to some extent due to disuse and are consequently reversible, at least in part, for many older people (Willis & Schaie, 1986). Kliegl and Baltes (1987) similarly demonstrated the sizable reserve capacity of old people using cognitive training. However, using a testing-the-limits paradigm pronounced differences in the reserve capacity of old people relative to young people has been clearly demonstrated (Baltes & Kliegl, 1992).

Age-related decline in cognitive mechanics stands in sharp contrast to how older people perform on cognitive processes and abilities which are embedded in a context of cultural meaning, or what Baltes (1993) refers to as "cognitive pragmatics". For example, there is growing evidence that older adults can excel in matters of social and practical intelligence and in the integration of affect into cognitive systems (Blanchard-Fields, 1986; Labouvie-Vief, 1981, 1986).

Understanding age-associated cognitive change is complicated by cohort or generational effects, gender differences, and individual differences (Schaie, 1994). Examination of individual differences has revealed variables which are associated with maintenance of functioning well into advanced old age such as the absence of cardiovascular and other chronic diseases, favourable environmental conditions and involvement in complex and stimulating intellectual activities (Schaie, 1978). The implication of these findings is that given a healthy individual (i.e., no brain-related disease) with opportunities for self-development and self-directed learning, intellectual performance in certain areas in old age will be enhanced (Dittmann-Kohli, 1981). This research is consistent with anecdotal evidence of continued development in late life from careers of artists and experts in their fields (Arnheim, 1986; Baltes & Kliegl, 1986). In short, the research climate has become primed for the examination of the construct of wisdom as a prototype of intellectual competence in old age.

Outline of Introduction

This introduction will summarize and critically review the modern psychological approaches to investigating wisdom in three main sections. The first section will be a critical review of recent empirical approaches to the investigation of wisdom. Essentially, the literature consists of folk approaches which attempt to define wisdom as it is conceptualized in the population, and performance approaches which seek to quantify wisdom elicited by complex interpersonal and social dilemmas. The second section will discuss several issues from the literature and will present the hypotheses to be tested in the present study in an attempt to address limitations of the two empirical paradigms. Some of the most controversial and important issues in this literature include: What is the association between wisdom and old age? Is wisdom an individual difference or a developmental variable? Is wisdom domain specific expertise or a pervasive characteristic of the individual? And finally, what is the relation between successful aging and wisdom? The final section will present a rationale for an integrated quantitative and qualitative methodological approach to the investigation of wisdom.

MODERN PSYCHOLOGICAL APPROACHES

Lay theories of wisdom

The first empirical approach to study wisdom focused on three questions. First, is wisdom a distinct construct or does it overlap with existing constructs such as intelligence or creativity? Second, do conceptions of wisdom differ across generations, occupations, or historical periods? In other words, is wisdom a universal construct or is it merely a reflection of the cultural idiosyncrasies of those who describe it? Third, do implicit theories of wisdom correspond to plausible psychological competencies? A number of researchers have approached these questions by eliciting lay people's assumptions regarding the attributes of wise people (Clayton & Birren, 1980; Holliday & Chandler, 1986; Sternberg, 1985).

The work of Clayton and Birren (1980) represents the first attempt to address these questions. Three age groups, (young, middle-aged, elderly) were given 15 adjectives which were potentially related to wisdom and were asked to rate all possible adjective pairs on similarity. Multidimensional scaling revealed that the ratings clustered into three dimensions which were labeled affective (peaceful, understanding, empathetic, gentle); reflective (introspective and intuitive); and cognitive (intelligent, pragmatic, observant). Interestingly, the young and middle-aged groups placed the stimulus word *aged* closer to the stimulus word *wise* than did the elderly group which some authors have interpreted to mean that wisdom decreases with age (e.g., Meacham, 1990). An alternative interpretation is that the results may reflect a more stereotypical view of old age held by the younger groups. The greatest difference between the groups was that the older group conceptualized wisdom as more differentiated.

A limitation of Clayton & Birren's (1980) methodology is that it may have inadequately described the construct's domain. Their 15 adjectives had been selected on subjective grounds and may not have captured all the relevant dimensions of the construct. Brent & Watson (1980) avoided the problem of a restricted set of adjectives by asking people to generate all the characteristics they could think of which related to a wise person they knew. However, given that there was no basis for judging the adequacy or representativeness of the characteristics generated, they too may not have exhausted the construct's domain. Holliday and Chandler (1986) improved on the methodology by using Roschian categorization, a methodology which involves a process of generating descriptors of related categories followed by a distillation of the data into nonredundant sets of the most frequently cited descriptors which define each category. One group of participants was asked to generate lists of prototypical descriptors of wise people. Phase two of the study consisted of having three age groups (young, middle-aged, elderly) rate the prototypicality of the descriptors which

had been embedded within a list of characteristics relevant to related competency constructs including intelligent, spiritual, shrewd, and perceptive. Using principle components analysis five underlying dimensions of wisdom were identified: Exceptional understanding, judgment and communication skills, general competence, interpersonal skills, and social unobtrusiveness. The results revealed that across the three generations, participants produced a multidimensional and consistent prototypical conception of wise people. In terms of distinctiveness, while certain core descriptors including verbal skills, cognitive abilities, and perceptual abilities were associated with several of the competency categories, the dimensions of judgement and communication skills, and spirituality, that is, concerns with non-materialistic values, were more specifically related to wisdom. In short, while there was evidence of convergence among the attributes associated with the competency categories, compared to the other competency categories, the characterization of wisdom reflected a complex integration of basic psychological abilities within a socially oriented framework. The use of this methodology allowed Holliday & Chandler (1986) to report a broader and more detailed description of the wisdom prototype than previous research.

Further evidence for the distinctiveness of the wisdom construct came from a series of experiments conducted by Sternberg (1985) which examined implicit personality theories underlying notions of wisdom, creativity, and intelligence. In the first experiment, business, art, and philosophy professors rated a number of behaviors with respect to their ideal conceptions of wise, intelligent and creative. Although there was considerable overlap, notions of wisdom did differ across fields of specialization. For example, art professors emphasized insight, knowing how to balance logic and instinct, knowing how to transform creativity into concepts, and sensitivity. In contrast, business professors emphasized maturity of judgment, understanding the limitations of one's actions and recommendations, knowing what one does and does not know, knowing

when not to act as well as when to act, and good decision making. Sternberg's results suggest that implicit theories of wisdom may be influenced by the group memberships of the participants and therefore may reflect their particular values and interests.

In Sternberg's second experiment, college students sorted the top rated wise, creative, and intelligent attributes into as many or as few piles as they wished. Multidimensional scaling of the data revealed six basic elements in the students' conceptions of wisdom which accounted for 87 percent of the variance of the data: Reasoning ability, sagacity, learning from ideas and environment, judgement, expeditious use of information, and perspicacity. Wisdom was most distinguished from intelligence along the dimension of sagacity which included the items: displaying concern for others; considers advice; understands people through dealing with a variety of people; feels he or she can always learn from other people; knows self best; is thoughtful; is fair; is a good listener; is not afraid to admit to making a mistake; will correct the mistake, learn, and go on; listens to all sides of an issue.

Sternberg's third experiment tested the relationships of measures of intelligence and social judgement to the model. Thirty participants first rated themselves on attributes prototypical of wise, intelligent and creative. Each participant's self ratings were then correlated with the pattern of ratings associated with the wise, intelligent and creative prototypes derived from the first experiment. Higher correlations indicated a closer match to the prototype and were used as a prototype resemblance 'score'. The prototype resemblance scores were then compared with how the participant actually performed on several validating measures including the Cattell and Cattell Test of *g*, and the Embedded Figures Test as indicators of intellectual ability; the George Washington Social Intelligence Test and the Chapin Social Insight Test as measures of social judgement. No measures of creativity were judged adequate for assessing creativity and therefore were not included. Sternberg argued that convergent validity would be indicated if the wisdom prototype scores were more highly correlated with the

social judgment tests than with the intelligence tests. This is essentially what was found, although people who rated themselves high on prototypically intelligent attributes also tended to score highly on Chapin's test of social insight.

In summary, studies investigating people's implicit theories of wisdom support the convergent and discriminant validity, the universality, and the psychological reality of the construct. The variety of methodologies utilized provides a multi-method validation of the claim that wisdom is distinguishable from other competency constructs such as intelligence, creativity and semantically related categories such as shrewd and perceptive (Sternberg, 1985; Holliday et. a., 1986). Wisdom ratings correlate with validating measures of social judgement more highly than with measures of intelligence supporting the finding that wisdom is associated with interpersonal functioning.

The studies also revealed that implicit theories of wisdom may be influenced by one's group memberships, values, and interests. In addition, the studies differ in how the investigators organized the data which may reflect the interpretive side of data clustering techniques. For example, Clayton and Birren 's (1980) model of wisdom involves three dimensions (i.e., affective, reflective, and cognitive). Holliday and Chandler 's (1986) model of wisdom involves five dimensions (i.e., exceptional understanding, judgment and communication skills, general competence, interpersonal skills, and social unobtrusiveness). Sternberg's (1985) model of wisdom involves six dimensions (i.e., reasoning ability, sagacity, learns from ideas and the environment, expeditious use of information, perspicacity). Although such differences are a source of concern, closer examination of descriptors generated by the studies suggests cross situational consistency in some of the dimensions characterizing the attributes of wise people. For example, personal competency as a factor appeared across the studies implying that cognitive skills are necessary conditions for being recognized as wise. A dimension implying that wisdom is reflected in common sense and the conduct of everyday life appeared across all three of the studies (Brent &

Watson, 1980; Clayton & Birren, 1980; Holliday & Chandler, 1986). Across these studies, 'practical-experiential', 'reflective', and 'exceptional understanding of ordinary experience' appeared to be particularly distinctive characteristics of wise people.

Wisdom as an expert knowledge system

The second major empirical paradigm to investigate wisdom was employed by Baltes and his associates Dittmann-Kohli, Marciel, Sowarka, Smith, and Staudinger at the Max Planck Institute of Human Development in Berlin. Rather than eliciting lay people's implicit theories of wisdom as in the folk approaches, the Max Planck paradigm represents one of the few, explicitly theory-driven empirical approaches in the area. The approach links wisdom with current literature on cognitive aging. Briefly, wisdom is conceptualized as embedded within a Dual Process framework of intelligence (Smith & Baltes, 1990) which differentiates knowledge-free "mechanics" from knowledge-based "pragmatics" of intelligence similar to the Cattell-Horn theory of Fluid-Crystallized intelligence (Horn, 1982). In both models, the mechanics of intelligence (i.e., fluid abilities) are largely content free, universal, genetically influenced and biologically based. Pragmatics (i.e., crystallized abilities) are content rich, culturally dependent, and experience based. While the mechanics of intelligence manifest age associated decline, the pragmatics of intelligence may continue to develop with age. Smith and Baltes (1990) view pragmatic intelligence as most relevant to the understanding of wisdom which is defined as "expertise in the domain of fundamental life pragmatics, such as life planning, management, and review". Wise people are seen as having exceptional insight into human development and life matters and as having exceptionally good judgment, advice, and commentary about difficult life problems. Within this framework, wisdom is seen as an ability, and a process, which involves extensive factual and procedural knowledge. This knowledge base is used to produce both superior understanding and judgement.

The Dual Process model presents mechanics and pragmatics as equally important and partially independent. Rather than being a derivative of intellectual mechanics, the ontogeny of pragmatic intelligence is thought to require extensive experience with complex life tasks. General factors which would facilitate the development of wisdom would include an adequate level of cognitive, personal and social efficacy. Specific factors, intrinsic to the development of wisdom would include extensive experience with a wide range of human conditions, organized practice dealing with these experiences such as mentorship, and motivational dispositions such as generativity. Modifying or facilitating factors would include age, education, professional status, and leadership experience. These modifying factors may facilitate development of wisdom but would not in themselves be sufficient for its acquisition (Baltes & Smith, 1990).

Conceptualizing wisdom as an expert knowledge system is reflected in the five criteria used to index wisdom-related expertise. The first two criteria reflect the knowledge basis of expertise, and were based on theories of expert systems (e.g., Ericsson & Smith, 1991). The remaining three criteria were derived from life-span developmental theory and from historical analyses of the concept of wisdom (Dittmann-Kohli & Baltes, 1990). The five criteria include: 1) Rich factual knowledge about life matters; 2) Rich procedural knowledge about life problems; 3) Knowledge about the contexts of life and their relationships (i.e., life-span contextualism); 4) Knowledge about differences in values and priorities (i.e., relativism); and 5) Knowledge about the relative indeterminacy and unpredictability of life (i.e., awareness of uncertainty). Baltes (1993) argues that life-span contextualism functions as wisdom's defense against an over reliance on the present in the interpretation of life. Relativism is said to function as wisdom's defense against dogmatism, righteousness, and intolerance. Awareness of uncertainty is argued to function as wisdom's defense against an over reliance on determinism and rationality in evaluating problems. Not all

tasks or problems call for wisdom. Baltes argues that fundamental life pragmatics tend to consist of knowledge regarding life *adjustments*. Thus, wisdom is likely to be directed towards changes, problems and crisis situations which are connected to and important for long term goals and values (Dittmann-Kohli & Baltes, 1983). Such a domain poses a challenge for the the measurement of wisdom as wise responses would not be expected to be elicited in response to trivial questions of little personal concern to the individual.

The construct of wisdom as an expert knowledge system associated with the domain of fundamental life pragmatics, assumes that age and experience would predict wisdom-related performance. Smith and Baltes (1990) predicted a weak life-span developmental function whereby age would facilitate but would not in itself be sufficient for the development of wisdom. Therefore, on average, younger and older adults may perform at the same level of wisdom, but some of the highest scores would be produced by the elderly people. The paradigm used to test these predictions consisted of measuring wisdom related performance in participants of various age groups who had been positively selected for education and occupation. Life planning and life review vignettes were presented to the participants who were instructed to discuss the problem and offer advice using a "think aloud" procedure. The resulting protocols were then rated by judges trained to use the five wisdom criteria. These judges included lawyers, social scientists, journalists, social workers, and teachers. Interrater reliability ranged from .70 to .80 (averaged across problems).

Responses to four life planning problems presented in vignette form were obtained from 60 men and women from three age groups (young, middle-aged, elderly) (Smith & Baltes, 1990). The problems varied in terms of type of problem (normative vs nonnormative), and age of the target of problem (young vs old). Overall, young subjects tended to be rated higher than elderly subjects (Mean scores across problems: Young=3.35, middle-aged=3.18, old=2.88). As expected, responses

considered to be close to the ideal defined by the wisdom criteria (rated 5 and above on a 7 point scale) were rare, apparent in only five percent of the protocols. These wise responses were spread equally across the three age groups. Both young and old individuals responded more wisely to dilemmas involving same-age peers suggesting that knowledge about life pragmatics is associated with age-specific peaks. The hypothesis that elderly individuals would be among the top performers was supported by the finding that all of the top scores for the nonnormative elderly problems came from the elderly subjects. Baltes and Smith (1990) hypothesized that persons selected for their wisdom would display a pattern of performance that is less tied to the target age of the problem. This hypothesis has received some preliminary support (Baltes, Staudinger, Maercker, & Smith, 1993).

A second study conducted by Staudinger (1988) examined wisdom related performance of 63 women in response to a life review problem in which the target age was manipulated as in the previous study. The results indicated comparable ratings across four of the wisdom criteria for old and young people. Old participants were rated significantly higher than the young participants on the dimension of *awareness of uncertainty*.

The role of intelligence versus personality as predictors of wisdom-related performance was investigated by Marciel, Smith, Staudinger, and Baltes (1991). A sample of 126 women of varying ages completed a number of standard personality and intelligence measures as well as a life planning task. As in the other studies, the life planning discourse was scored according to the five wisdom criteria. Results indicated that only 20% of the variance in the wisdom scores was accounted for by the intelligence and personality measures. Interestingly, the personality measures, especially flexibility and openness, were more powerful predictors than either the fluid or crystalized intelligence measures.

The relative importance of age and professional experience in the pragmatics of life was investigated by comparing the wisdom-related performance of young and old clinical psychologists with age-matched controls in an age by experience design (Smith & Baltes, 1991; Staudinger, Smith & Baltes, 1991). As expected, the psychologists performed significantly higher than the controls. As in the previous studies, age differences were small and there were age-specific advantages with younger and older adults performing best when dealing with life tasks appropriate to their age period.

Finally, Baltes, Staudinger, Maercker and Smith (1995) examined the wisdom of a select group of 16 people ranging in age from 41 to 88 (mean age=67) who had been nominated for their wisdom. Wisdom related performance was evaluated in comparison to 60 controls which included young and old people matched for education and professional status, and a group of older clinical psychologists. As in the previous studies, participants were instructed to use a think aloud procedure in response to two dilemmas, one involving a life planning situation, the other a suicide situation. The results supported the absence of age effects in wisdom. Secondly, the nominees performed at least as well as the older clinical psychologists, and both of these groups out performed the two control groups. The top performers were composed primarily of the nominees, supporting the view that if the framework for evaluating wisdom is marked by a psychological bias, it does not preclude non-psychologists from scoring highly on the criteria. In particular, the wise nominees excelled at the suicide task. Finally, as with previous studies, differences emerged in the wisdom criteria such that the higher performance of the nominees was primarily due to high scores on *relativism* (i.e., awareness of multiplicity in people's values and interests).

In summary, the wisdom research at Max Planck represents a much expanded notion of intelligence relative to the traditional emphasis on fluid abilities and decontextualized thinking. Interestingly, an implication of the model which has

received some preliminary support is that wise individuals need not excel at fluid type abilities. Their experiences and developmental history may be more predictive of wisdom than their IQ scores. This is essentially the same inference made by Holliday & Chandler (1986) who concluded that while intelligence was necessary for wisdom, it was not sufficient to discriminate wisdom from other competency categories such as shrewd. However, while Baltes' approach may appear to compliment the folk approaches, there are two important differences in how each conceptualizes wisdom which have implications for future research.

First, there is a fundamental difference between conceptualizing wisdom as a highly developed form of adult intelligence (Smith & Baltes, 1990) and conceiving of intelligence as a facet of wisdom (e.g., Holliday et al., 1986). The former approach implies that it is desirable and necessary to establish a psychometric treatment of contextual and knowledge based forms of intelligence. In contrast, the latter approach implies a number of characteristics, such as value systems, must be considered in the assessment of wisdom which are difficult to deal with using a psychometric approach. Baltes concedes that the psychometric approach may be unable to capture the entire construct, and in particular, would be unable to deal with what he has labeled "philosophical wisdom" defined as "a genuine concern that goes beyond one's own self ... to a more general concern with societal and cultural solutions for human existence." (Dittmann-Kohli & Baltes, 1983, P.10.) Philosophical wisdom is thought to be concerned with issues such as the essence of being, and the relationship of the self and others to the world at large. Baltes argues that these domains may lie outside the realm of empirical psychology and he therefore recommends interdisciplinary study for their investigation. In contrast, Holliday and Chandler's position is that the assimilation of wisdom into an expanded framework of intelligence risks missing the point of investigating wisdom in the first place, to reveal alternative modes of knowing which have been neglected in the literature.

A second major difference between the approaches appears as a semantic issue, but carries important implications for future work in the area. Where Baltes conceptualizes *wisdom* in terms of expert knowledge systems, the folk approaches have focused their research on characteristics of individuals labeled as *wise people*. By implication, the expert model focuses heavily on wisdom-associated products, and fundamental attributes of wise people, including personality and motivation, are not included in the theoretical definition. This approach permits the assessment of wisdom apparent in archival material, but is limited in evaluating how wise an individual person may be. For example, in an analysis of interviews of older people on the topics of wisdom and wise people, Sowarka (1989) found that individuals emphasized the importance of "excellent character". Such an emphasis goes beyond the expert knowledge system outlined by Baltes who concedes that this aspect may need to be explicitly incorporated into the theoretical definition (Baltes & Smith, 1990). Specifically, in a discussion of the universal metadefinitions of wisdom, Baltes states that "wisdom, when used, is well intended and combines mind and virtue (i.e., character)" (Baltes, 1993, p. 586). The folk approach, particularly the work done by Holliday and Chandler (1986) therefore offers a broader, more inclusive description of the construct as it applies to wise people. In addition to character, this approach has identified the importance of the social context, affect, and interpersonal skills for wise people.

The two approaches may be best viewed as complimentary rather than contradictory perspectives. While the Max Planck approach emphasizes wisdom related processes, the folk approaches emphasize characteristics of the person who generates such wisdom related processes. Nonetheless, the differences between the approaches in defining the construct's domain reinforces the need to connect the empirical study of wisdom with the semantic meaning of wisdom as it has evolved in our cultural history (Baltes, 1993).

A recent study by Hosley, Cornelius, & de Bruyn (1994) support the idea that current approaches to conceptualizing wisdom may suffer more from incompleteness than from inaccuracy. The methodology involved interviewing 795 people ranging in age from 17-96 (mean age = 43 years) and asking them to describe a wise person. The responses were then categorized according to the Max Planck (i.e., expert performance) and Sternberg (i.e., distinctions between wisdom, intelligence, and creativity) frameworks. Within the Max Planck framework, the most frequently mentioned responses were classified as advice giving (10.5%), specific expertise (21.4%), and exceptional knowledge (9.7%). However, 18% of the responses could not be classified within the framework. Within the Sternberg framework, the most frequently mentioned responses were classified as reasoning ability (32%), sagacity (21%), expeditious use of information (16%), and judgement (10.5%). However, 32% of the responses could not be classified within the framework. The researchers interpreted these results as evidence that both the Max Planck and Sternberg frameworks inadequately sampled the construct's domain. They constructed a classification scheme which incorporated the dimensions of general personality, general intellectual, and communication with others and applied this framework to the data. Within this framework, only 2% of the responses remained unclassifiable. The framework was further modified by interviewing a second sample of 341 people ranging in age from 22-97 (mean age = 46) and asking them to rate the importance of wisdom related attributes. The authors constructed their final classification scheme in terms of four dimensions, each of which was subdivided into central, intermediate, and peripheral attributes. The dimensions were labeled "general", a dimension which appears to reflect general intellectual and personality characteristics (e.g., has common sense, broad view); "other", a dimension which reflected the importance of relationships with others in wisdom, (e.g., learns from others, has insight into others); a dimension labeled "self" which appears to reflect self development and mental health (e.g., has self esteem,

admits being wrong, is modest, has clear priorities); and a dimension labeled "world " which appears to reflect the broad focus of the wise person (e.g., knows about life, has a sense of generativity).

To summarize, the preliminary work on wisdom related performance supports the idea that old people may continue to develop expertise in the domain of fundamental life pragmatics and has laid the ground work for the study of wisdom in people nominated as wise. Both Smith and Baltes (1990) and Holliday and Chandler (1986) agree that the next step in the systemic investigation of wisdom will be to focus upon wise people bearing in mind the caution that attempts to develop a 'test of wisdom' may fail to capture the essential nature of wisdom (Holliday & Chandler, 1986). Baltes' five criteria have proven to be useful in the assessment of wisdom related performance. However, the folk approaches and the more recent Cornell study imply that it may be desirable to incorporate additional criteria which assess aspects of character and integrity in wise people in order to better connect the empirical study of wisdom with the semantic meaning of wisdom.

The present study will address these issues by assessing wisdom in a nominated sample using an expansion of Baltes' criteria designed to more closely correspond to the semantic meaning of wisdom. Given that wisdom is not likely to be expressed in response to trivial questions of little concern to the individual, the present study will explore wisdom in response to real life issues and dilemmas. The following section will explore further theoretical issues regarding the characteristics of wise people and will present the hypotheses to be tested in the present study.

THEORETICAL ISSUES CONCERNING THE CHARACTERISTICS OF WISE PEOPLE

Age and Experience

Many researchers agree that while wisdom does not necessarily increase with age, the qualities associated with wisdom tend to reflect experience and maturity. However, given that wisdom appears to be rare, even in the elderly, experience probably is necessary but not sufficient for the development of wisdom (Smith & Baltes, 1990). The ability of young people to respond 'wisely' to interpersonal problems further challenges the idea that wisdom is the sole provenance of the elderly (Smith et al., 1990). Given that there are no studies which have assessed the development of wisdom over the life course, one can only speculate about whether wisdom increases with age. For example, while Baltes' research supports the idea that high levels of wisdom can be found in aged individuals, it is unclear whether these individuals were wise as young people or whether their wisdom came with age. That is, is wisdom an individual difference or a developmental variable? It is possible that both views are partially correct. A wise outlook may be characteristic of some people, in line with the individual difference point of view, but the nature of the problems which confront the individual vary over the course of one's lifetime and will therefore determine how a person's wisdom is manifest. Such an argument is consistent with Meacham's (1990) proposition that age is associated with changes in wisdom, from simple to more profound manifestations. Meacham conceptualizes wisdom in terms of two dimensions. The first dimension, considered to reflect the essence of wisdom, involves a balance between knowing and doubting, and is assumed to be accessible to people of all ages. The second dimension concerns whether wisdom is simple or profound which is thought to depend on age related accumulation of information, experiences, and insights.

Rather than a simple accumulation of experience, it may be that certain critical events promote the development of wisdom. For example, it has been suggested that

tragedy is the substratum from which wisdom arises (Kohlberg, 1981). Tragedy may reflect a special case of circumstances where the individual is forced to solve complex problems of crisis proportions. In addition, tragedy has a strong affective component which necessitates affective as well as cognitive competence and integration. Not all elderly people will have successfully weathered the tragic events which may promote wisdom, and some young people might be able to do so. Nonetheless, elderly people as a group would be more likely to have experienced tragic circumstances over their life-time than young people. This reasoning is therefore consistent with Smith & Baltes' (1990) suggestion that wisdom may arise in the context of a life characterized by opportunities for complex problem solving. It is also consistent with the idea that the domains in which wisdom is manifest include crisis situations, fundamental life problems, and matters of adjustment.

The association between wisdom and old age can also be viewed developmentally. Normative events in old age pose intense existential and practical challenges such as widowhood and death of family or friends. The ultimate existential challenge facing the aged is to come to terms with one's inevitable approaching mortality. The importance of the resolution of this crisis in the development of wisdom has lead Erikson to characterize wisdom as "a detached concern for life itself in the face of death itself" (Erikson, 1964, p.133) . Challenges such as coping with tragedy and accepting one's mortality demand the ability, as well as the time, to reflect on a lifetime of experience. The aged may therefore be in a better position developmentally to cope with and respond to these challenges (Kubler-Ross, 1969). Indeed, the ability to accept change has been identified by old people as a hallmark of successful aging (Ryff, 1989).

Thus, the association between wisdom and old age can also be viewed functionally. Whether or not wisdom requires age to develop, it may be differentially adaptive and encouraged across the life-span. Wisdom may not be of much benefit

to a young person immersed in a context which values technical expertise over practical or emancipatory interests. For example, formal academic settings may suppress wisdom in favour of intelligence by rewarding abstract thinking detached from context, certainty or the appearance thereof, and completing tasks within the parameters of the problem rather than questioning the meaning underlying these parameters (Sternberg, 1990). This is not to say that education discourages wisdom. Certain attributes of wisdom (e.g., relativism) are enhanced by education (Kramer & Melchior, 1990). In contrast, wisdom may be rewarding and adaptive for the elderly person attempting to transmit knowledge to the upcoming generation or facing the existential crisis of his or her mortality.

The longitudinal approach necessary to address the question of whether wisdom increases with age is beyond the scope of the present study. Rather than focusing on the issue of whether or not old people are more wise than young people, the goal of the present study will be to explore how wisdom may be manifested in successful aging. To date, the only empirical study to examine wisdom in relation to experience has focused on whether clinical psychologists are more wise than other groups (Smith and Baltes, 1991). No studies have examined wisdom in relation to life events or tragic circumstances. Given that wisdom is thought to develop through experience with complex life problems, the present study will document the kinds of experiences which wise people themselves identify as having promoted their personal development. A related question concerns whether the wise person has had ample opportunities for complex problem solving and help in structuring these experiences such as mentorship. The present study will address this question by gathering demographic information on the participants including occupational status.

Hypothesis#1: Wisdom will be associated with experiences in complex interpersonal problem solving and situations which require adjustment.

A) People nominated as wise will tend to come from occupations which foster interpersonal problem solving and the role of advisor.

B) Tragic or affect laden experiences will be emphasized among the events cited as having fostered personal development.

Cognitive Style

Sternberg's (1990) has put forth a metacognitive stance characteristic of wise people. Implicit in this discussion is that wise people have the capacity to stand outside and reflect critically on their intellectual framework. Consistent with this portrayal, several of the folk studies emphasized the dimension of reflectivity in their descriptions of wise people (Sternberg, 1985; Holliday & Chandler, 1986; Clayton & Birren, 1980). Reflectivity has relevance to cognitive-developmental accounts of wisdom. By implication, research on wisdom supports the view that formal operations may too narrowly construe adult cognition in terms of syllogistic reasoning and may represent a premature endpoint to cognitive development. Wisdom may involve other modes of knowing (such as contextual thinking) and domains of life other than cognitive (such as affect).

The debate regarding possible candidates for 'post-formal' stages is relevant to the metacognitive stance which may be prototypical of people labeled as wise. Briefly, it is generally agreed that wisdom requires an extensive knowledge base. The manner in which the post-formal stage is conceptualized as a prototype of wisdom, however, reflects the different emphases in form and organization of knowledge thought to be relevant to wisdom. One position is that while childhood development consists of a series of hierarchical qualitative stages, post-formal stages in adult development proceed quantitatively (Dittmann-Kohli & Baltes, 1985). This position is

consistent with wisdom as expertise. For example, Smith & Baltes (1990) emphasize expertise in one, all be it broad, domain of knowledge, fundamental life pragmatics. From this point of view, it is reasonable to conceptualize wisdom in terms of an accumulation of experience and to measure it psychometrically.

In contrast to the expert-knowledge/quantitative view, a number of authors argue for a stage view of post-formal thought implying a hierarchical and qualitative integration of previous modes of thought and coordination of multiple systems of knowledge (Holliday & Chandler, 1986; Labouvie-Vief, 1982; Pascual-Leone, 1987). Candidates for possible post-formal stages include the concepts of relativism and dialectical reasoning. Relativism involves exceptional understanding of other people through the acceptance of mutually incompatible points of view (Labouvie-Vief, 1980) and is a key dimension in a number of cognitive-developmental accounts of wisdom (Kitchener & Brenner, 1990; Pascual-Leone, 1987). A possible limitation of relativistic thought for the development of wisdom, however, is that awareness of multiplicity or subjectivity of viewpoint complicates and may hinder the ability to make commitments. It might seem contradictory that Smith and Baltes include relativism as one of their wisdom criteria given that these authors espouse a nonhierarchical view of adult development. However, there is debate regarding whether relativism can be considered a 'post-formal' mode of thought in a qualitative sense since some theorists argue that formal structures are able to account for relativistic thinking (Kramer & Woodruff, 1986).

An alternative, or subsequent, post-formal stage conceives a general and fundamental transformation from formal thinking (comprehension of systemic relations among propositions) to dialectical thinking (comprehension of dynamic relations among systems). The concept of the dialectic involves a process of increasing differentiation and integration. The dialectical stage addresses the main limitation of relativism by permitting commitment through the resolution of contradictions.

Specifically, formal thought involves the utilization of one system, logical reasoning. Relativism involves increasing awareness of multiplicity in viewpoint, but provides no mechanism for stepping outside the framework of logical reasoning for reconciling contradictions among viewpoints. However, dialectical reasoning enables the thinker to step back from one's formal systems, to adopt a detached perspective in which logic is viewed as only one means of interpreting experience thereby facilitating correspondence between thought and reality (Kramer, 1983). To clarify this distinction it may be useful to contrast formal and dialectical stages in terms of the domains of knowledge in which they operate. Contexts of interaction oriented at establishing the truth (such as technical problems) call for formal logic. Therefore formal operational thought may be expected to be particularly well suited to dealing with technical knowledge in the formation of truth statements. In contrast, interpersonal interactions directed towards maintaining communication emphasize agreements about the nature of the interaction over consensus about truth statements. Such practical interests involve complex open systems, have multiple solutions rather than a single solution, and are evaluated in terms of feasibility rather than truth (Kramer, 1983). These may therefore be more suited to dialectical thinking.

A number of authors argue that the problems of life we most typically associate with wisdom emphasize uncertainty (Kitchener & Brenner, 1990; Meacham, 1983; Taranto, 1989). Meacham's (1983) position is that wisdom involves recognition of the idea that what one knows is only a part of what can be known. Awareness of the uncertainty of knowledge demands that the thinker *construct* rather than apply a solution. Thus although wise individuals recognize the uncertainty of knowing and the validity of multiple perspectives, they are able to synthesize viewpoints in a way that generates reasonable solutions to difficult and complex problems. In short, the wise individual is able to make 'sound judgments' in the face of uncertainty (Smith & Baltes, 1990; Kitchener & Brenner, 1990). Awareness of uncertainty is closely associated with the

notion of self-reflectivity and is implicit in both relativism and dialectic reasoning. For example, relativism demands a recognition of the inherent subjectivity of viewpoints since the ability to separate the point of view of the other from the self implies awareness that one's conceptual tools influence the knowledge obtained about the world (Koplowitz, 1978). Similarly, the dialectical thinker is able to reflect critically on the limitations and potentials of formal logic for complex problem solving (Basseches, 1980).

Assumptions about the world underlying epistemic cognition change between adolescence and adulthood (Basseches, 1986; Kitchener & King, 1981; Perry, 1970). In support of a developmental view of wisdom, studies have found increasing instances of relativistic thought in middle-age (Basseches, 1980) and dialectical thinking has been documented in the self-reports of old people (Ryff, 1982). In addition, Kramer and Woodruff (1986) cite longitudinal evidence that both relativistic and dialectical thought increase with age. Older, more highly educated individuals score higher in terms of being able to make commitments in the awareness of uncertainty and such an ability appears to be rare before the age of 30 (Kitchener, King, Wood, & Davison, 1989).

In summary, the view that formal reasoning represents the culmination of cognitive-development is giving away to models which may be more relevant to wisdom. However the manner in which a 'post-formal' stage is thought to be manifest is a contentious issue. Some researchers argue that adult development proceeds nonhierarchically (Smith & Baltes, 1990; Langer, Chanowitz, Palmerino, Jacobs, Rhodes & Thayer, 1990). Others argue for qualitative changes in adult cognitive development (Basseches, 1980; Kitchener et al., 1989). Cognitive style, whether in the form of relativism or dialectical reasoning may be but one aspect in the cluster of abilities associated with the prototypically wise person. The present study will directly examine the association between wisdom and cognitive development. It is predicted that wisdom will be

associated with advanced cognitive development (i.e., dialectical reasoning) rather than with an absolute cognitive style.

Hypothesis:#2: Wisdom will be associated with advanced cognitive development (i.e., dialectical reasoning).

Motivation

Motivation may be one of the key antecedent variables for understanding wisdom and wise people. Sternberg (1990) has hypothesized that the wise person is motivated to understand the structure, assumptions and meaning underlying phenomena and events. In terms of the interpersonal domain, the wise seek to understand the inherent ambiguity in interpersonal dynamics and relationships which necessitates exploration at an increasingly deep level of what motivates the self and others. Such reflection often leads to a deeper appreciation of the relationship, its implications, and the potential limits to resolving conflicts or obstacles.

This motivation to understand the dynamics of relationships is consistent with the dialectical cognitive style discussed above. A dialectic style would permit sensitivity and awareness of dynamic interactions between people. Folk approaches' emphasis on communication skills and tact (Holliday & Chandler, 1986) recognizes the motivation to become deeply engaged with others as intrinsic to wisdom. Characterization of the wise person as someone able to communicate indirectly (i.e., nonverbally and metaphorically) substantiates the deep level at which the relationship is pitched. That is, the wise may attend to, and be more open to, the *process* of communication rather than merely the content. It is the combination of a dialectical cognitive style and motivation to understand the dynamics of interpersonal relationships which would permit the "penetrating insights" which are definitive of wisdom.

But why would someone invest so much of themselves in such a process? One explanation, proposed by Csikszentmihalyi and Rathunde (1990), is that wisdom itself is

intrinsically rewarding particularly when reflection on the process of interpersonal relationships leads to a deeper understanding of the self and consequently to personal growth. Thus the wise person is thought to be motivated by the intrinsic rewards of relationships, self reflection, and effective communication with others. In addition, attending to the form and process of experience permits a "disciplined and mature awareness of the childlike ability to get engaged in experience" (Clayton & Biren, 1980).

Generativity, literally passing on one's knowledge to future generations, is a concrete example of how wisdom may be an intrinsically rewarding process (Baltes, 1991; Erikson, 1959). Characterization of the wise as advisors, or teachers, is evident in many prototypical descriptions of wise people. Generativity combines effective communication skills with a broad perspective on life (Orwoll, 1988) enabling the wise person to draw from one's own growth experiences, including past rewards and regrets, and to pass on a perspective on situations which might otherwise be lacking.

Csikszentmihalyi and Rathunde (1990) argue that the emphasis in the literature has been on the cognitive or intellectual side of wisdom to the exclusion of its intrinsic motivating properties and as a consequence we are missing the opportunity to understand how wisdom works and how it can be used. For example, although Baltes (1991) cites generativity as intrinsic to wisdom, his five wisdom criteria do not include generativity in the assessment of wisdom. To address this criticism, the present study will integrate generativity into the investigation in two ways.

First, an additional criteria in the evaluation of wisdom will be constructed. It is argued that unless wisdom is passed on to or communicated to others, it is not really wisdom. This argument is consistent with Baltes' statement that "for wisdom to be wise, it has to be used for a good goal, your own development or the welfare of others" (Cited by Kent, 1992, pg. 15). Therefore, Baltes' criteria will be expanded to include a criterion to assess the extent to which generativity is a underlying motivating force in the lives of people selected for their wisdom.

The second avenue by which generativity will be assessed will consist of reflections on the manner by which wisdom is communicated as recommended by Csikszentmihalyi and Rathunde (1990). Nominees will be asked why they feel they were singled out by the nominator as a wise person in order to illuminate the extent to which passing on knowledge is integral in the perception of wisdom. An exploratory approach will be undertaken by means of a qualitative analysis of the characteristics associated with people manifesting high levels of wisdom. Three questions will be explored including: 1) How does one feel in the presence of a wise person? 2) What does one take away from the encounter? and 3) How is wisdom communicated? The addition of qualitative analyses into the investigation will enable systematic attention to subjective aspects of encounters with wise people. Such an interplay between qualitative and quantitative approaches will expand the presents study's limits allowing the documentation of the elusive and subjective nature of the construct and relating this to objectively assessed dimensions of wise people.

Affect Integration: The heart of wisdom

A limitation of some cognitive-developmental approaches to wisdom, is that wisdom is conceptualized as a cognitive product or process and the role of affect is not considered. Such a deemphasis on affect is consistent with some historical conceptualizations of wisdom which tend to view the suppression of emotion as necessary for 'clear thought' (e.g., Plato) (Holliday & Chandler, 1986). Ironically, in as much as wisdom is used to understand human interaction, which includes affective processes, it may well be that openness to and competence in processing emotional information is the feature that distinguishes wisdom from intelligence or mere cleverness and permits the 'penetrating insights' and 'exceptional understanding' associated with wise people. Wise people have been described as effective managers of interpersonal conflicts, as being empathic, and as being effective at coping with the

stresses of life such as developmental challenges (Kramer, 1990). All three of these functions of wisdom are linked by virtue of affect-cognitive integration. A number of authors therefore include affect-cognitive integration as necessary for the development of wisdom (Clayton & Birren, 1980; Holliday & Chandler, 1986; Kramer, 1990; Labouvie-Vief, 1982, 1990; Orwoll & Perlmutter, 1990).

Interpersonal problems, such as the types of problems depicted in Baltes' vignettes, often touch upon social values, emotional difficulties, and conflicts in the self and in others (Dittmann-Kohli & Baltes, 1985; Kramer, 1990). It is difficult to conceive of how interpersonal problems could be satisfactorily understood and resolved without an awareness of the affective processes operating in both the self and the other (Labouvie-Vief, 1982; Pascual-Leone, 1990). Furthermore, the solutions to such problems frequently demonstrate an awareness that clear cut logical solutions are not always appropriate for encouraging healthy interaction patterns and may be too far removed from the complexities of life to serve as the sole basis for judgement (Gilligan, 1982).

A core characteristic of wisdom, empathy, requires affect clarity both in one's self and the other. In fact, the process of wisdom itself has been described as a feeling-judgement (Pascual-Leone, 1990; Solomon, 1989). Unless one explicitly considers affect, experience will be inherently incomplete and distorted. This proposition has implications for the cognitive-style necessary for wisdom, in line with the previous section. Specifically, it can be argued that formal operations represent a situation of excessive cognitive control over affect (Gilligan, 1982; Labouvie-Vief, 1982, 1990). Formal operations as a "closed system approach" to thought require all relevant variables influencing the equation to be considered in order to formulate a solution. It is therefore necessary for the individual to hold an internally consistent theory about the self and the world, and to avoid conceptual and affective uncertainty (Labouvie-Vief, 1982). By implication, over reliance on formal logic may impede affect-cognitive integration (Labouvie-Vief, 1985).

In contrast, some authors argue that both relativistic and dialectical thinking involve a significant affective dimension (Kramer, 1990). Specifically, an understanding of one's emotional life is necessary for understanding of the self, relationships with another, and the nature of change. In support of this association, Kramer, Goldston & Kahlbaugh (1989) found dialectical thinking to be positively related to age, but the relationship only held in individuals who maintained a high level of affect intensity (i.e., were concerned about the issues being considered). In terms of interpersonal functioning, there is evidence that dialectical thinking facilitates positive interpersonal interaction patterns and reduces conflict among married couples (Kramer, 1989).

Finally, reference to affect integration and emotional competency are apparent in some of the earliest literature on wisdom as well as in the more recent approaches (e.g., Brent & Watson, 1980; Clayton & Birren, 1980; Holliday & Chandler, 1986). Erikson (1959) stated that failure to attain the virtue of wisdom would result in despair, implying that such a negative emotional state is incompatible with wisdom. Characterizations of wise people as 'serene' implies competency in affect modulation. It is difficult to imagine chronic negative affective states such as hostility, despair, or envy, as being conducive to wisdom. Such states imply that the person has not yet "come to terms" with limitations in the self or the other, and as a result is suffering, or projecting their suffering onto others.

In light of the associations between effective interpersonal problem resolution, empathy, serenity, and wisdom, it is notable that 'affect maturity' is an area of development that profits from life experience. Attention to this dimension may therefore reveal how wisdom is manifest in successful aging. Besides facilitating thoughtful consideration of life's problems, qualities such as patience and a sense of humor may be emotionally adaptive in coping with life crises and losses. Indeed, there is empirical evidence that coping maturity increases with age (Labouvie-Vief, Harkim-Larson, & Hobart, 1987; Irion & Blanchard-Fields, 1987; Valliant, 1977). Studies also support

the expertise of elderly adults within the domain of emotional regulation, and emotional complexity. For example, interview data from elderly people lead to the description of the experience of emotion across the life-span as seeing greater differentiation of feelings as well as evenness of feeling in one's own life as it is lived longer (Lawton & Albert, 1990). Finally, affect cognitive integration is consistent with the contention that wisdom is directed towards problems of adjustment (Smith & Baltes, 1990). Therefore wisdom may be apparent in the day to day experience of successfully aging individuals (Rossel, 1988).

In summary, attention to the affective dimension of wisdom further challenges models which posit formal logic as the endpoint of cognitive development. According to Edelstein and Noam (1982), effective communication precludes the elimination of responsibility at the expense of formation of truth statements. In other words, to communicate effectively in the context of an ongoing relationship involves respect and fact; qualities which reflect an awareness of the interests and vulnerabilities of the other. This awareness may temper the desire to express truth statements which though truthful, are not helpful, and may be damaging to the relationship (e.g., I told you so). Thus the ability to empathize and to act compassionately are at the heart of wise decision making. In order to accurately empathize with the other, one must be genuinely open to the emotional experiences of others and capable of differentiating between another's affective experience and one's own emotional reactions to it. Finally, not all problems are ideally suited to formal logic. In particular, such a system may be inadequate to deal with complex interpersonal conflicts, the very domain in which wisdom operates. In short, affect-cognitive integration implies an openness to experience that cannot be achieved by reliance on logical reasoning alone or by simply accommodating to the demands of interpersonal contexts. Affect-cognitive integration links together 'exceptional understanding of human nature' with accurate empathy, compassion, sensitivity to interpersonal context, and recognition of individuality.

The importance of affect-cognitive integration in wisdom will be explored by the present study in two ways. First, it is proposed that negative emotional states such as extreme regret, despair, or hostility are inconsistent with a wise perspective on life. A truly wise person is one who has come to terms with or resolved critical issues in his or her life. The present study will therefore further expand Baltes' criteria to include an evaluation of the degree and quality of affect-cognitive integration apparent in the discourse of wise nominees. Such an approach is consistent with Kramer (1987) who suggested that efforts be directed away from linking affect-cognitive integration with age, and instead focus on *individual differences in openness to growth*. In addition to incorporating affect-cognitive integration into the evaluation of wisdom, the study will independently measure the level of emotional complexity and capacity for empathy of wise nominees, and will measure their level of life satisfaction. To the extent that affect-cognitive integration and emotional complexity are necessary for the development of wisdom and are associated with post formal thinking, there should be significant positive associations between the participant's wisdom, their level of emotional complexity, and their cognitive style.

Hypothesis #3: Wisdom will be associated with affect-cognitive integration and affect competence.

- A) *Wisdom will be associated with affect complexity.*
- B) *Affect-cognitive integration will be associated with the other six wisdom criteria.*
- C) *Affect complexity will be associated with a dialectical cognitive style.*
- D) *Wisdom will be associated with life satisfaction.*

Personality

Emphasis on affect-cognitive integration leads to the question of the association between wisdom and personality. Expanded intelligence frameworks such as Smith & Baltes (1990) state that whether and how intellectual skills will be put to use depends on the individual's personality as well as external demands. Thus, whether wisdom develops depends in part on how personality influences the use and development of intelligence. The postulated association between wisdom and personality is also supported by the following psychodynamic and contextual perspectives on human development.

Psychodynamic theorists believe wisdom develops within a healthy, integrated personality structure (Erikson, 1950,1959; Jung, 1971). Jung (1971) discussed the process of becoming wise in terms of confronting progressively deeper, unconscious layers of the self. This intense self-reflection was said to permit the individual to be able to resolve contradictions between such opposing 'forces' as subjective and objective reality and masculine and feminine dimensions of the personality. Access to the unconscious permits integration of 'the darker side' of the personality which allows individuals to become aware of and tolerant of their own motivations rather than defending the self from this awareness by projecting them onto others (Kramer, 1990). Confronting egotistical fears and wishes rather than compensating for them with unconscious defences is thought to permit a more open and expanded functional relationship with the world.

Themes of resolution and integration are also apparent in Erikson (1950, 1959) who located wisdom within a progressive developmental sequence which culminated in a well-balanced and integrated personality. Erikson emphasized the resolution of numerous life-stages in the development of wisdom. In the successful resolution of the final stage, ego integrity versus despair, the wise individual adopts a posture of

'detached concern for life itself in the face of death itself' thereby resolving the conflict through acceptance of death as necessary for renewal of the life cycle.

These theories emphasize a process of personal growth which involves a highly differentiated, integrated, and balanced understanding of the self permitting empathy and the acceptance of limitations. Consideration of the idea that integration of the personality frees the individual from self-absorption and permits genuine concern for life and the welfare of others resolves the seeming paradox between detachment and connectedness in wise people. Specifically, detaching one's self from self-interest is thought to result in a deeper, or more genuine connection with others and the potential for an interest in collective, or global values and concerns. Such a view further supports the importance of generativity in identifying wise people.

Some preliminary empirical support for this process has emerged in the aging literature. Orwoll and Perlmutter (1990) argue that wisdom is exceedingly rare because it involves a combination of exceptional personality development (i.e., ego integrity) as well as exceptional cognitive functioning (i.e., dialectical reasoning). Orwoll (1988) tested this view by measuring global perspective (i.e., concern for the world or humanity) and ego integrity in old people nominated as wise compared to age peers nominated as creative. While wise nominees were not significantly different from the creative nominees on general measures of psychological well-being, they were significantly higher than the creative nominees on ego integrity and were significantly more likely to express a global perspective.

Support for a developmental view of the association between personality integration and empathy with others comes from studies such as Labouvie-Vief et al (1989) which demonstrated that relative to young adults, old and middle-aged adults were more likely to adopt a symmetrical attribution pattern to explain interpersonal conflicts and emotions. For example, when explaining anger, the young adults tended to polarize the self and other, that is, to attribute blame and responsibility for conflict to

the other while freeing the self from blame. Older adults manifested a more symmetrical expression of attributions to the self and to the other. Rather than applying different criteria for evaluating the behavior of the self and the other, the older adults presented a pattern in which both self and other were accorded equal responsibility for the conflict. Thus old age brought a compensating ability to experience empathy and maintain the ability to relate to the other (i.e. connectedness). This symmetrical attribution style is consistent with the argument that the person has integrated the negative aspects of the self into the personality instead of projecting them onto others. The integrated person therefore can take responsibility for personal motivations in a way that an individual with a polarized view cannot, and can identify with the negative side as well as the positive side of other people. Such connectedness would foster an attitude of tolerance, respect, and awareness of limitation, three fundamental traits which are prototypically associated with wise people.

The second body of literature which supports the importance of personality functioning in wisdom, derives from contextual approaches to human development. While the literature has primarily focused on the relationship between personality and intelligence, the assumption that human development consists of a life-long mutually causal interaction between the individual and the environment is also relevant to the ontogeny of wisdom.

In a review of the cognitive aging literature on personality-cognition interactions, Gold and Arbuckle (1990) developed a model specifying the direct and indirect effects of personality on cognition. The model focused on five broad central dimensions of personality: 'introversion-extraversion', referring to introspectiveness versus sociability; 'emotional stability-neuroticism' referring to the stability of one's emotional life; 'openness to experience', 'agreeableness' and 'conscientiousness'. In general, people who were more introverted, open, and agreeable performed somewhat better on cognitive ability measures. The emotional arousal component of neuroticism

hindered some abilities but facilitated well learned verbal responses. Variables reflecting personality-cognition interactions including flexibility, field independence, and locus of control were also examined. In general, people higher on flexibility, field-independence, and internal locus of control tended to perform better on cognitive tasks.

Gold and Arbuckle concluded that extraversion had a negative but low correlation with intelligence. This would make sense in terms of the necessity for the individual to have the capacity to focus their attention on the cognitive problem at hand rather than the social dimensions of participating in a psychological research project. A more introverted stance may also be relevant to wisdom insofar as it bears resemblance to the capacity to reflect on experience. However, in line with Baltes' hypothesis that the ontogeny of wisdom requires extensive practice in complex interpersonal problem solving, one may expect that extraverts would be more likely than introverts to construct and participate in social exchanges with other people which would be conducive to the development of wisdom.

The dimension of emotional stability-neuroticism was found to be associated with poorer outcomes in cognitive functioning although this relationship was more apparent for measures of fluid abilities than for measures of crystallized abilities. Crystallized abilities were, in some cases, facilitated by anxiety (Costa & Fozard, 1978). Thus, as in the case of extraversion, the association between personality and intelligence may be different from the association between personality and wisdom. One would expect that a certain amount of anxiety is necessary to motivate the individual to examine and modify beliefs about the self and the world but that high levels of anxiety or neuroticism would be associated with the perception of greater threat and consequently a more rigid defensive style. Further, high neuroticism insofar as it reflects a high level of self preoccupation might preclude the development of wisdom. Overall,

it is expected that lower levels of neuroticism may be conducive to personal growth and the development of wisdom.

There has been little empirical research examining openness in relation to cognitive functioning, however, both psychodynamic and contextual models imply that openness is necessary for the development of wisdom. Psychodynamic models posit that one must be sufficiently open, that is free from an overly defended personality structure, to permit personality integration. The contextual approach implies that openness is conducive to experience with a variety of novel circumstances permitting a broader perspective on life. The association between wisdom and openness has already received some preliminary support (Marciel, Smith, Staudinger & Baltes, 1991).

Nondefensiveness implies a particular coping style characteristic of wise people. In her review of the literature, Taranto (1989) describes wise people as having a "mature" coping style and defensive structure (e.g., humor, patience, sublimation). Wise people are described as reflective in terms of their coping style rather than avoidant or escapist. The coping style of wise people also has relevance to affect-cognitive integration, discussed above. For example, the defenses of intellectualization, rationalization, and repression essentially disregard affectively toned information thereby impeding affect-cognitive integration. The defenses of projection, reaction formation, and projective identification oppose rationality and would also impede affect-cognitive integration by displacing one's emotional experience onto another and by distorting the affective experience of the self (Edelstein & Noam, 1982). Both defensive structures would, by definition, be associated with a distorted view of the self, the other, and the relationship.

Finally, the association between control beliefs and intelligence may also be different than the association between control beliefs and wisdom. Although an internal locus of control may be associated with better performance on some cognitive tasks (e.g., Lachman, Baltes, Nesselroad & Willis, 1982) a wise perspective has explicitly been

described as an awareness of limitation and the ability to recognize that which one cannot change. These descriptions are not consistent with a high internal locus of control but instead reflect a balance between internal and external control beliefs.

In summary, there are compelling arguments for the association between personality and wisdom which support the distinctiveness of the construct from intelligence. A well integrated personality structure resembles a truly wise perspective on life. In addition, certain types of personality structures may be better able to promote and benefit from life experiences in such a way as to achieve personality integration in later life. The present study will investigate central dimensions of personality which may be particularly conducive to wisdom including openness and extraversion and will assess the coping style and control beliefs of wise people.

Hypothesis #4: Wisdom will be associated with central dimensions of personality.

A) Wisdom will be positively associated with openness, negatively associated with neuroticism and positively associated with extraversion .

B) Reflection will be favoured over avoidance or denial as a coping style by wise people.

C) Wisdom involves an awareness of events beyond as well as within one's control and therefore, will not be associated with high levels of beliefs of internal control .

Gender

It is becoming apparent that the context provided by individual's life history, including personality, health, and many features of the sociological structure of the life course such as education, are important influences on intellectual functioning in late life (Arbuckle, Gold & Andres, 1986). To the extent that gender is associated with opportunities to participate in wisdom-promoting experiences, it is an important variable to consider in models outlining the development of wisdom. The issue is not

whether there are gender differences in wisdom, but what kinds of experiences facilitate the development of wisdom.

This argument is supported by one of the only studies to explicitly examine gender in relation to wisdom by focusing on folk beliefs and the gender of people nominated as wise. Perlmutter, Adams, Nyquist and Kaplan (1988) asked adults ranging in age from 20 to 90 whether wisdom was related to age, gender, and education. While 78% of the sample believed wisdom was related to age and 68% linked wisdom with education, only 16% of the sample believed wisdom was related to gender. The same participants were then asked to nominate the three wisest people they could think of and to indicate the gender, age and education of the nominees. The nominations corresponded closely to participants' beliefs regarding education and age insofar as the nominees tended to be well educated and the average ages of the nominees were 50 and 65 years old for young and old nominators respectively. However there was a marked difference between beliefs and nominations when it came to gender. Although the female nominators nominated more women (40%) than did the male nominators (25%), both male and female nominators nominated significantly more men than women as wise (60% and 75% male nominees for female and male nominators respectively).

The authors interpreted these gender differences as a reflection of wisdom being a socially valued characteristic and therefore stereotypically associated with more males than with females in our culture (Orwoll & Perlmutter, 1990). An alternative interpretation is that the results may reflect gender differences in education and occupational experience which favour men. In support of the latter interpretation, gender has been shown to be related to intellectual performance in old age with males out performing females on Raven's Progressive Matrices and both Verbal and Performance scales of the Weschler Adult Intelligence Scale (Anderson, Berg, Lawenius & Svanborg, 1978; Shanan & Sagiv, 1983). This male advantage is reduced or

eliminated when education and occupational experience are controlled (Berger & Gold, 1979).

Despite this possible male advantage in experience which favours the development of wisdom (which likely will be reduced in more recent cohorts), descriptions of wise people do not tend to be masculine, but instead imply an integration of masculine and feminine characteristics. For example, some characteristics which Holliday and Chandler (1986) identify as being associated with wisdom appear to be stereotypically associated with the feminine gender role (e.g. compassion, sensitivity, humility, intuition) while other characteristics appear more traditionally masculine (e.g., logical and rational, reasoning ability, wide knowledge). Thus wise people are depicted as manifesting both feminine and masculine characteristics. These characteristics reflect a process of healthy differentiation (i.e., autonomy) and mature connection with others (i.e., communion) (Orwoll & Achenbaum, 1993).

Descriptions of wise people which incorporate both feminine and masculine characteristics are consistent with theories which argue for an integration of masculine and feminine aspects of the personality in the development of wisdom. For example, Jung (1971) argued that there is a move towards androgyny in old age which provides a context for personality integration such that men become aware of the feminine components of their psyche and women become more aware of their masculine side. Similarly, Labouvie-Vief (1990) argues that with late life development the concepts of masculine and feminine are reorganized as a hallmark for a period of new growth. Aggressive impulses in men are phased out with the integration of feminine qualities into the structure. Similarly, women integrate the more instrumental side of their personality. This process is thought to result from increased openness to unconscious processes.

Gender integration may promote the acceptance of limitation in wise people (Taranto, 1989). Specifically, wisdom is tested by circumstances in which the individual

has to come to terms with what is changeable and what is not (Birren & Fisher, 1990).

Recognition and acceptance of the limitations is not the same as passivity. It is important not only to be aware of limitations but also to respond to them (Clayton, 1975; Taranto, 1989). Being able to respond to the potentially threatening realities of old age such as physical decline or imminent death implies that wisdom is embedded deeply in the possibilities of everyday life (Taranto, 1989).

To date, there have been no studies in the psychological literature which have explicitly examined whether wise people are less sex typed (i.e., more androgynous) than people who are less wise. Some indirect support can be found in the literature which associates adjustment with an integration of autonomy and communal orientation (e.g., Watson, Biderman, & Boyd, 1989). In addition, gender role integration has been found to be associated with higher levels of ego development (Costos, 1990).

The present study will explicitly examine the association between gender and wisdom and will attempt to establish whether or not wisdom is associated with greater sex-role transcendence (i.e., androgyny). While tendencies to nominate more men than women as wise may reflect social bias, they may also reflect the importance of education and occupational experience in the development of wisdom. Thus the present study will examine gender differences in nominations and will investigate whether gender differences in wisdom are present (after controlling for education). In terms of the hypothesis that wisdom is associated with gender role integration, at least in terms of the capacity for well developed autonomous manner of relating and well developed communal ways of relating, it is predicted that there will be greater gender role integration in both male and female wise people. Finally, current literature on gender role integration suggests that the developmental trajectory of wisdom would be different for wise men and women. For men, wisdom would come with an integration of feminine, expressive dimensions of their personalities while for women, wisdom would be associated with an integration of masculine, instrumental dimensions. Thus, there

may be many paths to wisdom. However, if wisdom represents something akin to a universal construct, the perspectives of wise men and women should converge.

Hypothesis #5: Wisdom will be associated with integrated gender identity

A) Both men and women will be nominated as wise.

B) Nominated men and women will be equally wise when educational experience is controlled.

C) Wisdom will be associated with gender integration in both men and women.

Context

We may be able to identify the attributes associated with wise people, and even to relate these to well known developmental competencies, but still fall short of understanding wisdom. It is fairly reasonable to conclude that the cognitive competencies of relativism and dialectical reasoning as well as the emotional competencies of empathy and affect management, may encourage wise judgement. However, two points need to be made regarding environmental context. First, the perception of an individual as wise depends on the context in which they are embedded (Sternberg, 1990). For example, if the environment values the qualities associated with wisdom, then the wisdom of the person manifesting these qualities will be recognized and encouraged. If, however, the environment is hostile to these qualities, then the person may be perceived as a fool, someone who makes mountains out of mole hills, or as inefficient.

Secondly, given the interpersonal domain in which wisdom operates, it is possible that wisdom itself may not exist outside the context of certain circumstances and interpersonal relationships. Wisdom may be an emerging capacity rather than a trait or an attribute, similar to the processes involved in a clinical therapeutic alliance or relationship. The qualities of a good clinician overlap many of the attributes we

associate with wisdom (e.g., accurate empathy, penetrating insights, self awareness). However, the clinical literature has revealed that the interaction between therapist and client variables must be considered in order to understand the therapeutic process and predict outcome (e.g., Berzins, 1977). Future research is needed to differentiate wisdom as a process from attributes which may facilitate the process.

The present study will investigate the issue of context by examining the relationship between the person who recognizes wisdom in another and the person who is identified or labeled as wise. The relationship will be examined in terms of variables similar to those used to examine the therapeutic relationship, including gender, age, cognitive style and emotional complexity. Assuming that one would be unlikely to identify wisdom in someone who is less cognitively or emotionally mature than oneself, it is predicted that people will nominate others who they admire for their maturity.

Hypothesis #6: Wisdom is manifest in the relationship between individuals.

It is predicted that people will nominate individuals as wise who tend to be more:

A) cognitively complex (i.e., higher cognitive level of development)

B) emotionally complex, and

C) older than themselves.

OBJECTIVES OF THE STUDY

The present study attempted to integrate the literature into a much expanded conceptualization of wisdom relative to current approaches. In addition, the study focused on the functioning and characteristics of *wise people* to illuminate variables which may have been overlooked in the literature. The issues that needed attention included the dynamics between affect, cognitive and social-interpersonal functioning of wise people; the circumstances and factors which encourage the development of wisdom; and the consequences of wisdom in terms of living a wise and meaningful life.

The present study conceptualized wisdom not simply as a form of intelligence or as a cognitive style but instead as a *perspective on life* that can only be developed in a meaningful sense if one has the ability and the time to reflect on experience and the openness to integrate affect with cognition. Such openness implies a mature defensive style. Thus, it was expected that wise people would be motivated to reflect on personal conflicts and biases in the service of understanding, personal growth, and generativity. Wise people would be expected to manifest the cognitive capacity to appreciate the potential validity of multiple points of view and to employ an outlook on life that recognizes the inherent limitations of the self, of others, and the consequent uncertainty in relationships. Limitation, uncertainty and ambiguity would be understood as inherent in life and in relationships which are seen as dynamic and multidetermined.

Acceptance and understanding of the self, especially the limitations of the self and one's more negative aspects, would result in a deeper more genuine connection with others and the potential for an interest in collective, or global values and concerns.

Wise people would also be expected to manifest the interpersonal and communication skills needed to interact and communicate effectively with others.

From this conceptualization of wise people arose six related hypotheses:

Hypothesis#1: Wisdom will be associated with experiences in complex interpersonal problem solving, and situations which require adjustment. This hypothesis was examined in two ways. First, it was predicted that people nominated as wise would tend to come from occupations which fostered interpersonal problem solving and the role of advisor. Second, participants were asked to comment on experiences which they believed to have fostered their development. It was predicted that tragic or affect laden experiences would be emphasized among the events cited as having fostered their personal development.

Hypothesis #2: Wisdom will be associated with advanced cognitive development. Specifically, it was predicted that wisdom would not be compatible with an absolute cognitive style, but would instead be more likely to occur in participants who manifested dialectical reasoning on a measure of cognitive complexity.

Hypothesis #3: Wisdom will be associated with affect-cognitive integration and affect competence. It was predicted that the wisdom criteria including the criteria of affect-cognitive integration would be positively associated with the other six wisdom criteria. It was also predicted that wisdom would be positively associated with performance on a measure of emotional awareness and with a measure of life satisfaction.

Hypothesis #4: Wisdom will be associated with central dimensions of personality. It was predicted that wisdom would be positively associated with the personality dimensions of openness and extraversion and would be negatively associated with neuroticism. Secondly, it was predicted that wisdom would be positively associated with a tendency to use reflection rather than avoidance or distraction as a coping style. Finally, as wisdom involves an awareness and acceptance of things beyond one's control, it was predicted that wisdom would not be associated with high internal control beliefs.

Hypothesis #5: Wisdom will occur in both men and women and will be associated with an integrated gender identity. Three predictions were generated to be tested. First, it was predicted that both men and women would be nominated as wise. Second, it was predicted that nominated men and women would be equally wise when educational experience was controlled. Third, it was predicted that wisdom would be associated with gender integration, as assessed in a measure of gender identity, in both men and women.

Hypothesis #6: Wisdom is manifest in the relationship between individuals. It was predicted that people would nominate individuals as wise who tended to score more

highly on cognitive and emotional complexity than themselves. It was also predicted that people would tend to nominate individuals as wise who were older than themselves.

Wisdom is apparently rare, occurring in approximately five percent of people (Smith & Baltes 1990). Therefore a significant challenge of studying wisdom involved locating a sample with sufficient numbers of wise people to permit the examination of wisdom in relation to a number of other variables. Given that folk approaches have demonstrated that lay people have a well articulated conception of the traits of wise people, it was assumed that lay people would be able to identify prototypically wise people. Thus a nomination approach to sample selection was utilized which recruited individuals who had been nominated as wise by someone who knew them well. This nomination approach had been used by Orwoll and Perlmutter (1990) and Baltes, Staudinger, Maercker and Smith (1995) with some success. It was not assumed that every individual nominated would be a wise person, but rather that this manner of sample selection would increase the probability of including wise people in the investigation.

The second challenge to the empirical investigation of wisdom involved measuring wisdom in a manner that would render it amenable to statistical analyses. The present study quantified wisdom by means of the five theoretical criteria generated by Smith and Baltes (1990) which included factual knowledge, procedural knowledge, life-span contextualism, relativism, and awareness of uncertainty. Two additional criteria (generativity, affect-cognitive integration) were added in line with the expanded framework of the present study and to address the criticism that Baltes' formulation was designed to assess wisdom rather than to identify wise people. These two additional criteria are consistent with other formulations of wisdom (e.g., Erikson, 1959) and have been identified by Baltes (1991) as important factors in the ontogeny of wisdom.

Therefore the inclusion of these two criteria was judged to be compatible with the other five wisdom criteria.

The ultimate challenge to the empirical investigation of wisdom involved developing a methodology capable of relating the more elusive dimensions of wisdom to established measures of psychological functioning. The present study addressed this challenge by developing an integrated quantitative-qualitative approach to data collection which was akin to a clinical psychological assessment. This assessment included standardized measures of intelligence, personality, emotional functioning, control beliefs and life satisfaction. Rather than assessing wisdom by means of presenting participants with hypothetical dilemmas or problems as in previous research, it was thought that much more could be learned by asking participants to discuss issues relevant to their own lives and to comment on the human condition. Thus participants were asked open-ended questions regarding self-perception, critical life experiences, values, and a problem identified as a real life dilemma. Allowing the participants to select a real life dilemma ensured that they were discussing events which were personally meaningful to them. Questions which represented the participants' views on the human condition included asking participants to discuss how they understand gender differences and to discuss their own definition of wisdom. The underlying assumption of this approach was that wisdom would be apparent in both the day to day experience as well as in the critical reflections of wise individuals (Rosel, 1988).

The goal of this integrated quantitative-qualitative approach was to focus on the *whole person* as the means of illuminating the essential nature of wisdom (e.g., Orwoll & Perlmutter, 1990). The advantage of qualitative methodology is that it provided a rich source of information on a number of levels including a demonstration of social competency in how the participant interacted with the interviewer, an indication of emotional competency in the quality and level of affect the participant expressed and

integrated into the discourse, and an indication of cognitive competency in terms of the participants' ability to think through and respond to a number of challenging questions including the definition of wisdom. Disadvantages of this methodology included the large amount of time needed to code and interpret the qualitative data, and the possible influence of verbal expressiveness on the perception of wisdom. Despite these difficulties, gathering qualitative as well as quantitative data offered an opportunity to create an analytical framework which was grounded in the experiences of people labeled as wise and to relate this framework to established measures of psychological functioning. It was hoped that this methodological approach would avoid the problem of the assimilation of the construct and would therefore have the potential to create a truly novel theory of how wisdom is manifest in old age.

Finally, although this study was restricted to examining the wisdom found in an elderly sample of participants, this does not mean that it was assumed that wisdom may only occur in old age. Features of a wise perspective on life may be apparent long before old age as found by Smith and Baltes (1990). The design of the present study precluded investigating questions relevant to the development of wisdom over time. Nonetheless, it was thought that investigating wisdom in an elderly sample would permit a focus on important relationships between wisdom and old age. Specifically, the unique challenges confronting the elderly such as coping with widowhood, chronic illness, and "finding a detached concern for life itself in the face of death itself" (Erikson, 1959) suggest that the wisdom manifest in old people may be linked with what it means to find meaning in life despite, or in the face of, adversity and loss.

METHOD

Participants

In order to increase the probability of interviewing wise individuals, a nomination strategy was utilized to identify people who were considered wise by their peers. Given the influence of social stereotypes and social biases in evaluations of wisdom, an attempt was made to sample nominators from a variety of sources including a large seniors' center, the Mature Students Society of Concordia University, and various local church groups. The study was advertised by the placing of posters at the agencies and, in some cases, giving a short presentation on aging followed by a description of the wisdom study. Individuals interested in the study were asked to nominate the wisest man or woman they knew personally, who lived in the Montreal area.

Approximately 10% of the sample was acquired through these agencies. To reach a larger audience, a short article on wisdom was run in a major Montreal newspaper, describing the study and appealing for nominations (see Appendix A). The response to the newspaper article was impressive with over 50 calls inquiring about the study on the day it appeared. A total of 60% of the sample was obtained through the newspaper responses. The remaining 30% of the participants were located by means of a snowballing procedure whereby participants in the wisdom study or in another Concordia study on aging were asked if they would make a wisdom nomination. This procedure was used until 78 participants had been scheduled for interviewing including 51 women and 27 men (mean age nominees = 69.13 years) nominated by 56 women and 22 men (mean age nominators = 63.8 years).

Screening:

The nominations were screened by the application of four criteria. Participants were restricted to English speaking people (not necessarily as their first language), who were over the age of 60, lived within the Montreal area, and who were not presently living in a long term care institution. No attempt was made to screen nominees in terms of education, gender or health although two people who were deaf and one person who was blind were excluded due to potential difficulties these disabilities would pose for the standard interview and testing session.

Participants were further screened by asking the nominators to describe briefly why they believed their nominee was wise. This question revealed four people who had nominated someone for reasons other than perceived wisdom, such as thinking that the individual may benefit from increased activity or social contact. In cases such as these, the caller was given the telephone numbers of local agencies which provided the services most relevant to their concerns.

Nominees who met the criteria for inclusion in the study were then telephoned, the study was described to them as well as the manner in which they were nominated, and interviews were scheduled with those individuals who were interested in participating. Most of the nominators had asked the nominee's permission to give us their name prior to making the nomination or had notified the nominees. Therefore the majority of the nominees were aware of the study prior to receiving the telephone call. Over 80% of the nominees telephoned agreed to participate. Participants were not paid but received a copy of the results following completion of the study.

Comparison Groups

Participants nominated as wise by others were compared to two groups of participants. The first comparison group consisted of 22 individuals (10 men, 12 women: mean age = 71.9 years) who *nominated themselves* as the wisest person they knew.

Given the departure from the standard nomination procedure these individuals were not classified with the nominated participants, but instead were retained as a comparison group. These 'self-referred' participants provided an opportunity to contrast wisdom perceived in others with wisdom perceived in the self. In addition, one of the key elements of wisdom is an awareness of limitation. A self nomination appears to be inconsistent with such an awareness and therefore may suggest a relative lack of wisdom. It was therefore hypothesized that the self-referred participants would be less wise than the nominated participants. Such a result would support the utility of the nomination strategy for identifying exceptionally wise individuals.

Short interviews were also conducted with a second comparison group, the nominators of the nominees who had agreed to participate. The nominators provided information on their relationship to the nominee, completed the Extended Personal Attributes Questionnaire (E-PAQ), the Social Paradigm Belief Inventory (SPBI), the Levels of Emotional Awareness Scale (LEAS), and a demographic questionnaire. In this way, the nominators served as a yoked comparison group to which the wise group was compared on gender identity, cognitive style (i.e., social paradigm beliefs), and emotional complexity. The nominations were also asked to check wisdom related attributes on an adjective check-list taken from Holliday & Chandler (1986) (see Appendix A).

In total, 148 people participated in the study. 22 self-referred participants, 78 nominated participants, and 78 nominators, 30 of which were also nominees. Due to the snowball sampling procedure discussed above, some of the nominees also nominated someone for the study and therefore were in two groups. The data were therefore coded to indicate whether or not the nominator had previously been a nominee. For the analyses which compared nominees to nominators, the sample was divided to ensure that the groups were mutually exclusive .

Measures

The measures for the wisdom study comprised a subset of measures used for a larger study investigating competency in old age. Several of the measures used for the competency study had no obvious theoretical relation to wisdom and were therefore not examined or included in the analyses. These additional measures included measures which assessed: participation in everyday activities, memory for two prose passages, self efficacy, social support, currently used medication and an illness checklist.

Intelligence

Intelligence was assessed by means of three subtests from the Wechsler Adult Intelligence Scale Revised (WAIS-R) (Wechsler, 1981). The advantage of this test is that norms are available up to age 74, verbal intelligence can be examined separately from nonverbal intelligence, and specific abilities, such as the ability to generate abstract concepts, can be compared with other abilities.

The full WAIS-R consists of six verbal and five performance subtests. Of these 11 subtests, the Vocabulary, Block Design and Similarities subtests were chosen to represent both verbal and nonverbal domains and to allow comparisons with the results of previous research which utilized Vocabulary and Block Design subtests as a short form of the WAIS-R (e.g., Silverstein, 1970, 1967). In addition, reliability tables in the WAIS-R manual were examined and the Vocabulary, Block Design and Similarities subtests were among the subtests with the highest reliability coefficients. Split-half reliability coefficients for the Vocabulary subtest are .96 and .95 for ages 65-69 and 70-74 respectively. For Similarities, these coefficients are .87 and .86, and for Block Design, they are .87 and .84.

WAIS-R Vocabulary:

The Vocabulary subtest assesses language development and understanding of words. It has been shown consistently to be one of the best single measures of "general intelligence", is relatively insensitive to brain injury making it a good indicator of premorbid level of intelligence, and generally does not show age related deficits. Performance on the Vocabulary subtest for ages 65-69 and 70-74 correlates .87 and .84 respectively with Verbal IQ, .69 and .60 with performance IQ, and .84 and .81 with Full Scale IQ.

The Vocabulary subtest involves giving participants a word list and asking them to define up to 35 words read aloud by the examiner. Responses are recorded verbatim and scored according to explicit scoring principles in the WAIS-R manual. Definitions which earn two points tend to be more abstract such as a good synonym, a major use, or a general classification to which the word belongs. One-point responses are generally correct but show a poverty of content. Zero point responses are incorrect. A maximum of 70 points may be earned on this subtest.

WAIS-R Block Design:

The Block Design subtest is a measure of nonverbal problem solving, which requires the skills of analysis and synthesis, visualization of part-whole relationships and visual motor integration. It is considered to be one of the best estimates of "g" and is sensitive to organic impairment. Performance on the Block Design Subtest for ages 65-69 and 70-74 correlates .61 and .63 respectively with Verbal IQ, .73 and .74 with performance IQ, and .69 and .72 with Full Scale IQ.

The Block Design subtest involves showing the participant a design and asking him or her to construct the design using a series of coloured blocks. There are nine designs which are presented in order of increasing difficulty. A design is failed if it does

not exactly match the card or if it is not completed within a specified time limit. Bonus points are awarded for correct productions which are done quickly. A maximum of 51 points may be earned on this subtest.

WAIS-R Similarities:

The Similarities subtest measures the ability to see relationships, verbal conceptual information, and the capacity for abstract thinking. Performance on the Similarities subtest for ages 65-69 and 70-74 correlates .79 and .73 respectively with Verbal IQ, .70 and .63 with performance IQ, and .80 and .76 with Full Scale IQ.

The Similarities subtest involves asking the participant to specify how two objects are alike. The similarities between the objects become increasingly more abstract as the test progresses (e.g., from banana-orange to fly-tree). Responses for each of the 14 items are recorded verbatim and are scored according to criteria specified in the manual. Two-point answers include general classifications which are a primary pertinent to the pair. One-point answers include a specific common property to the pair. Zero-point answers specify properties of each or focus on differences. A maximum of 28 points may be earned on this subtest.

Cognitive style: Paradigm Beliefs

Cognitive style was assessed using the short form of the *Social Paradigm Belief Inventory* (SPBI) (Kramer, Kahlbaugh, & Goldston, 1992). The SPBI short form is a nine item forced-choice preference instrument which assesses absolute, relativistic and dialectical beliefs. Many of the items were derived from interview responses in prior research (Kramer & Woodruff, 1986). Each item contains an absolute, relativistic and dialectical statement referring to a wide range of content areas including intrapersonal, interpersonal, and societal issues, the causes of behaviour, nature of personal growth, source of romantic attraction, marital success, job success, and the nature of social

deviance. The statements within each item are comparable in terms of format and length. Responses are weighted such that absolute choices earn one point, relativistic choices earn two points and dialectical choices earn three points. Scores are summed across the nine items to yield a maximum total of 27 points. In addition, participants may be given a score for the number of absolute items chosen, the number of relativistic choices, and the number of dialectical choices.

The SPBI (long form) has good reliability, with internal consistencies of .60, .83, and .84 for absolute, relativistic, and dialectical beliefs respectively. Test-retest correlations over a two week period are .77 for the total score, .82 for the number of absolute items chosen, .83 for the number of relativistic items chosen, and .78 for the number of dialectical items chosen.

In terms of validity, the scale correlates with in-depth interviews of reasoning assumptions ($r = .42$) suggesting that the scale is assessing beliefs similar to those in the interview. For example, in terms of beliefs about change, the belief of stability as a primary feature of reality would be characteristic of the absolute style, the belief that change is an inherent feature of life would be characteristic of relativistic style, and the belief that change involves a developmental process would be characteristic of a dialectical style (Kramer et al., 1992). Discriminant validity has been demonstrated by examining relations with personality-attitudinal measures, including intolerance of ambiguity ($r = -.14$; $p > .05$), social desirability ($r = -.06$; $p > .05$), social dogmatism ($r = -.17$; $p > .05$), and verbal intelligence as measured by the WAIS-R vocabulary subtest ($r = .02$; $p > .05$), (Kramer et al. 1992). The scale shows convergent validity with other paradigm inventories including Organism-Mechanism Paradigm inventory (OMPI; Germer, Efran, & Overton, 1982) which forces participants to choose between organismic and mechanistic statements, and The World Hypothesis Scale (WHS; Harris, Fontuna & Dowds, 1977), which has participants rank order four statements, which reflect Pepper's four world views: formism and mechanism, which correspond to Kramer's absolute

statements, contextualism which corresponds to Kramer's relativistic items, and organism, which corresponds to Kramer's dialectical items. People with high scores on the SPBI score more highly on the OMPI ($r = .33$; $p < .01$); and have lower formistic ($r = -.31$; $p < .01$) and lower mechanistic ($r = -.35$; $p < .01$) and higher contextualism scores ($r = .40$; $p < .001$) on the WHS (Kramer et al. 1992).

Emotional Complexity

An independent measure of the organization of emotional experience was based on the Levels of Emotional Awareness Scale (LEAS) (Lane & Schwartz, 1987). The scale asks the participant to describe how the self and another person would feel in response to 10 evocative interpersonal situations which are scored by means of specific structural criteria. Each scenario is constructed to elicit the emotions of anger, fear, happiness or sadness in either or both characters which are scored according to five levels of increasing complexity. Each response for a particular scenario is scored independently.

Inter-rater reliability and intra-test homogeneity of the LEAS are strong (intraclass $r(20) = 0.81$, Chronbach's Alpha = 0.81, $N = 35$) (Lane et al., 1990). The LEAS correlates significantly with the Washington University Sentence Completion Test of Ego Development ($r(39) = 0.40$), the Openness to Experience Scale total score ($r(38) = 0.33$) and Values subscale ($r = 0.37$), but not with the other subscales. It does not correlate significantly with scores on the Differential Emotions Scale, or the Taylor Manifest Anxiety scale, suggesting that the LEAS measures the developmental level of emotional complexity rather than the specific qualities of emotion tapped by these scales. Of particular interest to this investigation are the self/other subscales of the LEAS which permit level of empathy (i.e., awareness of the emotions of others) to be scored separately from level of self-emotional awareness.

Gender Identity

The extended form of the Personal Attributes Questionnaire (E-PAQ) (Spence & Helmreich, 1978) was used to measure gender identity. This scale consists of 40, five point bipolar items describing personal characteristics on which the participants are asked to rate themselves. The scale is divided into four eight item subscales measuring desirable masculinity (M+) desirable femininity (F+) desirable masculinity-femininity (M-F+), undesirable masculinity (M-), and two four item subscales measuring undesirable femininity (F_{C-}) and (F_{Vd-}). This conceptualization of gender construes masculinity and femininity as two independent dimensions such that individuals of either sex can be highly masculine-agentic, highly feminine-communal, or androgynous (i.e., both agentic and communal in orientation).

The M and M-F subscales are scored in a masculine direction while the F subscales are scored in a feminine direction. Higher scores represent more frequent endorsement of feminine or masculine items. The range of possible values for the M+, F+, and M- subscales is 0-32 and the range of possible values for the F_{C-} and F_{Vd-} subscales is 0-16. The undesirable M-, F_{C-} and F_{Vd-} , reflect sex-typed characteristics that are judged to be undesirable in members of either sex. M- items refer to 'unmitigated agency' and include items such as hostile, arrogant, and boastful. The F_{C-} items reflect 'unmitigated communion' and include items such as spineless, servile and gullible. The F_{Vd-} items reflect 'verbal passive-aggressiveness' and include items such as whiny, complaining, and fussy.

Test-retest reliability on the PAQ is $r = .92$ for men and $r = .98$ for women. Scores are essentially orthogonal to intelligence (correlations with Scholastic Aptitude Test range from .02 to -.12, Spence, Helmreich, & Stapp, 1975). All three positive scales, in particular M+, are positively related to self esteem, while both F- scales are negatively related to self esteem in both sexes (Spence, Helmreich, & Holahan, 1979). Substantial

negative correlations have been found between neuroticism and M+ and M-F+ while all three negative scales are positively correlated with neuroticism, particularly F_{VA-} (Spence et al., 1979). In both sexes, acting out is associated with M- and with F_{VA-} .

Personality

Personality traits were assessed by the short form of the NEO Personality Inventory (Costa, & McCrae, 1985). The scale consists of 60 items on a five point scale, is self administered, and has been researched and validated on samples of men and women from the full adult age range. This inventory provides a concise measure of Neuroticism (N), Extroversion (E), Openness to experience (O), Agreeableness (A), and Conscientiousness (C), with the first three subscales of most interest to wisdom.

The Neuroticism subscale contrasts emotional stability with maladjustment in the domains of anxiety, hostility, depression, self-consciousness, impulsiveness, and vulnerability. Individuals who score highly on this subscale are more likely to experience emotional distress, to be prone to unrealistic ideas and to cope less well with stress. The Extroversion subscale measures sociability in the domains of warmth, gregariousness, assertiveness, activity, and excitement-seeking. High scorers tend to be upbeat, likable and cheerful in disposition. Low scorers are more reserved, independent and prefer solitude. The Openness to experience subscale is comprised of the domains of fantasy, aesthetics, feelings, actions, ideas and values. Individuals who score highly on this subscale are curious about both inner and outer worlds, entertain novel ideas and unconventional values, and experience both positive and negative emotions keenly.

Internal consistency coefficients for the overall, N, E, and O scales range from .85 to .93. and six month retest reliabilities range from .66 to .92 for a sample of men and women aged 17-78. Item scoring of the NEO is balanced to control for acquiescence and socially desirable responding does not appear to bias the scores (McCrae &

Costa, 1983). A third person form of the scale has been administered to spouses and has been shown to have comparable reliability and validity (McCrae, 1982).

In terms of validity, correlations of the NEO-N subscale and the Eysenck Personality Inventory-N subscale range from $r = .44$ to $r = .75$., the NEO-E and EPI-E subscales range from $r = .35$ to $r = .69$. None of the Eysenck subscales correlate with the Openness to experience subscale suggesting that O measures a dimension not present in the EPI. Correlations between comparable subscales of the NEO PI subscales and the subscales of the Guilford-Zimmerman Temperament Survey range from $r = .30$ to $r = .60$. Finally, Openness to experience scores are correlated with ego development level on the Washington University Sentence Completion Task ($r = .66$).

Life Satisfaction

The Memorial University of Newfoundland's Scale of Happiness (MUNSH) was used as a measure of life satisfaction. The 24 item scale includes 10 questions assessing affect in the past year and 14 questions which inquire how the person feels more generally. The scale is constructed to balance positive with negative affective experiences. All questions are answered True or False. Happiness scores are calculated by subtracting negative experiences from positive experiences.

The MUNSH was constructed by presenting 301 elderly participants with selected items from the Affect Balance Scale, the Life Satisfaction Index-Z, and the Philadelphia Geriatric Center Scale as well as 22 new items. Their responses were then correlated with self-appraisal (i.e., avowed ratings of happiness). Only items that displayed a high degree of relationship were retained for inclusion in the final scale. The resulting 24 item scale was then cross validated on an additional sample of 297 elderly participants. Fifty-six of these participants completed the scale a second time to check reliability. Internal consistency of the MUNSH is high (alpha coefficient = .86). Correlations between the

MUNSH and the cross validation sample's self avowed happiness ratings ranged from .90 to .93. Tests retest reliability after an interval of six months to one year was .70.

Coping Style

The measure of coping was taken from Conway, Giannopoulos & Stiefenhofer (1990). The coping questionnaire is a 12 item inventory which lists various means of reacting to sadness. Each item is rated in terms of self description on a seven point scale ranging from *never* (1) to *almost always* (7). The inventory is divided into three main subscales; rumination/reflection, avoidance, and distraction. Reflection items refer to expressing or thinking about sadness such as "I talk to others about my feelings". Avoidance items refer to attempting to ignore the problem. Distraction items refer to the alleviation of sadness by means of engaging in pleasurable activities.

Conway, Giannopoulos & Stiefenhofer (1990) reported that higher femininity scores on the Bem Sex Role Inventory were associated with more reflection on the coping questionnaire, while higher masculinity scores on the BSRI were associated with more distraction. Avoidance was not significantly related to sex-role scores.

Desired Control

The short form of the Desired Control Measure (Reid & Ziegler, 1981) was administered to assess the degree to which participants felt in control of significant events in their lives. The scale was based on the premise that the degree to which elderly individuals feel in control of desirable events is a central factor affecting their general sense of well-being. The items for the original form of the scale were derived from open ended semi-structured interviews of 143 elderly persons designed to assess factors contributing to their happiness, contentment, and adjustment (Reid & Ziegler, 1977). The resulting questionnaire that was subsequently developed included a 35 item scale to assess the degree to which an individual desires particular reinforcers (Desire

subscale) as well as 35 parallel items which assessed the degree to which the individual believes she or he can obtain these reinforcers (Belief subscale). The 16 item short form of the Desired Control scale included the items which had high item total correlations with the long form of the scale and as a group were representative of reinforcers found in the original survey.

The Desired Control short form had high test-retest correlations over one year ($r = .81$) (Gold, Andres, Etizadi, Arbuckle, Schwortynes & Chaikelson, in press). Internal consistency of the short form of the scale was .73 (Chronbach's alpha). Internal consistency for the short form Desire and the Belief subscales were .74 and .69 respectively. Significant positive correlations have been reported between the Desired Control short form, intellectual activities, and adult verbal intelligence scores and significant negative correlations between Desired Control and neuroticism scores (Gold et. al.).

Wisdom Qualitative Interview Schedule

The Wisdom Qualitative Interview Schedule (WQIS) is a series of open-ended items which included a subset of questions used by Belenky, Clinchy, Goldberger, & Tarule (1986), judged to be most pertinent to the construct of wisdom (see Appendix A). The interview was designed to facilitate flexibility in exploring the world view of the participants and allow the participants to express themselves in their own terms within the structure of the interview. Thus, although a standard set of questions was given to all participants to facilitate comparisons across interviews, participants had a great deal of freedom in how they chose to express themselves. For example, one of the questions asked the participants to discuss a real life dilemma. Allowing the participants to select the dilemma ensured that they were able to discuss events which were personally meaningful to them. Nondirective probes such as "Tell me about that," or "Can you

explain what you mean?" were used to clarify the meaning whenever responses appeared ambiguous. The WQIS included seven main categories of inquiry.

First, to gain a better understanding of the social context in which wisdom was perceived, nominated participants were asked, "Why do you think ____ nominated you as a wise person?" All remaining questions were identical for nominated and self-referred participants.

The second section was designed to develop a 'picture' of the participants and to engage them in the interview by asking them to reflect about their lives and themselves. The complexity and content of the participant's self concept was assessed by means of the questions, "Tell me about yourself. What kind of person are you?"

Self-perceived change and the life circumstances under which change was perceived to occur were assessed by means of the questions, "Has your sense of yourself changed?" and "What were the major turning points in your life?"

The fourth section of the interview focused on values and asked "What is most important to you?" and "What do you care about and think about?"

The answers to the remaining three sections of the WQIS were rated in terms of the seven theoretical dimensions of wisdom (i.e., factual knowledge, procedural knowledge, life-span contextualism, relativism, awareness of uncertainty, generativity, affect-cognitive integration). The first section asked participants to select and discuss an important dilemma that they had been faced with in their lives. Following their discussion of the dilemma, several probes to gain specific information were asked including: "When did this occur?", "What was the conflict for you in this situation?" and "Do you think you handled it wisely?" The real life dilemma was selected to examine what participants perceived to have been critical life situations. This section was expected to tap into the dimensions of procedural knowledge, factual knowledge, awareness of uncertainty, and affect-cognitive integration.

The second section to be rated focused on the participants' gender identity and their conceptions of gender. Participants were asked, "Do you think there are important character or psychological differences between men and women?" and "Do you see yourself as more masculine or more feminine?" These questions were selected for ratings because gender was thought to be a subject for which all participants would have a knowledge base from which to draw their answers. In addition, the question's social and political implications were expected to tap into the dimensions of relativism, awareness of uncertainty and life span contextualism.

The final section to be rated focused on the way participants conceived of wisdom and wise people. Participants were asked, "What do you think wisdom is?", "How does a person become wise?", "Do emotions have a place in wisdom?", and "How does this way of looking at things affect the way you live your life?" Besides affording a means to examine folk conceptions of wisdom, the wisdom section was expected to tap into all seven of the wisdom dimensions. At the end of the interview, participants were asked if there were any additional issues they felt were important to understand wisdom.

Interview Format and Assessment Procedures

All the nominated and self-referred participants were interviewed by either the author (T. L.) or a female research assistant (H. F.) who had been trained in techniques of interviewing and test administration. Both interviewers completed five pilot sessions in order to practice administration. The fifth pilot interview was viewed through a two-way mirror by the study's research coordinator (M. R.) who gave feedback regarding interview style and test administration. In addition, both interviewers periodically viewed each other's sessions and gave each other feedback regarding deviations from standard administration in order to maintain as much similarity to each other as possible.

The interviews themselves were conducted in the homes of the participants or at the university laboratory depending upon the participants' preferences. Due to budget constraints and the amount of time necessary to conduct home visits, the research assistant conducted only two of the 13 home visits. Nominated and self-referred participants were interviewed in two separate sessions.

Session I:

The first session consisted of a structured individual interview designed to yield an in-depth description of the participants using a clinical assessment format. First, the interview and videotaping procedures were described to the participants and their informed consent was obtained. A structured history was then taken which focused on demographics, education and employment experiences. Following this structured history, an assessment was made of the kinds and frequencies of activities in which the participant was involved as well as a memory test. These data were collected for the purpose of the larger study and were excluded from analysis in this study. The participants completed a measure of self-perceived health and then the WAIS-R Vocabulary, Block Design and Similarities subsets were administered. In total, this section of the interview took an average of 90 minutes. The participants were then given a 10 minute break. Following the break, the Wisdom Qualitative Interview Schedule was administered. Responses to this section were videotaped. The 10 items from the Level Of Emotional Awareness Scale were then administered and the responses audiotaped. Upon completion of the first session, a second session was scheduled and participants were given a record sheet to list their medications (not analysed in this study). In total, the first session lasted approximately two and one half hours. In cases where the participant was noticeably fatigued, or on request, some of the measures were postponed until the second session.

After the participant had left, interviewers completed a series of ratings concerning the participant's interview behaviour (e.g., cooperativeness, sense of

humour) as well as their reaction to the participant (e.g., level of comfort) and the perceived wisdom of the participant. Any difficulties that the participant had, such as fatigue, hearing problems, or unusual occurrences, were noted.

Session II:

In the second session, participants completed a number of self report measures either by themselves or in small groups of 3-6. These measures included the Seriousness of Illness scale, Social Support, a measure of self esteem and mastery, Desire and Belief Scale, E-PAQ, the NEO personality inventory (short form), a coping questionnaire, the SPBI short form, and the MUNSH. The first three measures were collected for the larger study and were not analysed in the present study. Participants were then asked whether or not they wished to nominate someone else for the study and were asked for general comments and suggestions.

The order of testing and the format for both group and individual sessions was essentially identical. All self report inventories included standard instructions which the interviewer read aloud. While participants in groups were completing these measures, the interviewer circulated around the room answering questions and ensuring that the instructions were being followed correctly. As each participant finished, the questionnaires were collected and examined to ensure that no items or pages had been omitted.

When all participants had finished, the author initiated and led a group discussion on what it was like to participate in the study and the group discussed more specific issues regarding wisdom. Table 1 summarizes the interview format as well as the average times required to complete each test of sessions I and II.

Table 1
Order and Duration of Tests & Measures

Tests/Measures	Duration (minutes)
Session #1 (total duration =147 minutes)	
1. Demographics	13
2. Occupational history	14
3. Everyday activities*	22
4. Prose memory*	12
5. Health i) Tri-scale	1
6. WAIS-R: Vocabulary, Block Design, Similarities	30
BREAK	10
7. Wisdom qualitative interview	30
8. Emotional Awareness Scale	14
9. Medications (take home) *	1
Session #2 (total duration = 66 minutes)	
1. Health ii) Seriousness of illness*	2
2. Social support*	5
3. Self*	4
4. Desire and Belief	8
5. Gender Identity (E-PAQ)	6
6. Personality (NEO)	10
7. Coping Questionnaire	4
8. Social Paradigm Belief Inventory (SPBI)	13
9. Memorial University of Newfoundland Scale of Happiness (MUNSH)	4
10. Nomination form & Comments	10

Note. * Competency measures administered but not used for the Wisdom study

Inter-rater Reliability

Wisdom Ratings:

The wisdom scores were comprised of ratings for each of the five wisdom criteria proposed by Smith & Baltes (1990) (i.e., factual knowledge, procedural knowledge, life-span contextualism, relativism, awareness of uncertainty). In addition to these five wisdom criteria, two criteria to reflect the character structure of wise people were added which roughly corresponded to the final life stage achievements of generativity and ego integrity proposed by Erikson (1959). Generativity was conceptualized in terms of involvement with growth promoting activities and relationships such as parenting, teaching, and counselling. Clear evidence was needed that participation in these activities was motivated by a wish to pass on one's knowledge for the benefit of others in order for an activity to be scored as generative. Ego integrity was operationalized as affect-cognitive integration and was scored in terms of the presence and quality of affect. Further clear evidence was needed indicating that the individual was not in a state of despair, but had come to terms with and resolved fundamental emotional conflicts. The final set of seven criteria yielded what seemed to be a reasonable degree of precision and comprehensiveness in the operationalization of wisdom.

These seven criteria were applied to the gender question, to the real life dilemma question, and to the wisdom question. Three points represented 'ideal' responses which clearly exemplified the meaning of a particular dimension. Two points were awarded to 'moderately developed responses, one point to responses which were 'marginally' developed, and zero points to responses which did not contain the required concept. Each of these was defined in the scoring manual (see Appendix B). In addition to listing the criteria which needed to be present in the ideal response, the manual listed several cues in the protocol which would correspond to the dimension,

such as discussion of "how to do things" under the dimension of 'procedural knowledge'.

Several steps were undertaken to enhance inter rater reliability of the wisdom interview and to refine the scoring manual. First, both interviewers watched three of the 10 pilot interviews, and scored the interviews using the criteria for scoring listed in the manual. Initially, there were large discrepancies in the ratings, particularly along the dimensions of 'relativism' and 'awareness of uncertainty' ($r_{\text{initial}} = .50$). For dimensions which were inconsistent, the cause of the discrepancy in relation to the intended meaning of the dimension was discussed and any ambiguities in the manual were revised. This procedure resulted in several revisions to the manual including incorporating more explicit criteria corresponding to 'ideal' responses on which to anchor the ratings.

A second round of ratings on three different interviews was then completed. Inter-rater reliability for the seven wisdom dimensions rose to $r = .77$ on this round. As in the first round of scoring, the discrepant ratings were discussed until a consensus was reached and the manual was revised. The second set of revisions added a set of cues or key words in responses which should draw attention to a specific dimension or concept. For example, the key words 'only my opinion', or 'others may disagree' were interpreted to indicate the presence of relativism in the response.

On round three, the remaining four pilot interviews were double rated and inter-rater reliability rose to $r = .94$. This level was judged adequate to begin rating the videotapes independently. To prevent rater drift, after every three-four separate rating sessions, the two raters rated a video together and discussed discrepant ratings as in the previous three rounds of training.

While every attempt was made to specify qualities which were required for ideal, moderate or poor response levels, particular responses sometimes appeared to fall midway between two levels. A procedure was followed whereby if borderline

scores were perceived on a dimension, an attempt was made to score in the opposite direction for the next item in which a borderline score occurred for that participant. For example, if raters were uncertain whether to award the gender question's contextualism score a three or a two, they might choose a two but on the next borderline question for that participant they would score upwards. Preference was given to balancing the scores within the particular dimensions, but care was also taken that the total number of scores scored upwards and downwards were balanced across the interview as a whole.

As a final check of inter-rater reliability of the wisdom scores, 25% of the sample was independently scored by both raters. Inter-rater reliability for the wisdom scores was high for all of the dimensions ranging from $r = .92$ on awareness of uncertainty to $.98$ on affect integration. Inter-rater reliability for the total wisdom score was $.99$.

Interviewer Ratings:

In order to quantify a number of qualities and behaviours that the participant exhibited across the two-three hours of interaction with the interviewer, interviewers completed a series of nine seven-point ratings immediately following session 1. These post-interview ratings focused primarily on the social competency and perceived wisdom of the participant (see Appendix A). Items included the ease with which the participant responded to the questions, cooperativeness, expressiveness, warmth, how comfortable the interviewer felt with the participant, sense of humour, reflectiveness, openness and perceived wisdom.

To examine inter-rater reliability of the post interview ratings, 25% of the sample were independently scored by both the interviewer and by the second rater who viewed the videotaped portion of the interview. Inter-rater reliability for the nine items was variable ranging from $r = .39$ on 'openness' to $.81$ on 'perceived wisdom' (see Table 3).

Table 2
Inter-rater Reliability for Wisdom Dimensions and Total Wisdom Score (n = 25)

<u>Dimension</u>	<u>Correlation</u>
Factual knowledge	.95*
Procedural knowledge	.96*
Life-span contextualism	.95*
Relativism	.95*
Awareness of uncertainty	.92*
Generativity	.94*
Affect integration	.98*
Total wisdom	.99*

* $p < .001$

Table 3
Inter-rater Reliability for Post Interview Ratings (n = 25)

<u>Item</u>	<u>Correlation</u>
Difficulty responding	.58**
Cooperativeness	.62***
Expressiveness	.54**
Insight/reflectiveness	.75***
Openness	.39
Warmth/friendliness	.57**
Interviewer comfort	.63***
Sense of humour	.74***
Perceived wisdom	.82***
Total post-interview rating	.75***

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

Levels of Emotional Awareness Ratings:

The audiotaped responses to the Levels of Emotional Awareness Scale (LEAS) were scored by the rater who had not interviewed the participant and therefore was unaware of his or her responses in the wisdom qualitative interview schedule. The tapes were scored following the standard criteria and glossary provided in the manual (Lane & Schwartz, 1987) (see Appendix B). Specifically, each response was rated in terms of five levels of emotional awareness. The first level, scored as level 0, reflected no response or a description of a cognitive state rather than an emotion (e.g., confused). Level one responses reflected either an explicit statement that the person would not feel anything or responses describing any bodily sensation. Level two responses involved emotions which were nonspecific in nature or action tendencies. Level three responses reflected emotions with well differentiated connotations, words that conveyed an exchange of emotion, or a single complex emotion. Level four responses reflected the use of more than one complex emotion such as opposing emotions, quantitatively distinct emotions, or in cases where different reasons were given for the same emotion. Level five responses were given only if both the self rating and the other rating each met level four criterion and the reaction of the self and the other was clearly differentiated. For cases where the appropriate level was ambiguous, as when the word the participant used was not listed in the manual, the response was discussed with the second interviewer until a consensus was reached, and then the word was added to the glossary for future reference.

To examine inter-rater reliability of the LEAS scores, 25% of the sample was independently scored by both the rater and the interviewer. Inter-rater reliability for the LEAS scores was high for all of the scales: $r = .96$ for the "awareness of the emotions of others"; $r = .98$ for "awareness of emotions of the self"; $r = .99$ for "total emotional awareness score".

RESULTS

The results of this investigation will be presented in three sections. In the first section, the statistical associations between the quantitative data and wisdom scores will be presented to examine the validity of the wisdom measure, the utility of the nomination procedure, and to test the main hypotheses of the study. In the second section, the content analysis of the qualitative data will be presented in order to provide a detailed description of the range of responses to the Wisdom Qualitative Interview Schedule in relation to nomination status and gender. The final section will involve a qualitative interpretation of a select subsample of ten individuals who scored highest on the wisdom criteria.

Section I Quantitative Analyses

Preliminary Analyses

Description of Sample

The sample included three groups; nominees ($N = 78$), nominators ($N = 78$) and self-referred participants ($N = 22$). The majority of participants in the nominator and nominee groups were women with a gender ratio of approximately 2:1 for nominees and 5:2 for nominators prevailing (see Table 4). There were approximately equal numbers of men and women in the self-referred group. Average ages of the three groups were 69, 72, and 64 for nominees, self-referred and nominators respectively. All three groups tended to be well educated. The average level of education for both nominators and nominees was a Bachelor or equivalent undergraduate degree. The average level of education for the self-referred participants was "some post high school college courses".

Table 4
Demographic data on Nominators, Nominees, and Self-referred Participants

	Nominators	Nominees	Self-referred
n	78	78	22
Age			
<u>M</u>	63.8	69.13	71.90
<u>SD</u>	(10.6)	(8.48)	(6.41)
Sex (%)			
Male	28.2	34.2	45.5
Female	71.8	65.8	54.5
Education ^a			
<u>M</u>	3.90	3.72	2.90
<u>SD</u>	(1.24)	(1.37)	(1.41)
Education Categories (%) ^b			
Elementary	1.3	8.2	19.0
High School	15.4	13.4	23.8
Some college	11.5	23.7	19.0
Bachelor	37.2	19.6	14.3
Master	26.9	27.8	23.8
Doctorate	7.7	7.2	-

^a 1=elementary, 2=high school, 3=some college education, 4=Bachelor degree, 5=Master, 6=Ph.D.

^b values reflect percent of participants in each educational category

Table 5
Percent Self-referred, Nominated, Male, and Female Participants by Marital Status (n = 100)

	Single	Married	Cohabiting	Separated	Divorced	Widowed
Nomination Status						
Self-referred	9.1	36.4	4.5	-	9.1	40.9
n	2	8	1		2	9
Nominated	6.4	59.0	-	3.8	5.1	25.6
n	5	46		3	4	20
Gender						
Male	2.7	86.5	2.7	-	-	8.1
n	1	32	1			3
Female	9.5	34.9	-	4.8	9.5	41.3
n	6	22		3	6	26

Nominees and self-referred participants did not significantly differ in terms of gender ($\chi^2(1) = .98, p > .05$), age ($F(1, 96) = 1.55, p > .05$), education ($\chi^2(5) = 7.66, p > .05$) or marital status ($\chi^2(5) = 8.02, p > .05$) (see Table 5). However, when marital status was examined in relation to gender, significantly more men than women were married while significantly more women than men were widowed ($\chi^2(5) = 28.86, p < .0001$).

Table 6 depicts the percent of nominated and self-referred participants in various occupational categories. The most frequent occupation for nominees was that of educator, for preschool school children to university students. A number of other occupations requiring interpersonal skills were represented in the sample including managers, secretaries, homemakers, ministers and counselors. Less frequent categories for nominees were skilled labour such as seamstress or tailor, technical trades such as electrician, and engineers, although some of these categories were highly represented in the self-referred group.

In general, people nominated others whom they had known for a very long time. The mean number of years nominators had known their nominees was 23.06 ($SD = 16.10$). There was no significant difference between the number of years nominators had known female compared to male nominees. Nominators were significantly more likely to make same sex than other sex nominations ($\chi^2(1) = 17.86, p < .001$). Eighty percent of the female nominators nominated women while seventy-one percent of the male nominators nominated men. The majority of nominators described the nominee as a friend or a coworker. These categories held for both male and female nominees (see Table 7). Less frequent relationships included two people who nominated their mothers, six people who nominated a spouse, and five people who nominated a minister or teacher.

Table 6
Percent of Nominated and Self-referred Participants in Various Occupations

	Nominees		Self-referred	
	%	n	%	n
Educator	26.0	(20)	14.3	(3)
Manager	13.0	(10)	9.5	(2)
Secretary	11.7	(9)	4.8	(1)
Homemaker	7.8	(6)	4.8	(1)
Minister	5.2	(4)	-	(0)
Sales	5.2	(4)	9.5	(2)
Counselor	5.2	(4)	9.5	(2)
Social activist	5.2	(4)	-	(0)
Business	3.9	(3)	-	(0)
Researcher	3.9	(3)	-	(0)
Medicine	3.9	(3)	-	(0)
Artist	2.6	(2)	-	(0)
Engineer	2.6	(2)	14.3	(3)
Skilled labour	2.6	(2)	28.6	(6)
Technician	1.3	(1)	-	(0)
Civil servant	1.3	(1)	4.8	(1)

Table 7
Percent of Nominated Men and Women by Relationship with Nominator

Relationship to Nominator	Nominee Sex	
	Men	Women
Parent	-	3.9
n		2
Spouse	14.8	3.9
n	4	2
Minister or Teacher	11.1	3.9
n	3	2
Friend	55.2	70.6
n	15	36
Coworker	18.5	17.6
n	5	9

Note. $\chi^2(4)=5.82, p>.05$

Data Screening

A check for accuracy of data input was taken prior to the major analyses by means of various SPSSx programs. All quantitative data were examined for data entry errors, missing values, and fit between their distributions and the assumptions of multivariate analysis (i.e., normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, multicollinearity and singularity). The data were examined separately for the 78 nominees and 22 self-referred participants.

Missing Data:

A total of seven participants were telephoned and queried regarding items with missing data. One case in the nominated group was missing data on over half of the measures and was deleted from subsequent analyses. Another nominated case was missing data on the wisdom questions as well as block design, and had an extremely low z score on vocabulary. It was discovered that this person had recently suffered a stroke which severely impaired her verbal expressiveness and likely compromised the validity of the self report measures. Therefore this case was deleted from subsequent analyses leaving a total of 22 self-referred and 76 nominated participants for analysis.

Outliers:

Within the nominated group, two cases with extremely low z scores on vocabulary, two cases with extremely low z scores on life satisfaction/positive affect, two cases with high z scores on life dissatisfaction/negative affect, one case with an extremely high z score and another with an extremely low z score on the Belief scale of the Desire and Belief measure, were found to be univariate outliers. Because there was no apparent pattern to the outliers, the sample size was small, and the distributions for these variables were relatively normal except for the extreme scores, it was decided to retain the cases and assign each outlying case a raw score on the outlying variable

which was one unit larger or smaller than the next most extreme score in the distribution as recommended by Tabachnick and Fidell (1989).

Within the self-referred group, one case with an extremely low z score on openness and similarities, one with an extremely low z score on negative affect (MUNSH), and one case with an extremely low z score on self-perceived health were found to be univariate outliers. Again, because there was no apparent pattern to these scores, the sample size was small, and the distributions were relatively normal otherwise, it was decided to replace them with raw scores which were one unit larger or smaller than the next most extreme score in the distribution. This procedure substantially improved normality for all relevant variables. There were no multivariate outliers identified through the Mahalanobis procedure with $p < .001$ within either of the groups.

Linearity:

Pairwise linearity was checked using within-group scatterplots and found to be satisfactory. Examination of the shape of the distributions revealed only one variable, negative affect on the MUNSH scale was positively skewed. As MANOVA is robust to moderate violations of normality as long as the violation is caused by skewness rather than outliers, a decision was made not to transform this variable to facilitate interpretation of the data.

Measurement of Wisdom

Three of the qualitative questions, the gender question, the real life dilemma and the wisdom question, were rated in terms of 4 point scales for each of the seven wisdom criteria (i.e., 1) factual knowledge; 2) procedural knowledge; 3) life-span contextualism; 4) relativism; 5) awareness of uncertainty; 6) generativity and 7) affect-cognitive integration). The wisdom scores were examined in terms of the total wisdom score across questions and across dimensions (range, 0-63) and in terms of the total wisdom score across dimensions for each question separately (range, 0-21) .

In general, the obtained wisdom scores were low relative to the potential that the participants could have obtained. The highest wisdom score obtained was 32/63 which represents 51% of the potential wisdom score. All but one of the top 20 wisdom scores came from nominated participants (see Figure 1 and Appendix C). Eight of these top scores were from male participants (seven nominees, one self-referred) while the remaining twelve top scores were generated by female nominees. The scores for nominated participants ranged from 5 to 32. Nineteen of the 76 nominated participants obtained wisdom scores greater than 20 (i.e., 25%), and twelve nominated participants scored less than or equal to 10 (i.e., 16%). Self-referred participants' wisdom scores ranged from 3 to 24, however, all but one of the wisdom scores obtained by self-referred participants were less than 20 (i.e., 5%), and nine of these were equal to or less than 10 (i.e., 41%). One male self-referred participant scored 24, placing him in the top 20 obtained wisdom scores but not in the top 10.

As shown in Figure 1 participants aged 75 and older were distributed throughout the range of wisdom scores for both self-referred and nominated participants. Five of the top 20 obtained wisdom scores came from participants aged 75 and older, four of which were represented in the top ten obtained wisdom scores. The lowest wisdom score for self-referred participants came from a female 78 year old and the two lowest wisdom scores within the nominated group came from females aged 75 and 77.

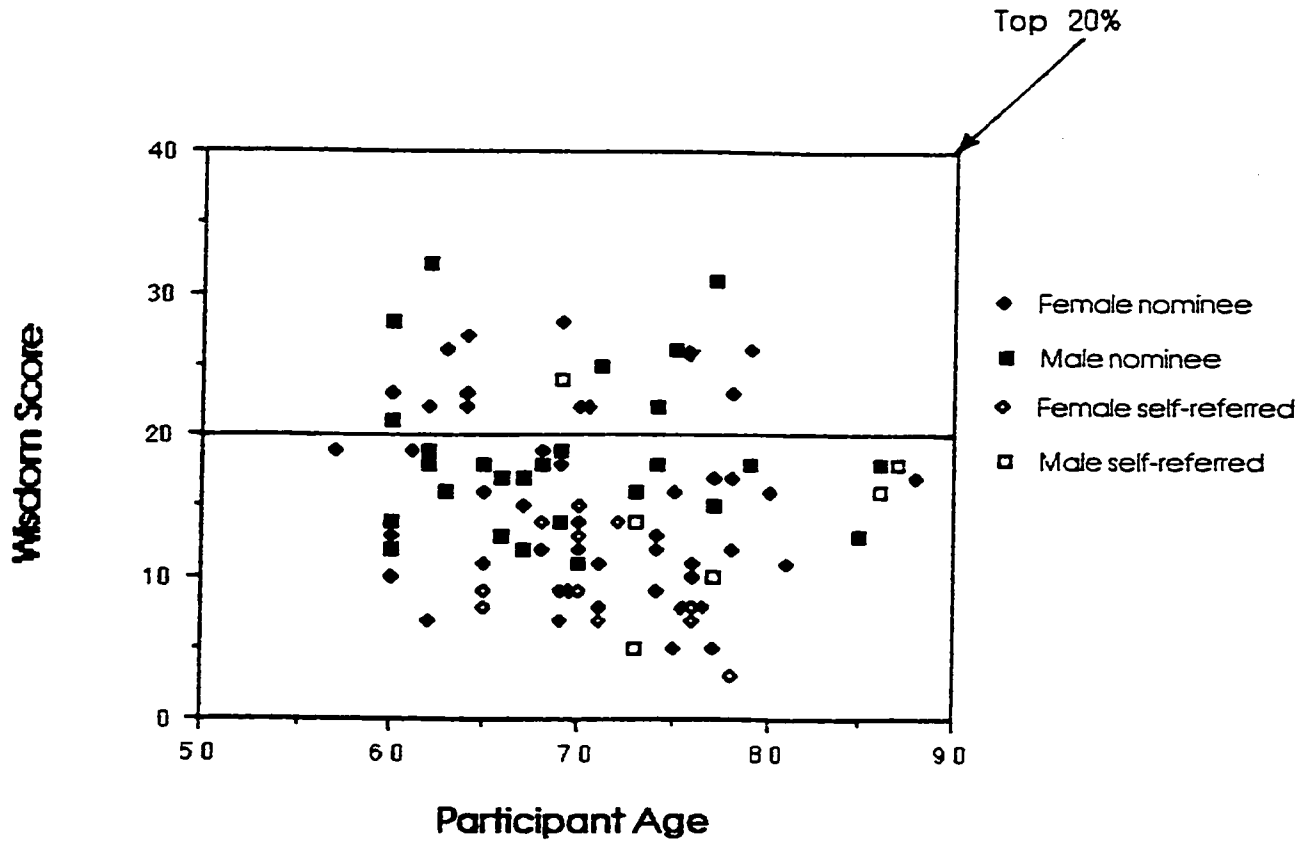


Figure 1
Wisdom related performance in relation to age, gender, and nomination status.

Factors Underlying Wisdom Criteria

In order to empirically summarize the relationships among the seven wisdom criteria and to illuminate the possible processes underlying the wisdom construct, an exploratory Principal Components Analysis (PCA) was performed on the wisdom scores for the nominated group. Several PCA runs specifying between two and four components were performed to find the optimal number of components and rotations. The three components solution was chosen for follow-up analyses and interpretation as it achieved a reasonable balance between adequately fitting the data without undue loss of parsimony. Examination of the scree plot supported the three factor solution. The three components accounted for a total of 72.5% of the variance in the wisdom criteria. As indicated by square multiple correlations (SMCs), the components were internally consistent and well defined by the dimensions. Community values, as seen in Table 8 tended to be high. With the use of a .45 cut off (equivalent to 20% variance overlap between variable and component) for inclusion of a variable in the definition of a component, all variables loaded on the three components. Loadings on components, communalities and percents of variance and covariance are shown in Table 8. Dimensions are ordered by size of loadings. The criteria generativity, relativism, and affect integration loaded on the first component, labeled 'Connectedness'. Together, this dimension suggests the capacity for an outward focus with freedom from self absorption. The criteria procedural knowledge and awareness of uncertainty loaded together on a component labeled 'Pragmatics'. Together, this dimension suggests awareness of both the potential and limits of one's ability to influence the environment. The criteria contextualism and factual knowledge loaded together on the third component labeled 'Knowledge' although factual knowledge also loaded on the component labeled 'Pragmatics'. Together, this dimension suggests a broad and informed perspective. Orthogonal rotation was used to aid in interpretation, however solutions for all of the rotations were essentially the same.

Table 8
Factor Loadings, Communalities (h^2), Percents of Variance and Covariance for
Principal Components Analysis and Varimax Rotation (n=76)

Dimension	C1 'Connectedness'	C2 Pragmatics'	C3 'Knowledge'	h^2
Generativity	.85	-.10	.24	.79
Relativism	.74	.30	.13	.65
Affect Integration	.64	.34	.18	.55
Procedural Knowledge	.05	.88	.11	.79
Awareness of Uncertainty	.35	.57	.25	.51
Contextualism	.23	.09	.92	.91
Factual Knowledge	.24	.51	.73	.84
Percent of Variance	27.00	22.56	22.29	
Percent of Covariance	37.50	31.35	30.95	

Wisdom as a function of Question

To examine whether wisdom scores vary as a function of the question (i.e., gender, real-life dilemma, wisdom) the seven wisdom criteria were summed for each question separately to yield a wisdom score for each question. A 2X2 MANOVA with three repeated measures was performed to compare wisdom scores across questions. Independent variables were nomination status (self, other) and gender of the participant. The question represented a within subjects factor which was examined in terms of the overall differences between the three questions (contrast 1), by contrasting the gender question with the wisdom question (contrast 2), and by contrasting the dilemma question with the gender and wisdom questions (contrast 3).

The three questions were significantly affected by gender ($F(2,93) = 4.69, p < .02$), but not by nomination status ($F(2,93) = 0.19, p > .05$), and not by their interaction ($F(2,93) = 0.18, p > .05$). The results reflected a weak association between gender and the question asked $\eta^2 = .09$ (see Table 9). Examination of simple effects analyses (see Table 10) revealed that the significant gender effect was due to a significant difference on the gender versus the wisdom question contrast ($F(1, 94) = 8.39, p < .01$). The contrast comparing the real-life dilemma versus the gender and wisdom question was not significant ($F(1, 94) = 1.27, p > .05$). Examination of the means revealed that relative to female participants, male participants scored higher on the wisdom question, but not on the gender question nor on the real life dilemma. This difference appeared to reflect very low scores on the wisdom question for female self-referred participants.

Thus participants appear to perform equally wisely when discussing events and issues which are personally meaningful to them such as a real life dilemma. However when asked to discuss issues which are more abstract, differences may emerge in the wisdom elicited as a function of gender. Overall, the results justify pooling the three questions to yield an overall wisdom score for use in subsequent analyses as differences between scores on the questions, when they occur, tend to be small.

Table 9
Repeated Measures Multivariate Analysis of Variance on the Effect of Question,
Nomination Status and Gender

Effect	Within Subject Contrasts	F(1,94)
Nomination by Question	GEN versus WIS question	0.14
	RLD versus WIS & GEN question ^a	0.24
Gender by Question	GEN versus WIS question	8.39*
	RLD versus WIS & GEN question	1.27
Nomination by Gender by Question	GEN versus WIS question	0.03
	RLD versus WIS & GEN question	0.34

^a Note. GEN= Gender question, RLD =Real Life Dilemma, WIS= Wisdom question

* $p < .01$

Table 10
Means and Standard Deviations of three Wisdom Questions as a function of
Nomination Status and Gender

Question	Self-Referred		Nominees	
	Men	Women	Men	Women
n	10	12	26	50
Gender question				
<u>M</u>	3.70	2.42	4.81	4.48
<u>SD</u>	1.25	1.56	2.67	2.57
Real-life dilemma				
<u>M</u>	5.80	4.67	6.85	6.02
<u>SD</u>	2.78	1.61	2.56	2.54
Wisdom question				
<u>M</u>	5.90	2.83	6.69	4.78
<u>SD</u>	2.08	1.75	2.46	2.89

Nomination procedure

To examine the utility and validity of the nomination procedure in identifying individuals who manifest the characteristics prototypically associated with wisdom, a MANOVA was performed on the quantitative measures and the total wisdom score as dependent variables. The independent variable was nomination status (self and other). The combined dependent variables were significantly affected by nomination status, $F(21,76) = 2.66, p < .001$. The results reflected a moderate association between nomination status and the combined dependent variables $\eta^2 = .42$.

Examination of the means (see Appendix C) and simple effects analyses (see Table 11) indicated that participants nominated by others received higher wisdom ratings than those who were self-referred ($F(1,96) = 6.91, p < .01$). Relative to self-referred participants, nominees had lower negative affect/life dissatisfaction scores ($F(1,96) = 8.59, p < .01$); higher intelligence (Vocabulary: $F(1,96) = 25.16, p < .001$; Block design: $F(1,96) = 13.15, p < .001$; Similarities: $F(1,96) = 21.87, p < .001$); had less desire for control ($F(1,96) = 6.11, p < .05$); and were less internal in their control beliefs ($F(1,96) = 8.04, p < .01$).

Table 11
Multivariate Analysis of Variance on the Effect of Nomination Status

Effect	Dependent Variables	F(1, 96)
Nomination Status	Wisdom	6.91**
	<u>Emotional Complexity:</u>	
	Self	0.01
	Other	2.58
	<u>Cognitive Style:</u>	
	Absolute	2.90
	Dialectical	3.43
	<u>Personality:</u>	
	Neuroticism	0.59
	Extraversion	0.90
	Openness	2.79
	<u>Happiness (MUNSH):</u>	
	Life satisfaction	1.44
	Life dissatisfaction	8.59**
	<u>Intelligence:</u>	
	Vocabulary	25.16***
	Block design	13.15***
	Similarities	21.87***
	<u>Coping Style:</u>	
	Avoidance	3.68
	Distraction	0.27
Reflection	0.00	
<u>Control Orientation:</u>		
Desire for control	6.11*	
Belief in control	8.04**	

$F(21, 76) = 2.66, p < .001$

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

Correlations among Wisdom scores and Standard measures for Nominated and Self-referred participants

Examination of zero order correlations among the variables for those who were nominated by others and those who referred themselves supports the validity of the wisdom construct and may reveal the meaning of perceived wisdom for nominated and self-referred participants. Nominated participants with higher wisdom scores tended to be more dialectical in terms of their paradigm beliefs, more intelligent, more open, expressed less life dissatisfaction, (i.e., negative affect scale of MUNSH), coped with sadness with more reflection and less avoidance, endorsed fewer internal control beliefs, and reported lower self perceived health than participants scoring lower on wisdom. Contrary to expectations, wisdom was not associated with age, education, or neuroticism in the nominated group (see Table 12).

A Bonferroni Multiple-test procedure was utilized to reduce the risk of making Type I errors when conducting a family of tests as recommended by Larzelere and Mulaik (1977). This resulted in adjusting the alpha to .002 (i.e., $.05/21$). Using this procedure, only the correlation between wisdom and coping with sadness through reflection was sufficiently large to reject the null hypothesis. Because of the nature of the research question which involved a series of hypotheses and a number of variables of interest, it was decided that such a procedure may obscure tendencies and therefore unduly restrict the exploration of wisdom in relation to standard measures of psychological functioning.

Examination of zero order correlations amongst the variables for participants who were self-referred reveals a similar pattern of correlations across the groups with a few notable exceptions. Although many of the correlations did not reach statistical significance in this small group, the pattern of correlations evident in the nominated group (i.e., higher vocabulary, block design and openness) were apparent in the self-

referred group (see Table 13). As with the nominated participants, self-referred participants with higher wisdom scores tended to be more dialectical in terms of their paradigm beliefs. As with the nominated participants, wisdom was not associated with age or with neuroticism.

Self-referred participants who scored higher in wisdom tended to be more educated than those scoring lower on wisdom. The significant associations between higher wisdom and lower control beliefs, more reflection, less avoidance and lower self-perceived health apparent in the nominated group were not evident in the self-referred group. To test the hypothesis that these correlations were equal for nominated and self-referred participants, a Fisher r to Z transformation was computed for education, control beliefs, coping through reflection, coping through avoidance, and self perceived health as outlined by Hays (1963). Using a standard score of 1.96 in absolute value to reject the hypothesis that the correlations were equal at the .05 level (two-tailed), only the correlation between wisdom and education was significantly different for nominated versus self-referred participants ($Z = 2.47$). These results suggest that while the characteristics of openness and a dialectical world view hold for both nominated and self-referred participants, self-perceived wisdom appears to have more to do with education than does wisdom perceived in other people.

Table 13
Zero order Correlations amongst Variables for Self-referred Participants (n=211)

	Emotional Complexity					Intelligence					Life Satisfaction										
	1) Self	2) Other	3) Absolute	4) Relative	5) Dialectical	6) Vocabulary	7) Block Design	8) Similarities	9) Neuroticism	10) Extroversion	11) Openness	12) Positive affect	13) Negative affect	14) Desire	15) Belief	16) Reflection	17) Avoidance	18) Distraction	19) Self-perceived health	20) Age	21) Education
Emotional Complexity (LEAS)	.39	.39																			
Cognitive Style (SPBI)			-.47*	-.54**	-.20																
Intelligence (WAIS-R)						.35	.33	.18	.15	.12											
Personality (NEO-PI)																					
Life Satis- faction (MUNSH)																					
Control																					
Coping Style																					

***p<.001, **p<.01, *p<.05

Note. LEAS = Levels of Emotional Awareness Scale, SPBI = Social Paradigm Belief Inventory, WAIS-R = Wechsler Adult Intelligence Scale Revised

Main Analyses

Hypothesis#1: Wisdom will be associated with experiences in complex interpersonal problem solving, and situations which require adjustment.

This hypothesis was tested in two ways. First, it was predicted that wise people would tend to come from occupations which fostered interpersonal problem solving and the role of advisor. Occupations were coded in terms of their interpersonal and advising functions leading to three categories of occupations. The first category included occupations associated with a clear demand for advising others such as minister, therapists, and educators. The second category included occupations which required interpersonal skills, but which are not generally considered advising occupations such as secretaries and sales people. The third category included occupations where the main requirements were abilities that were not interpersonal or advising in nature such as artists, laborers and engineers. These occupations were coded as 1 = interpersonal/advising, 2 = interpersonal/ nonadvising, 3=non-interpersonal/nonadvising.

To test the hypothesis that people with experience in advising occupations would be wiser, Spearman rank correlation coefficients were computed between occupation category and total wisdom score. As predicted, people with higher wisdom scores were significantly more likely to come from advising occupations ($r_s = -.44, p < .001$). This relationship held for both nominated ($r_s = -.38, p < .001$) and self-referred participants ($r_s = -.51, p < .01$).

The second prediction tested was that among wise people, tragic or affect laden experiences would be emphasized among the events cited as having fostered their personal development. To test this hypothesis, nominated participants were asked to list the events which constituted turning points in their lives. These events were

coded in terms of their affect valence resulting in four categories of events, positive, negative, neutral, and mixed affect valence. The four resulting categories of events were transformed to proportions to control for differences in the total number of events listed. Contingency coefficients were calculated between total wisdom score and proportion positive, negative, neutral, and mixed events as a measure of strength of association. The significance of these coefficients was based on the Chi² statistic.

Contrary to predictions, wisdom was not significantly related to emphasizing negative life experiences as turning points, but instead appeared to be more related to the opposite, that is emphasizing positive life experiences (Contingency coefficient =.95, $p < .05$).

Hypothesis:#2: Wisdom will be associated with advanced cognitive development .

It had been predicted that wisdom would not be compatible with an absolute cognitive style, but would instead be more likely to occur in participants who manifested dialectical reasoning on a measure of cognitive complexity. To test this hypothesis, Pearson product-moment correlations were computed between the nominated group's total wisdom score and the cognitive style variables assessed by the Social Paradigm Belief Inventory (SPBI). Participants' scores on the SPBI were unrelated to education and were negatively related to age (see Table 12). Thus older participants endorsed fewer dialectical and more absolute beliefs. As predicted, nominated participants with higher wisdom scores were significantly more likely to endorse dialectical beliefs than were participants with lower wisdom scores. There was also a nonsignificant trend for participants with higher wisdom scores to be less likely to endorse absolute beliefs. Interestingly, relativism scores were unrelated to wisdom scores. Overall, the hypothesis was supported.

Hypothesis #3: Wisdom will be associated with affect-cognitive integration and affect competence.

This hypothesis was examined in four ways. First, the association between wisdom and affect competence was examined by investigating the relationship between wisdom scores and a measure of emotional complexity. Specifically, it was predicted that wisdom would be positively associated with performance on a measure of emotional complexity as assessed by the LEAS scale. To test this hypothesis, the correlations between nominated participants' total wisdom scores and their scores on the LEAS self-complexity subscale and other-complexity subscale were examined (see Table 12). Although there was a nonsignificant tendency for participants with higher wisdom scores to describe their own emotions in terms of higher complexity, contrary to predictions, wisdom scores were unrelated to the emotional complexity of descriptions of other people. None of the emotional complexity scores were associated with age or education.

The second prediction tested was that participants' scores on affect-cognitive integration would be positively associated with their scores on the other six wisdom criteria. To test this hypothesis, the correlations amongst the wisdom criteria for the nominated group were examined. In general, the correlation coefficients between the seven wisdom criteria were quite varied in magnitude (see Table 14). Of the seven criteria, procedural knowledge produced the lowest correlations with the total wisdom score and was not significantly associated with generativity or with contextualism although it was significantly associated with relativism, awareness of uncertainty and affect-cognitive integration. In support of the hypothesis, affect-cognitive integration was significantly associated with *all* of the other six wisdom criteria and with the total wisdom score. The correlations between affect-cognitive integration and the other wisdom criteria ranged from .30 to .52. Affect-cognitive integration was least associated

with awareness of uncertainty and procedural knowledge, moderately associated with contextualism and factual knowledge, and most associated with generativity and relativism. Overall, these results support an association between affect-cognitive integration and the other wisdom criteria, and imply that while the criteria are related, as expected, they are not overly redundant with each other.

To test the predicted association between affect complexity and dialectical cognitive style, correlations between participants' LEAS scores and SPBI dialectical scores were examined (see Tables 12 & 13). There was a nonsignificant trend for people with higher dialectical scores to describe their own emotions in terms of higher complexity, but dialectical scores were unrelated to the emotional complexity of descriptions of other people. This pattern held for both nominated and self-referred participants.

Finally, to test the prediction that wisdom scores would be associated with life satisfaction, the correlation between wisdom scores and the life dissatisfaction subscale of the MUNSH was examined (see Table 12). In support of the hypothesis, nominated participants with higher wisdom scores had significantly lower life dissatisfaction scores than participants with lower wisdom scores. There was a nonsignificant trend for self-referred participants with higher wisdom scores to have both lower life dissatisfaction and higher life satisfaction scores (see Table 13).

Table 14
Correlations amongst the Wisdom Criteria Averaged across Participants and Questions
(n=76)

	Wisdom (total)	1	2	3	4	5	6
1) Factual Knowledge	.81***						
2) Procedural Knowledge	.55***	.46***					
3) Contextualism	.69***	.66***	.22				
4) Relativism	.72***	.49***	.33**	.34**			
5) Awareness of Uncertainty	.62***	.49***	.29*	.27*	.41***		
6) Generativity	.63***	.33**	.10	.39***	.49***	.23*	
7) Affect-cognitive Integration	.74***	.43***	.31**	.37***	.52***	.30**	.49***

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

Hypothesis #4: Wisdom will be associated with central dimensions of personality.

Specifically, it was predicted that wisdom would be positively associated with the personality dimensions of openness and extraversion and would be negatively associated with neuroticism. It was also predicted that wisdom would be positively associated with a tendency to use reflection rather than avoidance or denial as a coping style. Finally, it was predicted that wisdom would not be associated with a high desire for control or with high internal control beliefs. These predictions were tested by examining the correlations amongst nominated participants' wisdom scores and their scores on the personality measure (which includes the subscales neuroticism, extraversion, openness), scores on the coping measure (which includes the subscales avoidance, reflection and distraction), and their scores on the control measure (which includes the subscales desire for control and belief in control).

As predicted, nominated participant's with higher wisdom scores tended to be significantly more open than did participant's with lower wisdom scores (see Table 12). There was a nonsignificant trend in the predicted direction for participants with higher wisdom scores to be more extraverted. Contrary to predictions, wisdom was unrelated to neuroticism. Taken together, the hypothesis that wisdom would be associated with central dimensions of the personality received partial support.

In terms of coping style, participant's with higher wisdom scores were more likely to endorse using reflection and were less likely to endorse using avoidance to cope with sadness than participants who scored lower on the wisdom criteria. The use of distraction as a coping style was unrelated to wisdom. Thus the hypothesis that wise people would utilize reflection as the preferred coping style was supported.

Finally, as predicted, participants with higher wisdom scores were less likely to believe that they were in control of the events of their lives than participants with lower

wisdom scores. Contrary to predictions, the desire for such control was unrelated to wisdom.

Taken together, the prediction that wisdom would be associated with central dimensions of the personality, with a reflective coping style and with a lower internal control stance received partial support.

Hypothesis #5: Wisdom will occur in both men and women and will be associated with an integrated gender identity.

This hypothesis was examined in three ways. First, it was predicted that both men and women would be nominated as wise when participants were asked to nominate the wisest individual that they knew personally. As predicted, both women and men (50 women, 26 men) were nominated in proportions that roughly approximated the proportion of women to men in this age group (i.e., 2:1).

Second, it was predicted that men and women would be equally wise. This hypothesis was tested using an analysis of variance on the total wisdom score. The independent variable was gender. Because women were significantly less educated than the men, ($t(74)=2.40, p<.05$), level of education was entered as a covariate. SPSSx ANCOVA was used for the analysis. As predicted, total wisdom score did not significantly differ for men and women after controlling for level of education ($F(1,74) = 3.23, p>.05$).

Finally, it was predicted that wisdom would be associated with gender integration. To test this prediction, the correlations between wisdom scores and gender identity scores, as assessed by the E-PAQ, were examined. Wisdom was not related to any of the subscales on the E-PAQ when scores for male and female nominees were examined together (see Table 15). However, as a group, female participants received

Table 15
Correlations between Gender Identity and Wisdom for nominees (n=76)

	Wisdom	1	2	3	4	5	6	7	8
1) Positive Masculine (High Agency)	-.05								
2) Positive Feminine (High Communal)	.02	.46***							
3) Integrated (Agency/Communal)	-.03	.27*	-.19						
4) Negative Masculine	.05	-.03	-.33**	.15					
5) Negative Feminine	-.09	-.34**	-.29*	-.07	.17				
6) Verbal passive- aggressive	-.02	-.32**	-.13	-.29*	.40***	.33**			
7) Age	-.13	.12	.22	.03	-.23*	-.10	-.19		
8) Education	.14	.07	-.19	.16	.16	-.09	-.09	-.16	
9) Gender	-.23*	.04	.26*	-.01	-.27*	-.28*	-.26*	-.27*	.10

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

Note. Male coded=1, female coded=2.

Table 16
Correlations between Gender Identity and Wisdom in Relation to Gender

	Positive Masculine	Positive Feminine	Integrated	Negative Masculine	Negative Feminine	Verbal Passive Aggressive
Males ($n = 26$)						
Wisdom	.16	.48*	-.23	-.26	-.24	-.05
Females ($n = 50$)						
Wisdom	-.12	-.14	.08	.08	-.13	-.10

* $p < .05$

significantly higher communal scores and were lower than male participants on undesirable agency, undesirable communal, and verbal passive aggressiveness. Due to these differences, it was decided to examine the relationship between wisdom and gender identity scores separately for male and female nominated participants. It was found that males with higher wisdom scores tended to receive higher positive communal scores than males with lower wisdom scores (see Table 16) while E-PAQ scores were unrelated to wisdom in the female sample. To test the hypothesis that these correlations were equal for male and female participants, a Fisher r to Z transformation was computed for positive communal as outlined by Hays (1963). Using a standard score of 1.96 in absolute value to reject the hypothesis that the correlations were equal at the .05 level (two-tailed), the difference between these correlations was statistically significant ($Z = 2.61$).

Hypothesis #6: Individuals will nominate people who are older, more emotionally and cognitively complex , and androgynous than themselves.

To test this hypothesis, comparisons were made between nominators and nominees. Specifically, it was predicted that people would nominate individuals as wise who score more highly on cognitive and emotional complexity and who are older than themselves.

Nominated participants who in turn nominated a subsequent participant were excluded from these analyses to avoid violating the independence of the groups. This excluded 15 participants, leaving a total of 61 nominators yoked to 61 nominees. The same analyses were run with the full sample, and produced the same results.

In support of the hypothesis, nominees were significantly older than the nominators ($t(60) = -3.73, p < .001$) and scored higher on cognitive complexity as assessed by the SPBI ($t(60) = 2.19, p < .05$). Contrary to predications, no significant differences were found between nominators and nominees on emotional complexity as assessed by the LEAS, or on the androgyny subscale of the E-PAQ.

To determine if there was a relationship between how nominators and nominees scored on the LEAS, SPBI, and on the androgyny scale of the E-PAQ, correlations were computed between nominator and nominee scores on these variables. As predicted, significant positive correlations were found between nominators and nominees on the LEAS total score ($r = .25, p < .05$). SPBI scores and androgyny scores from the E-PAQ (i.e., M+F+) were not associated with nominations.

Additional Analyses

To further investigate the relationships among the set of variables associated with wisdom, a standard multiple regression was performed between total wisdom score as the dependent variable and intelligence (vocabulary, block design), openness, coping (reflection), emotional complexity of the self, dialectical reasoning, and belief of control as the independent variables for the nominated group. With 76 respondents and 7 independent variables, the case to IV ratio is almost 11:1, above the minimum requirements for regression.

Table 17 displays the unstandardized regression coefficients (B), the standardized regression coefficients (Beta), the semi-partial correlations (sr^2) indicating the particular effect of each variable, and R , R^2 , and adjusted R^2 . The R produced by the regression equation was significantly different from zero ($F(7, 68)=5.36$, $p<.001$). For the three regression coefficients that differed significantly from zero, 95% confidence limits were calculated. The confidence limits for coping through sadness with reflection were 0.0371 to 0.9452; those for block design were 0.0815 to 0.0063; and those for openness were 0.0385 to 0.5382. None of these confidence intervals contained zero as a further indication of their significance.

Only three of the independent variables made significant independent contributions to the prediction of wisdom. Block design ($sr^2 = .044$), Openness ($sr^2 = .050$) and coping with sadness by Reflection ($sr^2 = .048$). The seven independent variables in combination contributed another .21 in shared variability. Altogether, 36% (29% adjusted) of the variability in wisdom was predicted by the scores on these seven variables. Although the correlation between wisdom and self-emotional complexity had approached significance ($r = .19$), and the correlations between wisdom and Dialectical cognitive style ($r = .22$), Vocabulary ($r = .28$), and Belief in control ($r = -.26$) had previously been revealed as significantly different from zero, these four variables did not contribute significantly to the regression.

Table 17
Results of Multiple Regression of Intelligence, Openness, Coping, Dialectical reasoning,
Self emotional complexity and Control Belief on Total Wisdom Score

Predictors	B	Beta	<i>sr</i> ² (unique)	F
1) Block Design	0.169	0.22	0.041	4.297*
2) Openness	0.288	0.24	0.050	5.304*
3) Reflection	0.491	0.23	0.044	4.659*
4) Dialectic	0.185	0.04	0.001	0.127
5) Belief of Control	-0.320	-0.19	0.032	3.419
6) Vocabulary	0.140	0.14	0.018	1.859
7) Self complexity	0.228	0.17	0.025	2.619

$R^2 = .36$

Adjusted $R^2 = .29$

$R = .60^{***}$

Note. unique variability = .14; shared variability = .21

* $P < .05$

Summary of Quantitative Results

This sample of nominated participants was comprised of well educated elderly men and women. Nominators tended to nominate men and women whom they had known for several years, the majority of whom were described as a friend or a coworker. Consistent with previous research, there was a strong preference for same sex nominations.

There were no significant age, education, or proportionate differences in gender between nominated and self-referred participants. Nominated participants received higher overall wisdom ratings, were more intelligent, expressed less life dissatisfaction, and were less internal in their control beliefs than self-referred participants.

Dimensions underlying the seven wisdom criteria appear to reflect freedom from self absorption with the associated capacity to focus the self outwardly, an appreciation of both the potential and limitation that the individual has to influence the environment, and access to a broad knowledge base from which to draw one's conclusions.

In support of hypothesis #1, wisdom tended to be associated with experience in advising interpersonal occupations . Contrary to predictions, wisdom scores were associated with reporting *positive* life experiences as key turning points in one's development.

In support of hypotheses 2, 3, and 4, wisdom scores were associated with a dialectical cognitive style, higher intelligence, an open personality, a tendency to cope with sadness with reflection rather than avoidance, an awareness of circumstances which are beyond one's control , and less expression of life dissatisfaction. Contrary to predictions, wisdom was not associated with emotional complexity or with neuroticism. Further, in line with hypothesis 3, there was evidence that wise individuals were not in a

state of despair as affect cognitive integration was associated with higher wisdom scores, and with the dimensions of relativism and generativity.

In support of hypothesis 5, the genders were equivalent in terms of their overall wisdom once level of education was controlled. Contrary to predictions, there were no significant correlations between wisdom and gender identity for women. However male nominees with higher wisdom scores tended to endorse a more communal orientation than male nominees with lower wisdom scores.

In support of hypothesis 6, people nominated others who tended to be older and more cognitively complex than themselves. Nominators with higher emotional awareness tended to nominate more emotionally aware nominees. Contrary to predictions, androgyny scores were unrelated to nomination.

Finally, of the variables found to be most associated with wisdom scores (i.e., vocabulary, block design, openness, coping through reflection, dialectical reasoning, control beliefs, and self emotional complexity), block design, openness, and reflection proved to be the most important in predicting nominated participants' wisdom scores.

Section II

Content Analyses

Response Content to Wisdom Qualitative Interview

In this section, the substantive content of the responses to the videotaped questions are presented in graphic form to illustrate the most frequently occurring responses to questions regarding the context of the nomination, experiences participants identify as having been turning points, and four questions concerning wisdom. The remainder of the interview (i.e., self descriptions, perception of continuity/change, values) can be found in Appendix C. The responses are grouped according to nomination status, to explore similarities and differences in how nominees and self-referred participants answered the questions, and according to gender of the nominees to explore how wisdom may be manifested differently in nominated men and women. The purpose of this procedure was to reveal how the participants themselves responded to questions concerning life experiences and wisdom in order to identify issues relevant to wisdom which may have been overlooked in the literature. Similar methods of content analyses of open ended interviews have been fruitful in outlining views of psychological well-being among middle aged and older adults (Ryff, 1989).

Responses were coded into categories which consisted of short descriptors intended to reflect the response without unduly distorting the original meaning as intended by the participants. The first step in the coding process was to conduct repeated viewings of the videotaped interviews in order to generate coding categories for each question. No attempt was made at this step to reduce the number of content categories. The categories were then evaluated in terms of the application of six criteria of validity suggested by Miles & Huberman (1984) including: 1) internal homogeneity (i.e., categories are consistent), 2) external heterogeneity (i.e., categories are independent of each other), 3) precision and clarity (i.e., categories are

semantically close to the original words of the participant), 4) exhaustiveness (i.e., all content is represented by the categories), 5) parsimony (categories which are overlapping are combined), and 6) pertinence (i.e., related to the research question). Categories were combined or expanded until it was felt they met these criteria. Responses which did not fit into any of the categories were coded as "other".

Frequencies of responses to each question were calculated by scoring each category dichotomously. A score of one indicated that the participant answered in a particular category while a score of zero indicated no response in the category. Thus each participant who responded in a category contributed a single increment to the frequency count of that category. The absolute frequencies for each category were then transformed into proportions due to unequal sample sizes. Each figure includes the full range of responses to each question. The response categories are arranged from most to least frequently occurring responses generated by the larger of the two groups (i.e., nominees, women).

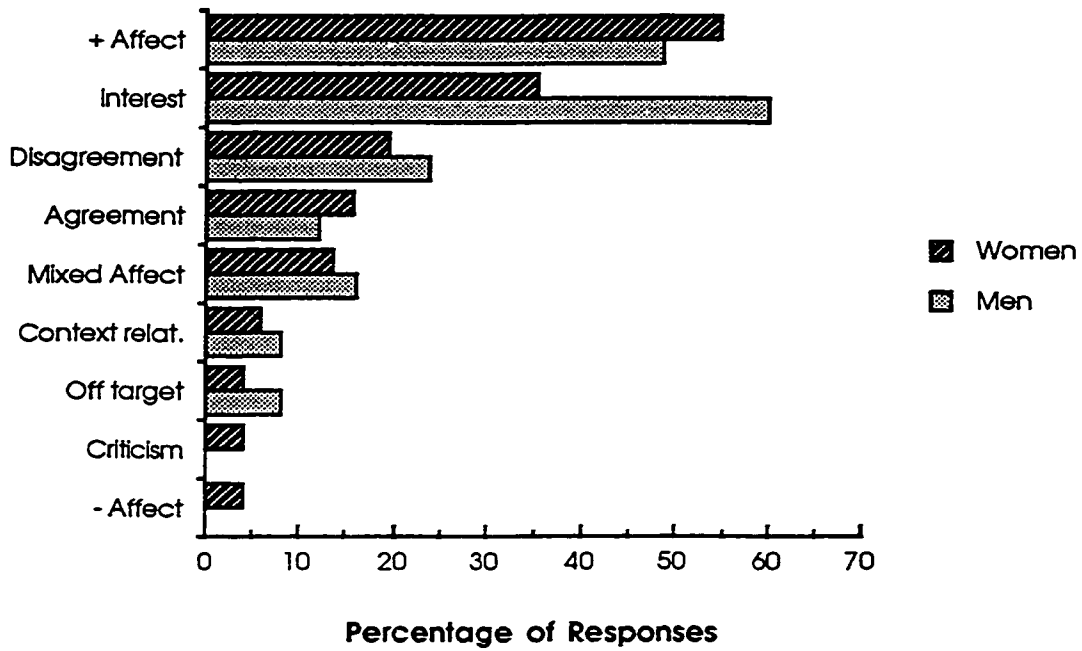
Statistical analyses were run to assess whether the relative frequency with which participants fell into discrete categories of responses varied by nomination status and by gender of nominees. The analyses were restricted to categories which represented at least 20% of participants in one of the four subgroups (i.e., self-referred, nominees, female nominees, male nominees) in line with Ryff (1989). Nonparametric tests were used for the analyses due to their relative robustness to violation of assumptions needed for multivariate techniques. All analyses were conducted using SPSSx CROSS TABS which generated a 2X2 contingency table of the observed frequencies for each content category versus nomination status (self, other) and versus gender of nominees (men, women). The statistical significance of the proportions of responses was evaluated by the Chi² test for two independent samples or in cases where the smallest expected frequency was less than 5, by means of the Fisher's exact probability test as recommended by Siegel (1956). In all cases, alpha was set at .05 divided by the number

of content categories per question to avoid excessive Type I error associated with multiple significance tests. For example, the question "How do you feel about this nomination?" included three categories of responses into which at least 20% of participants fell, therefore the significance of each category was tested with $\alpha = .05/3 = .016$ (see Appendix C for a summary of the statistical differences).

Context of Nomination:

In addition to the relationship variables discussed in the previous section (i.e., age, emotional complexity and cognitive development) Hypothesis 6 was further examined by asking all nominated participants two questions regarding the nomination itself : "How do you feel about this nomination?" and "Why do you think (the nominator) singled you out as a wise person?" (see Figure 2). For both men and women, the two most frequent occurring responses to the question "How do you feel about this nomination?" were the expression of positive affect such as feeling pleased or flattered (men=48.6 % women=54.9%), and the expression of interest or curiosity in the investigation itself (men=60.0 % women=35.3%). For both groups, the least frequent responses were negative affect such as feeling put out or embarrassed (men=0.0 % women=3.9%), and criticism of the scientific investigation of wisdom (men=0.0 % women=3.9%). Although interest in the investigation produced a marginally significant gender effect ($\text{Chi}^2(1)=4.16, p<.05$), no significant gender differences were obtained in the statistical analysis at alpha adjusted to .016.

In response to the question "Why do you think (the nominator) singled you out as a wise person?", the three most frequently occurring responses for both nominated men and women were: that they felt the nominator admired them either for the manner in which they lived their lives or for their ability to cope with adverse experiences such as widowhood (men=28.0 % women=37.3%); a self description justifying the nomination by citing personal qualities such as tolerance or compassion that the nominee felt were



WHY DO YOU THINK S/HE SINGLED YOU OUT AS A WISE PERSON?

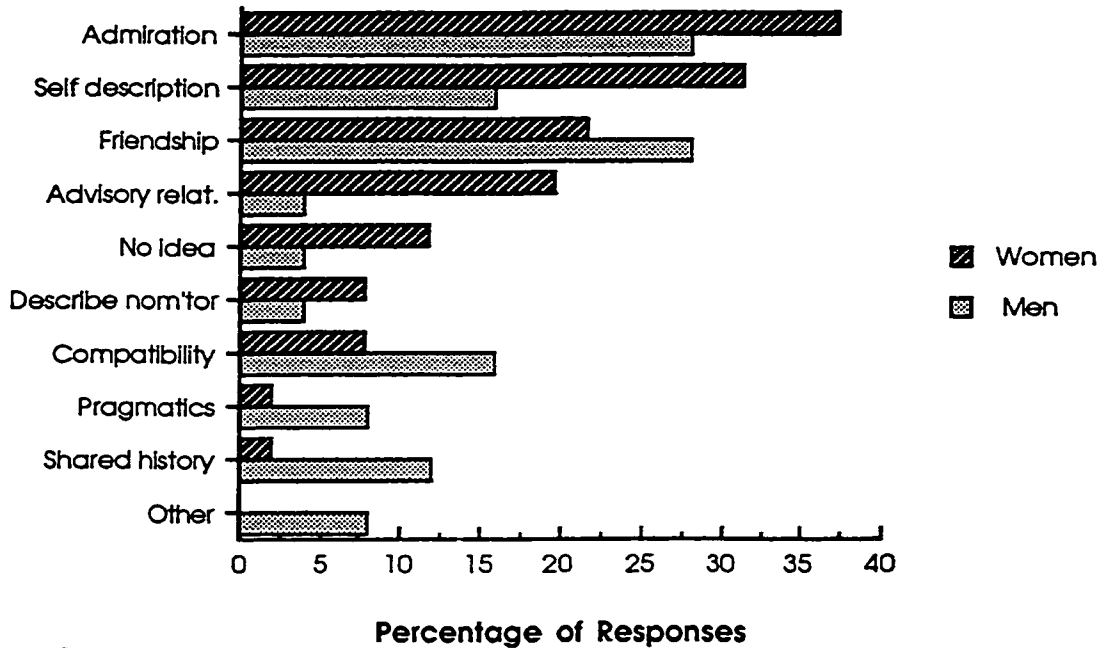


Figure 2
Nominated participant's responses to the questions, "How do you feel about this nomination?", and "Why do you think (s)he nominated you as a wise person?"

related to wisdom (men=16.0 % women=31.4%); and due to the nominee's friendship with the nominator (men=28.0 % women=21.6%). Nominated women also frequently discussed giving advice to the nominator (19.6%) while nominated men frequently discussed compatibility with the nominator in terms of similar values and interests (17.0%). No significant gender differences were obtained in the statistical analysis at alpha adjusted to .016.

Thus it would appear that the majority of both male and female nominees reacted positively to being nominated to participate in a study on wisdom. In support of hypothesis 6 both men and women tended to explain the wisdom nomination in terms of the nature of the relationship they had with the nominator, emphasizing friendship or their role as advisors.

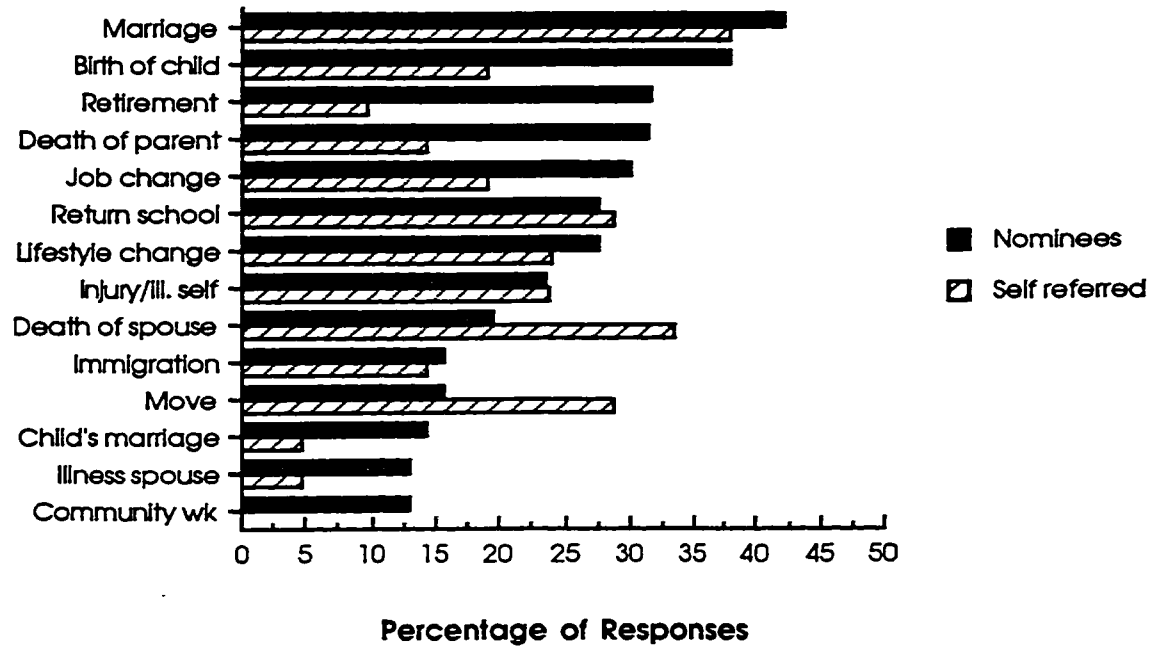
Turning Points

Hypothesis 1 predicted that wisdom would be associated with experiences with complex problem solving and life adjustments. In order to examine what participants themselves identified as important or salient life experiences, all participants were asked the question "What were the major turning points in your life? " A variety of life experiences from various periods in life were identified by the participants as major life events. Both self-referred and nominated participants emphasized marriage as a significant turning point in their lives (nominees=48.6%, self-referred=42.1%). Nominees also emphasized the birth of their children/being parents (39.2%), retirement (32.4%) the death of their own parent (s) (32.4%), and changes involving occupation (31.1%). Following marriage, the events most frequently mentioned by the self-referred participants included the death of a spouse (36.8%), returning to school (31.6%), moving (31.6%), a major life style change (26.3%) and the experience of personal illness or injury (26.3%). The more rare events mentioned by the groups were community work (nominees=13.5%, self-referred=0.0%), divorce or separation (nominees=12.2%, self-

referred=15.8%), and the marriage of one's child (nominees=14.9%, self-referred=5.3%). No overall significant differences between self-referred and nominated participants were obtained in the statistical analysis.

In terms of gender effects, both nominated women and nominated men most frequently emphasized family experiences such as marriage (women=41.1%, men=60.0%), and birth of children/parenthood (women=39.4%, men=36.0%). Nominated women also frequently emphasized the experience of personal injury or illness (27.6%), and returning to school (27.6%) as significant life events. Once alpha was adjusted, there was a nonsignificant trend for women to emphasize the death of a parent more often than men ($\chi^2(1)=4.65, p<.03$) (women=38.5% men=16.0%) as well as a trend for more women to mention death of a spouse ($\chi^2(1)=6.18, p<.01$) (women=27.5%, men=4%). A number of nominated men emphasized a major life style change (32.0%), retirement (44.0%) and there was a nonsignificant trend for nominated men to focus more on career changes ($\chi^2(1)=5.05, p<.02$) than nominated women (men=48.0%, women=21.6%). For the women, the least frequent turning points were a shift in values (5.9%), global events (7.9%), and the death of a family member other than one's spouse or parent (9.9%). The more rare turning points mentioned by the nominated men included care giving (0%), the illness of one's spouse (4.0%), and child's marriage (4.0%). No significant gender differences were obtained in the statistical analysis after alpha was adjusted to .005.

Thus overall, the participants identified many similar categories of life events that they felt had an impact on their development. The responses included both positive or planned events such as marriage, having children, or returning to school, and negative or uncontrollable events such as the death of a parent or spouse, and the experience of personal injury or illness.



Nominated participants

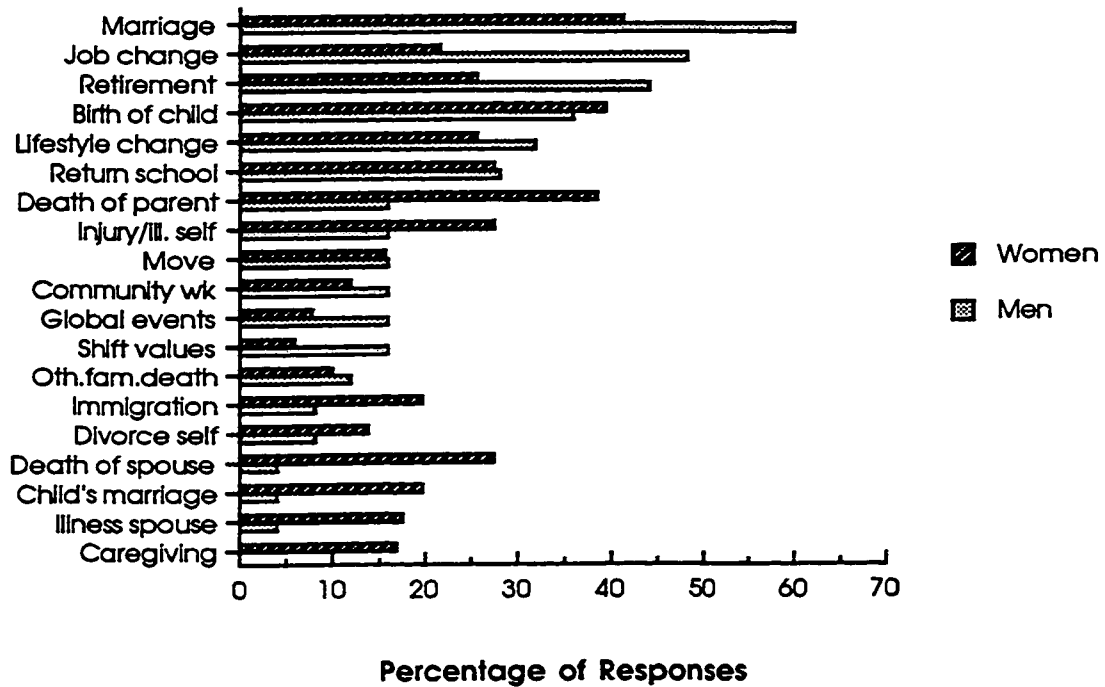


Figure 3
Responses to the question "What were the major turning points in your life?" for self-referred versus nominated participants and for male versus female nominees.

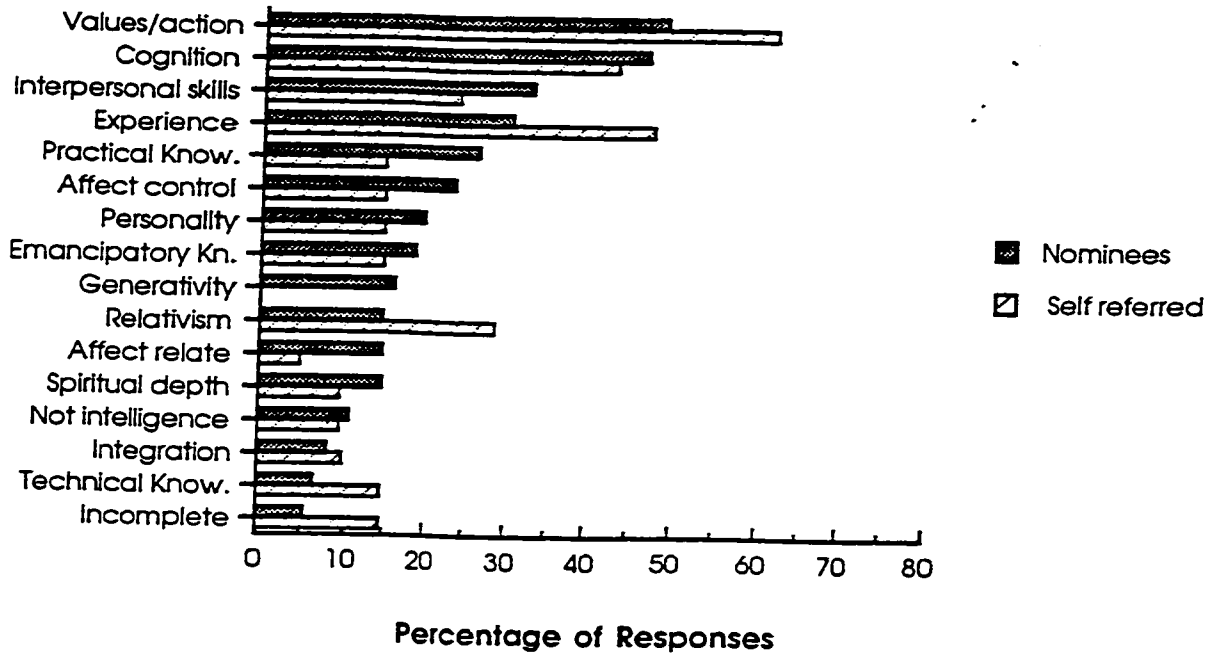
Wisdom

Participants were asked four questions regarding their views and understanding of what wisdom might be. Responses to the question "What do you think wisdom is?" and "How do you recognize wisdom in other people?" are presented in Figure 4. One of the most obvious findings is the multidimensional nature of the construct. Most participants listed more than one category in their definitions (mean=3.46, SD=2.26).

Both nominated and self-referred participants most frequently defined wisdom in terms of prescriptions for values and behaviour such as avoiding harm and encouraging growth in relating to others (nominees=48.7%, self-referred=61.9%). Both groups also emphasized the importance of cognition such as being logical and thinking through all sides of a problem (nominees=46.7%, self-referred=42.9%), the importance of interpersonal skills such as tact and being a skilled listener (nominees=32.9%, self-referred=23.8%) and the idea that wisdom develops through experience (nominees=30.3%, self-referred=47.6%). Nominated participants also emphasized the association between wisdom and practical knowledge, especially knowledge of self-other relations (26.3%) while self-referred participants stressed the importance of relativism, or being able to see things from multiple points of view (28.6%). Few participants in either group associated wisdom with technical knowledge such as knowledge of facts (nominees=6.6%, self-referred=14.3%) and few participants framed their definitions in terms of explicit integration between affect, cognition or behaviour (nominees=8.1%, self-referred=9.6%). Few self-referred participants associated wisdom with empathy, or the ability to relate emotionally to others (4.8%). No significant differences between self-referred and nominated participants were obtained in the statistical analysis although there was a trend for more nominated participants to emphasize the importance of generative commitments ($\chi^2(1)=3.78, p<.06$).

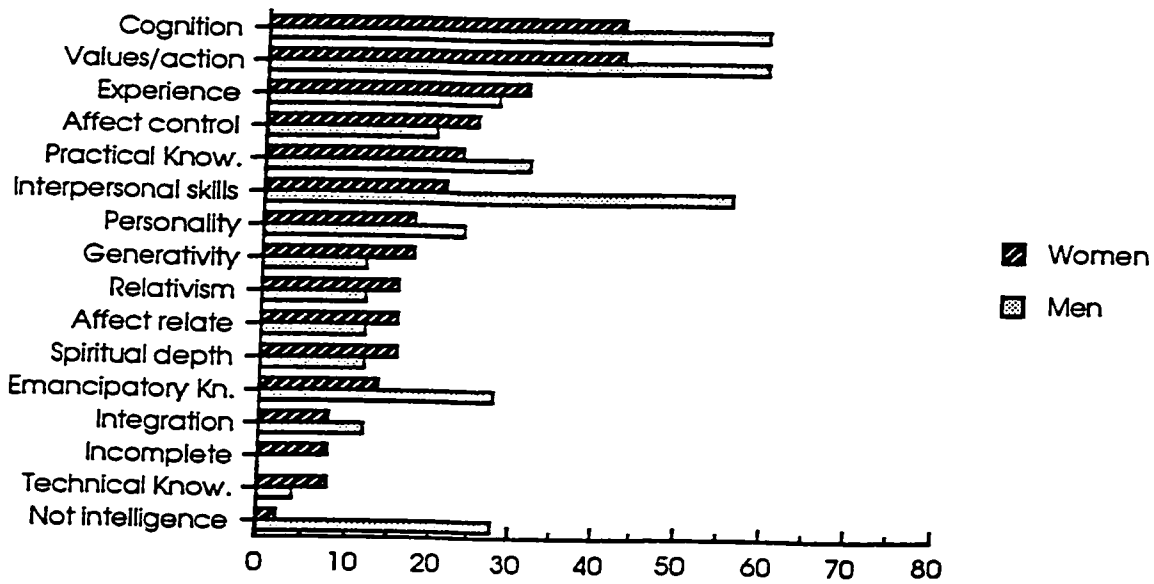
In terms of gender effects, both nominated men and nominated women stressed the importance of cognition (men=60.0%, women=43.1%), prescriptions for

WHAT DO YOU THINK WISDOM IS & HOW DO YOU RECOGNIZE WISDOM IN OTHERS?



Percentage of Responses

Nominated participants



Percentage of Responses

Figure 4
Responses to the questions "What do you think wisdom is & how do you recognize wisdom in other people ?" for self-referred versus nominated participants and for male versus female nominees.

values and behaviour (men=60.0%, women=43.1%), practical knowledge (men=32.0%, women=23.5%), control and modulation of one's affect (men=20.0%, women=25.5%) and experience (men=28.0%, women=31.4%) in their definitions. Nominated men were significantly more likely than nominated women to emphasize the importance of interpersonal skills ($\chi^2(1)=9.01, p<.003$) (men=56.0%, women=21.6%) and to state that wisdom is not equivalent to intelligence ($\chi^2(1)=12.08, p<.001$) (men=28.0%, women=2.0%). Few of the nominated men or women associated wisdom with technical knowledge (men=4.0%, women=7.8%), or explicitly referred to the integration between affect, cognition and behaviour in their definitions (men=12.0%, women=7.9%). Relatively few nominated women defined wisdom in terms of emancipatory or self knowledge (13.7%) and an emphasis on spiritual depth was relatively rare in both groups (men=12.0%, women=15.7%).

Development of Wisdom

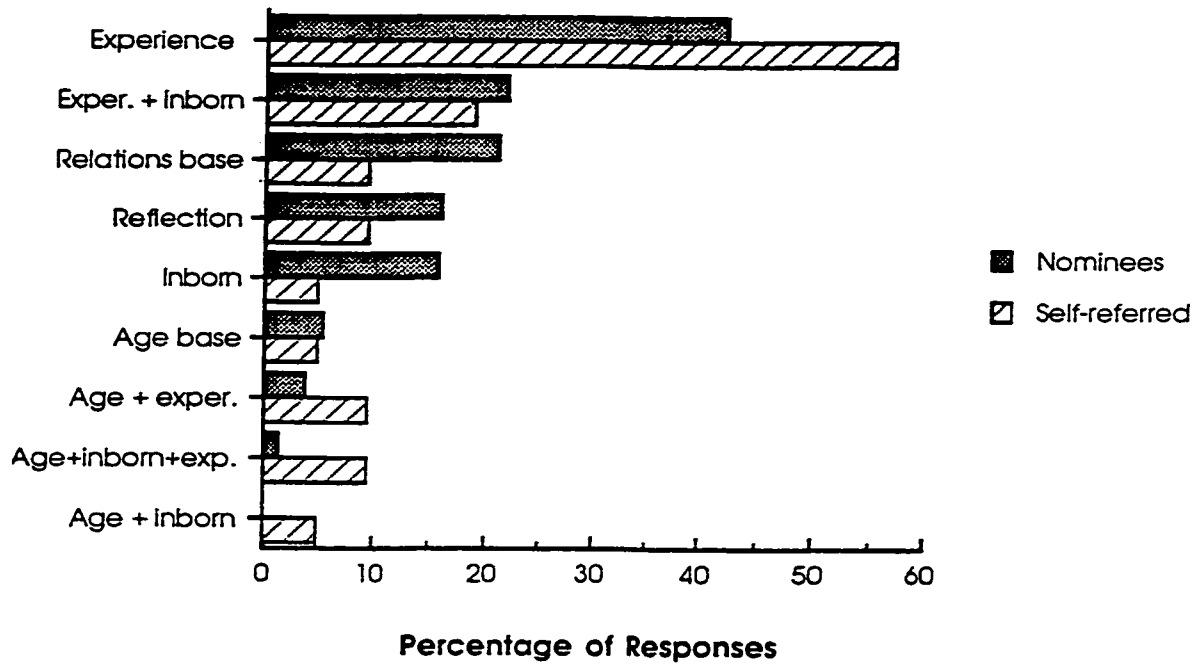
Figure 5 depicts the responses to the question, "How does one develop or acquire wisdom?" By far, the most common response for all four groups was through experience (nominees=42.4%, self-referred=57.2%; nominated men=36.0%, nominated women=45.2%). Both nominees and self-referred participants also discussed wisdom as emerging through a combination of individual differences and experience (nominees=22.1%, self-referred=19.0%). Nominees also stressed the importance of upbringing and social relationships such as those with teachers, as encouraging the development of wisdom (21.1%) followed by reflection (15.9%) and the importance of individual differences (15.8%). Very few of the nominated or self-referred participants mentioned wisdom as having anything to do with age, either alone (nominees=5.3%, self-referred=4.8%) or in combination with individual differences or experience (combined total nominees=5.2%, self-referred=23.8%). No significant differences

between self-referred and nominated participants were obtained in the statistical analysis.

In terms of gender effects, both nominated men and women frequently discussed social relationships as the basis of wisdom (men=24.0%, women=19.6%). Nominated men also emphasized the importance of reflection (24.0%) while nominated women stressed wisdom as emerging through a combination of individual differences and experience (21.6%). As with the self-referred group, it was relatively rare for both nominated men and women to explain wisdom as emerging with age (men=4.0%, women=5.9%) or through a combination of age and experience (men=8.0%, women=2.0%). No significant gender differences between nominated men and women were obtained in the statistical analysis.

In summary, the overwhelming consensus among all of the groups was that wisdom develops through experience and when references were made to specific experiences, they tended to involve social relationships with parents, teachers or other important figures. Some participants qualified this account with the provision that certain prerequisites are necessary for one to benefit from experience, such as intelligence or personality characteristics including open mindedness. Contrary to popular stereotypes, few of the participants believed that wisdom comes with age.

HOW DO WE BECOME WISE?



Nominated participants

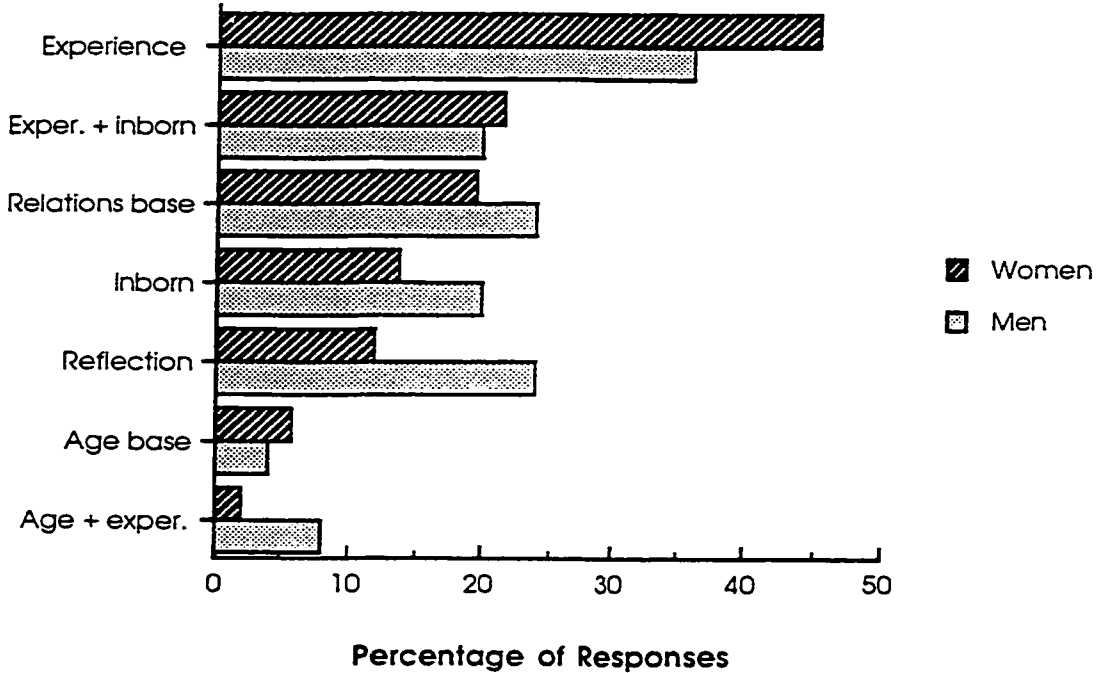


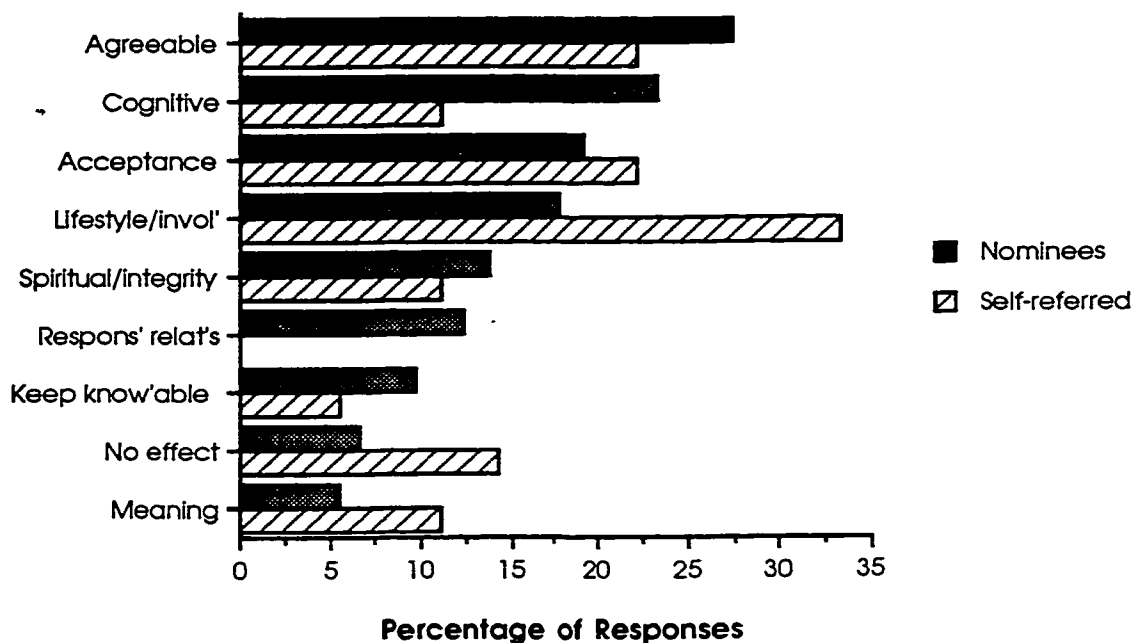
Figure 5
Responses to the question "How does one develop or acquire wisdom ?" for self-referred versus nominated participants and for male versus female nominees.

Conduct of wisdom

Participants were asked "How does this way of looking at (wisdom) affect the way you live your life?" Figure 6 depicts the responses to this question and reveals that the top category for all groups was agreeableness, indicating attempts to participate in harmonious relationships with other people (nominees=27.4%, self-referred=22.2%; nominated men=32.0%, nominated women=25.0%). Both groups emphasized cognition such as thinking through problems and applying logic (nominees=24.2%, self-referred = 10.2%). Both nominated and self-referred participants also emphasized the importance of *acceptance* such as acceptance of limitations in themselves and others, and acceptance of change (nominees=19.2%, self-referred=22.2%). Both nominated and self-referred participants emphasized attempts to keep active and involved (nominees=17.8%, self-referred=33.3%). Nominated participants also emphasized the importance of thinking things through carefully and logically (23.3%) while self-referred participants stressed the value they placed on spirituality and integrity (11.1%). The least frequent categories mentioned by the nominated participants included the feeling that one's life is meaningful (5.5%) and that their conceptions of wisdom had no effect on their lives (6.6%). For the self-referred participants, the least often mentioned categories were taking their responsibilities in relationships seriously (0%) and keeping knowledgeable (5.6%). No significant differences between nominated and self-referred participants were obtained in the statistical analysis.

In terms of gender effects, both nominated men and women emphasized the importance of cognition in terms of thinking things through carefully and logically (men=32.0%, women=18.8%), and the importance of accepting ones' self and life's circumstances (men=16.0%, women=20.8%). Nominated men also emphasized the attention they gave to their responsibilities in relationships (20.0%) while nominated women frequently discussed their attempts at being involved and active in their lives (20.8%). No significant gender differences were obtained in the statistical analysis.

HOW DOES THIS AFFECT THE WAY YOU LIVE YOUR LIFE?



Nominated participants

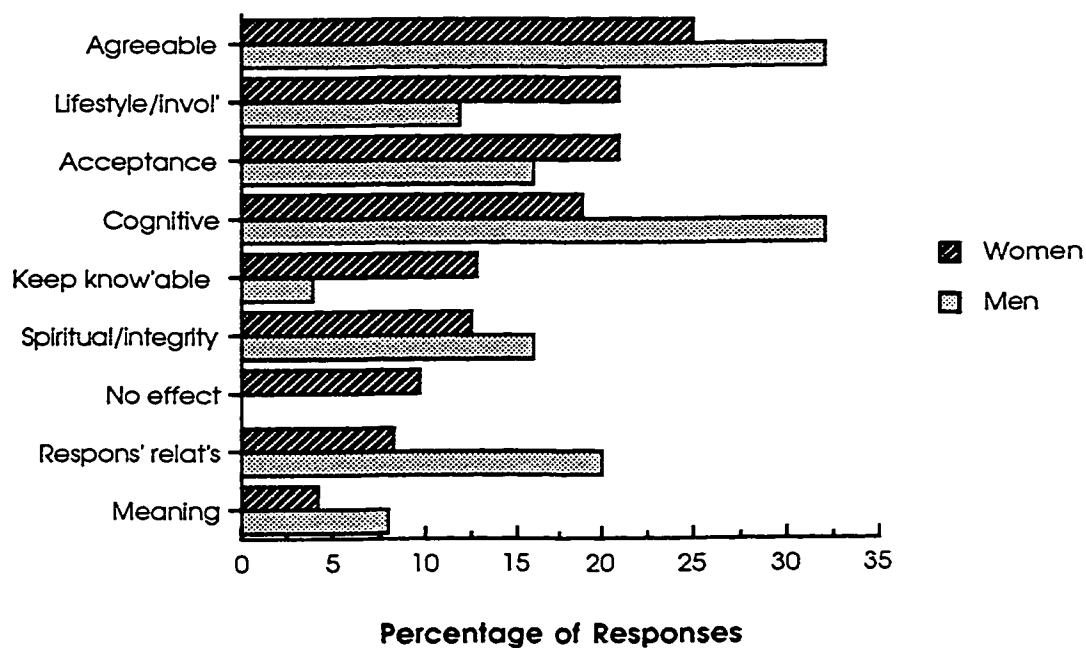


Figure 6
Responses to the question "How does this way of looking at wisdom affect the way you live your life ?" for self-referred versus nominated participants and for male versus female nominees.

Emotions and Wisdom

To explore further the predicted association between wisdom and affect participants were asked "Do you think emotions have a place in wisdom?" Examination of Figure 7 reveals that the majority of participants in all of the groups answered the question affirmatively although there was a minority which believed that emotions are incompatible with wise decision making. Participants generated several distinct categories of responses in terms of how they believed wisdom and emotion were related.

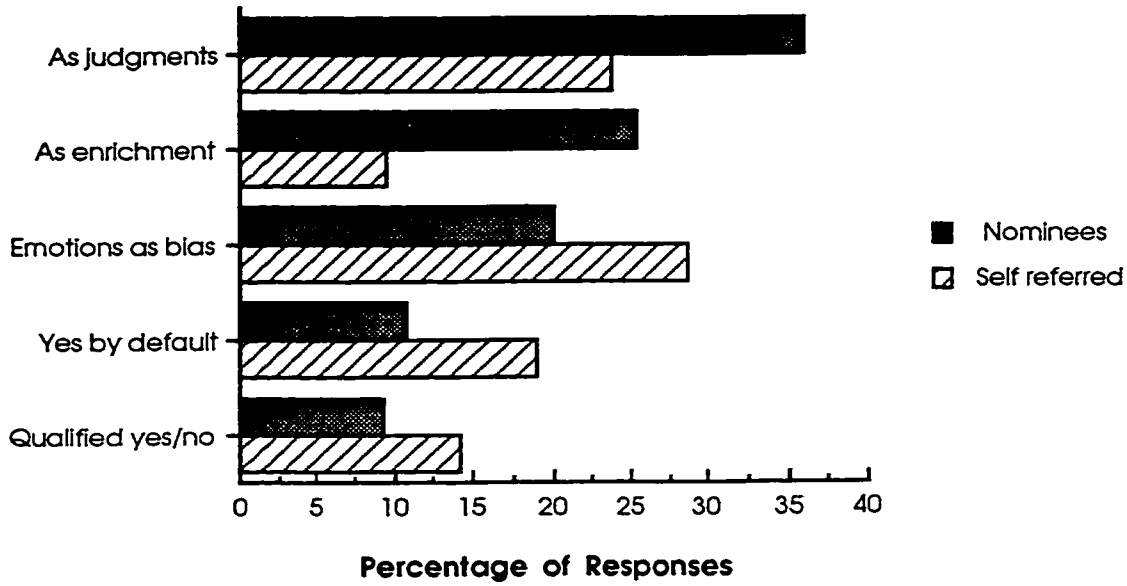
All four groups emphasized that attention to one's own feeling state as well as the emotions expressed by others is an important part of the process that leads to making wise decisions and judgments (nominees=36.0%, self-referred=23.8%; nominated men=36.0% nominated women=36.0%). In contrast, some of the participants in each of the groups stressed that emotions cloud or bias one's judgment and placed a premium on objectivity and logic in wisdom (nominees=20.0%, self-referred=28.6%; nominated men=20.0% nominated women=20.0%). Nominated participants frequently emphasized emotions as adding richness, complexity and meaning into one's life (25.3%) while self-referred participants frequently discussed emotions as part of the human condition and therefore related to wisdom as if by default (19.0%). The least frequently mentioned categories for both nominated and self-referred participants were a simple unelaborated no (nominees=1.3%, self-referred=4.8%), the idea that wisdom involves giving others emotional support (nominees=5.3%, self-referred=9.5%), and that emotions act as a cue to reflect longer on a particular problem or situation (nominees=8.0%, self-referred=0%). No significant differences between self-referred and nominated participants were obtained in the statistical analysis.

In terms of gender effects, following emotions as judgments, the top two categories for both nominated men and women were emotions as enrichment

(men=28.0% women=24.0%) followed by the idea that emotions bias one's thinking (women =20.0 %, men=20.0%). Nominated men also frequently discussed a qualified role for emotions such that some emotions such as love or sympathy are an essential part of wisdom while negative or intense emotions may cloud/bias one's judgment (16.0%). Nominated women responded that emotions are part of the human condition (14.0%) and that they act as a cue to reflect on the situation (12.0%). Few of the nominated men or women emphasized wisdom as functioning to emotionally support others (men=4.0%, women=6.0%) and none of the nominated men discussed emotions as a cue to reflect or gave a simple unelaborated no response. Likewise, few of the nominated women gave an unelaborated no response (2%), and nominated women did not tend to qualify their responses in terms of affect valence or intensity (6%). No significant gender differences were obtained in the statistical analysis.

In summary, consistent with hypothesis 3 the majority of the participants appear to believe that taking emotions into account is integral to wise judgments and/or that wisdom by its very nature involves an appreciation of beauty and love of others. Many participants were also wary however of the potential biasing effect that emotions, especially intense or negative emotions, may have on one's actions and decisions. Thus the overall consensus among these participants would appear to be that examination and attention to affect may be associated with a broadening and deepening of one's understanding of others and one's self. However, unmodulated or unexamined emotions may lead individuals to impulsive or unwise actions.

DO EMOTIONS HAVE A PLACE IN WISDOM?



Nominated participants

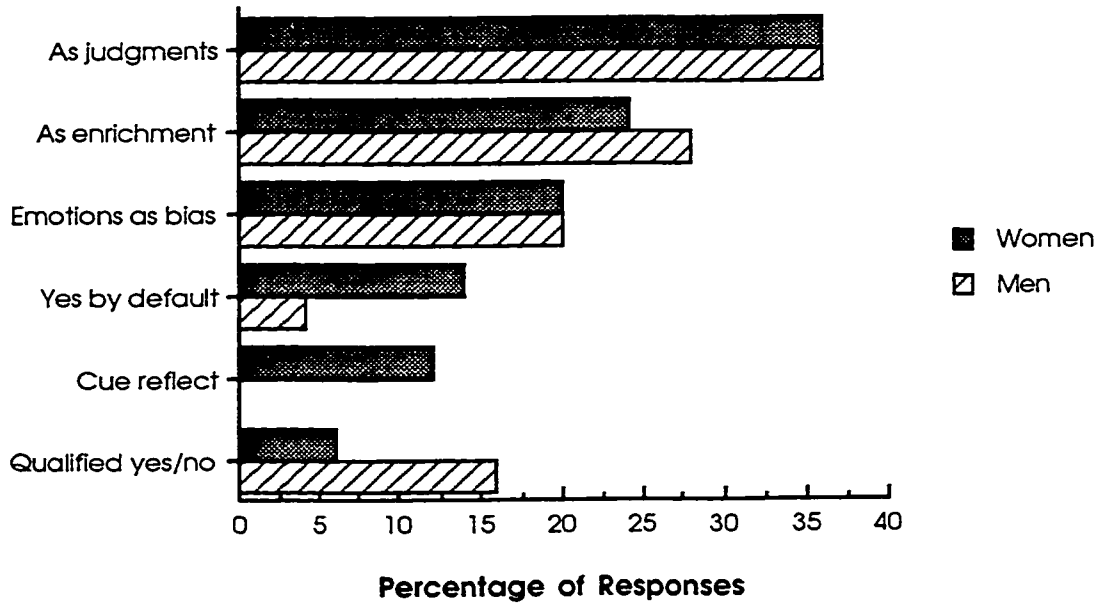


Figure 7
Responses to the question "Do you think emotions have a place in wisdom ?"for self-referred versus nominated participants and for male versus female nominees.

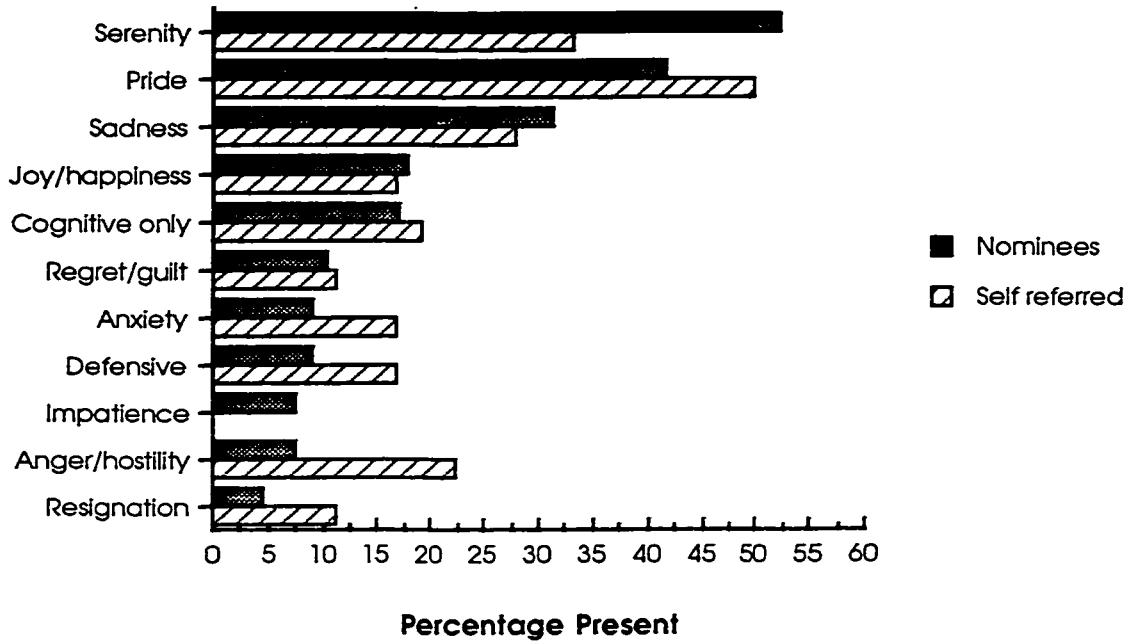
Interviewer ratings

Affect expressed during the interview

Hypothesis 3 predicted that wisdom would be associated with affect integration and affect competence. Specifically, wisdom was expected to be associated with a quality of affect described as 'serenity' and as being incompatible with negative emotions such as despair or bitterness. The approximately five hours of face to face interaction with each participant provided an opportunity to observe the quality of affect participants expressed across a series of tasks. Some of these tasks such as Block Design were intellectually challenging and potentially frustrating for some participants, while others such as the wisdom interview itself, provided an opportunity for participants to reflect on both the joys and painful experiences of their lives. Given the personal nature of the interview, it was not surprising that a broad range of affect was expressed by the participants including sadness, anxiety and joy. To document the interview process, interviewers noted any extreme emotional reactions which arose at any time in the interview and rated the videotaped portion of the interview in terms of expressed affect.

Figure 8 depicts the most frequently expressed emotions in the wisdom interview. A quality of affect perceived as 'serenity' in which participants readily expressed both positive and negative emotions with an air of acceptance and tranquility was the most frequently rated emotion for all groups (nominees=52.2%, self-referred=33.3%; nominated men=55.0%, nominated women=51.1%). All four groups also frequently expressed pride in their accomplishments or performance, (nominees=41.8%, self-referred=50.0%; nominated men=30.0%, nominated women=46.8%). Many of the participants expressed sadness when discussing particularly painful turning points in their lives (nominees=31.3%, self-referred=27.0%; nominated men=25.0%, nominated women=34.0%) as well as joy or happiness when

Emotions expressed during interview.



Nominated participants

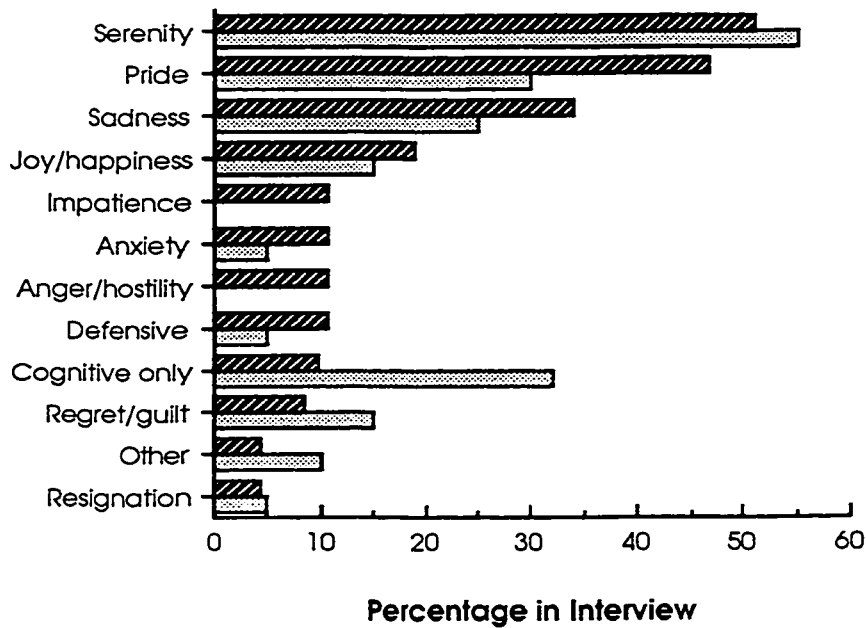


Figure 8
Emotions expressed during the Wisdom Qualitative Interview

reminiscing over positive life experiences (nominees=17.9%, self-referred=16.7%; nominated men=15.0%, nominated women=19.1%).

Nominees rarely expressed an attitude of helpless resignation (4.5%) or hostility (7.5%). The least frequent emotions expressed by the self-referred participants included impatience (0%) and guilt (9.5%). Notably, many of the nominated men expressed very little or no affect and were quite emotionally neutral in their self presentation (32.0%). No significant differences between self-referred and nominated participants or between nominated men and women were obtained in the statistical analyses.

Perception of Wisdom in Relation to Wisdom Scores

Immediately following the first session, interviewers completed nine 7 point ratings designed to assess the social competency and perceived wisdom of the participant (see Appendix A). These ratings were completed well before the videotaped interviews were coded and the 7 wisdom criteria were applied.

Examination of zero order correlations among the variables for nominated participants revealed that participants with higher wisdom scores were rated significantly higher by the interviewer on the post interview ratings than participants scoring lower on wisdom ($r=.49, p<.001$). This finding supports the idea that wisdom is a distinct quality which can be readily identified by others.

Section III

Qualitative Interpretation of Wisdom

In this final section of results, the tremendous variability and richness of the videotaped wisdom protocols will be further explored using an interpretive, qualitative procedure (Glaser & Strauss, 1967). The main goals of this phase of the analysis were: 1) to clarify the meaning of the variables found to be most associated with wisdom in the quantitative analyses (e.g., openness, reflection); 2) to explore some of the more elusive dimensions of wisdom such as interpersonal style and existential awareness which are difficult to quantify 3) and to ground the many facets of wisdom in the participants' own words.

Given the complexity of the interpretive procedure, it was decided to narrow this phase of the analysis to a select subgroup of 10 individuals who scored highest in terms of their wisdom scores. Five of these individuals were men and five were women. The youngest was 61, the oldest was 79. Nine of the individuals were interviewed by the author and one was interviewed by the research assistant.

This section relies heavily on the assumption that the manner in which people speak about their lives is meaningful. For example, rather than interpreting the life events data solely as a source of hypotheses regarding the development of wisdom, the protocols were approached in terms of a consideration of what the participants were *communicating about themselves* through the medium of these events. It should be emphasized that the interpretations which will be presented were based on the observations of the author, and are coloured by her experiences, world view, and personality. While this may limit generalizability to others, the procedure poses a uniquely personal, and in depth account of what it was like to interact with this particular group of wise people.

The methodology involved repeated viewing of the videotaped interviews. The interviews were transcribed, and then notations were made on each protocol which summarized what the participant had said in terms of dominant themes and sub-themes. At first, there appeared to be a vast amount of apparently unrelated themes. Themes mentioned by less than two of the participants were discarded in favour of more frequently mentioned themes. The themes were then evaluated in terms of precision and clarity, parsimony (i.e., themes which are overlapping are combined), and pertinence (i.e., related to the research question) as recommended by Miles & Huberman (1984). An attempt was made to develop the themes by highlighting qualifying statements and by emphasizing contrasting points of view whenever they were evident. This process reduced the number of themes to eight distinct themes including: interpersonal style, values (humanism & generativity), motivation (relationship & personal development), openness (nondefensiveness, openness to emotions, ideas & spirituality), critical awareness, personality integration of negative characteristics, affect, and experience. The types of experiences that the participants identified as having promoted their wisdom will then be discussed in terms of how these experiences led to a broader perspective and to a deeper awareness of existential issues including freedom and responsibility, awareness of uncertainty, facing aloneness, and accepting one's mortality.

The format of this section will be to present a specific theme, followed by an exploration of the theme by means of verbatim quotes from the interviews which develop the theme. Each quotation will be followed by the participant's code number to facilitate identification of which participants contributed specific ideas. The themes will be organized in terms of increasing levels of inference and interpretation beginning with a description of the interpersonal style of the wise people and then will progress towards the more abstract issues.

Theme #1: The Interpersonal Style of Wise People

Holliday and Chandler (1986) describe the interpersonal style of wise people as socially unobtrusive. It is not clear as to whether social unobtrusiveness is meant to refer to being socially skilled, tactful, passive, or to some other personality trait or style such as introversion. One of the participants described her unobtrusive style as being powerful without being obvious. Another emphasized the importance of listening skills.

"My masculine side? I'm a very good manager. I had a lot of responsibility at the hospital for the day treatment centre, and I managed to do it quite well, but in a low keyed way. Probably a lot because of my background and never being able to assert myself openly. I am a very quiet manipulator!" (#191).

"They say that wise men don't talk too much because they realize that you can't pass along your experience and the words you use are often misinterpreted. Fools seems to have a lot to say. Saying that, hopefully I'm not altogether foolish and regretfully I'm not altogether wise. I talk too much. I wish I was a better listener. The wisest people have the ability to listen." (#110).

For some of the other participants social unobtrusiveness manifested itself as tact. Tact revealed a sensitivity for other people's feelings and an awareness that tactlessness could be destructive to the relationship.

"Wisdom is to get into people's boots, you know, to know how a person feels before you say something.... This woman I know said Dorothy, your rouge is all wrong and Dorothy jumped at her. She told me and I said well, you were wrong for saying that to her. She wasn't wise in telling her that. I too had noticed the rouge on Dorothy but I didn't tell her. Is that cowardice? I know she'll feel bad. So she had the rouge on wrong, big deal. Is it worth making her feel bad? But then I don't know whether it's because I want her to like me or that I don't want to hurt her. Probably the latter. Maybe I don't want to hurt myself." (#156).

Thus for this participant, underlying social unobtrusiveness was sensitivity to other people, as well as an explicit statement that indicated that the relationship was to be held as a higher priority than getting one's own point or values across. There was evidence that other wise nominees shared this priority when it came to the topic of giving advice. Although Baltés emphasizes being able to give "exceptional advice and commentary about difficult life matters" as a hallmark of wisdom, not one of the individuals interviewed advocated giving advice to others in the usual sense of the word. Rather a number of individuals stated that *not* giving advice was one way of recognizing a wise person.

"Wise people are people who have been around a long time, who have a broad picture and who are open; who don't say 'do this' but who allow somebody enough space to find out where they want to be and to create a space for deepened understanding." (#140).

"If you were discussing a problem with a person and that person snapped out an answer before hearing all you had to say I might think that person hadn't as much wisdom as he should. If on the other hand, he was willing to listen to you, to ask some questions and draw some parallels, I would say the second person was the wiser of the two. That he had acquired some understanding of human nature and could stand back and think about it without snapping out an immediate answer." (#170).

For at least one of the participants, tact, and a reluctance to offer unsolicited advice, revealed an underlying awareness of the relativism of people's values. In addition, not giving advice involved an awareness of the limitations of one's knowledge. In their own way, each of the nominees indicated an awareness of the hazards of attempting to impose one's own values or ways of doing things on another.

or put another way, an awareness of the limitation of the self in attempting to find a solution for another's problem.

"Never judge. We're both here. We're both trying to live our life and find our way to what is important to us. I have my own sense of what is right and wrong but those are my values and I don't hold them for others." (#169).

"She comes to me because she knows I'll give it my time. I never have a fast answer, because I'm not really sure all the time I know what the answer is." (#119).

A recurrent concern involved awareness of the limitation of the self when attempting to direct others and a restructuring of old assumptions regarding responsibility. For some, particularly the women, a major revelation involved becoming more responsible for one's self, and at the same time, giving up the urge to take responsibility for others.

"I have had to temper my need to be right all the time and wanting the last word. And I have had to become aware of traps - when people around would abuse my wish to help and would not hear when I said no. Because you cannot do everything for everybody at the same time." (#141).

"I always felt it was up to me to make things right. It was a hard role to carry. It took me a long time to realize that I was not responsible for other people's feelings...You have to step back and analyze what you're trying to do and who the hell you are." (#119).

"One turning point was my marriage and that was difficult because we were so culturally different. She was French-Canadian and I was very English. By ten years later I was very bitter and cynical and didn't see much purpose, but at age thirty-five my attitude changed. And I

changed and so did she. That is a principle I've discovered, *you can't change anybody else* . If you want to change the world, you change yourself." (#110).

In summary, the socially unobtrusive interpersonal style of wise people appears to reflect their reluctance to impose their views on another but instead to serve as a sounding board to help the other to explore and construct his/her own solution or understanding of the situation. The emphasis is not on giving advice, which may be experienced as intrusive and demeaning by the other. Instead the wise person may suggest that certain key issues are being overlooked, or ask questions to clarify the situation. This interpersonal style is associated with an awareness of limitation in the self's ability to solve someone else's problem as well as an awareness of the risks to the friendship that giving advice, especially ill thought out or of poor quality, would entail. There is also attention to the integrity of the relationship in terms of relating to the other as an autonomous human being capable of finding their own way in life. The outcome to such a process would be enhanced understanding and self awareness on the part of the other, in keeping with the view that wisdom acts to foster growth and development.

Theme #2: Values held by Wise People

Subtheme: Humanism

One of the questions in the wisdom interview asked participants to express the values they held. These wise people emphasized values which reflected a deep concern for relationships with other individuals, with groups of people, or with the planet as a whole. Several of the participants expressed humanistic values in the sense of valuing people and relationships over material possessions or personal prestige. This value was associated with a deep sense of connection with others and with commitment, involvement, and action.

"I've always been interested in people. People more than things. My orientation has been more to the arts and humanities than to the sciences and over the years I've become more so. More involved with people. I guess my experience in India during the war and what we saw, what we couldn't avoid seeing; the famine, the deaths, the deprivation...I guess I've become more concerned with human values and whether humans are getting the proper treatment. ..I've become more aware that a lot of people don't have the good things in life and are suffering. It seems all wrong. It seems to me that if you put people first and are caring and understanding and empathic towards them, that's going to bring about something that's better for everyone, not just me, but for the whole human race. Those are some of the things I'm concerned about and think about. It may be driving me to think more, and do more, and get more involved." (#170).

"I think one thing that's involved in the quality of wisdom is the appreciation of other people and their relationship to you. That all the decisions you make are not just involved with what you are going to get out of it. But that doesn't really make you wise. It's trying to make the relationship you have with other people have a quality that's meaningful for both of you rather than just for one person...I think the only way we encourage growth in children or between people is when people are communicating with each other in a positive way. < WHAT DO YOU DO TO MAKE THE RELATIONSHIP MEANINGFUL? > I'm thinking about my granddaughter. She's at an age when everyday brings a great crisis for her and I try to keep in contact with her and talk with her often and give her a lot of support. She sometimes does things that even I think are a little bit crazy, and her mother and father are tearing their hair out, but still I want her to feel my support. I think at her age there has to be a feeling that no matter what I do, there is a person who will love me, and understands me, she might not like what I'm doing but she'll be there." (#191).

"One of my teachers taught us that intelligence is not a privilege, it is a responsibility. Not to set you apart in a dominant position. And never to humiliate people...What is most important to me - I will use a misused

word - justice. That's in every area of my life, justice. Justice and equality. Equality of people and a great respect for children. To me this is all linked together. And to organize so this is possible." (#141).

Subtheme: Generativity

A related value could be described as generativity in the sense of acting to promote the survival of future generations and the planet . Like the humanistic values discussed above, participants emphasized an active commitment in promoting generative concerns.

"The most important thing is to work towards leaving this life having left behind something better than when you entered it. Everything that goes into that is values oriented towards people rather than things. I noticed that I'm less interested in eating meat than before, more interested in gardening, now I recycle because I believe in returning things to the earth. I see a unity between animals, trees, and I feel part of this not separate. Those are my values." (#110).

"The most important thing is the continuation of the earth. I'm very very scared about what's happening. I have grandchildren and feel for them, and for all children. I sometimes wonder if we'll be able to turn things around." (#140).

Theme #3: Motivation and Wisdom

Subtheme: Enriching relationships

Several of the participants discussed how generative interactions were experienced as fulfilling, satisfying, or enriching suggesting that the interactions were intrinsically motivating. This enrichment was argued as compensating for heavy commitment and investment in the relationship in terms of time and energy. There was also some suggestion that reflecting on the relationship itself was experienced as pleasant.

"For several years I had a friend who was ill with cancer... She was someone who was very demanding, and very loving, and who needed - she needed someone to take her to the doctor, out for lunch, take her shopping. So for five years I took care of her.... Some times I would feel resentment that it did take that much time, but it compensated - it enlarged my life because I learned so much from her, the life of a person who was shut in, and who was dependent, and she was a very independent woman so to be dependent was probably the worst thing in the world for her. She was a remarkable woman and a very interesting friend to have had, and I enjoy thinking about that....The different interests we had in common, we read many books together and I went to the library twice a week because she was such a reader! All these things widened my life." (#191).

Subtheme: Personal development

The intrinsic motivation of personal development was discussed by other participants in broader terms regarding an attitude of enjoyment of learning in general. This process was described as self directed and self perpetuating.

"I read a lot of history. It gives a lot of pleasure and a lot of inducement to keep on reading because the more you learn the more you want to learn. We've taken a lot of courses as auditors, not for credit, but to enrich our lives by getting a new view, new vistas. But to get back to the idea of self control and self directed learning. My goal is to go through a box of material I have to categorize. Health is something I care about so I want to try to do something that would be useful for people in the troisieme age... My priorities have been changing over the past 10 years. I guess I've had more time to think, to read, and to learn, and I guess I've become driven to find ways I can make a contribution." (#170).

"To sum up, I think a lot of things go together. I think being wise and being happy go together. Being wise and having a peaceful existence go together. Being wise you will seek happiness and peace rather than pleasure and thrills. I don't think there is anything wrong with pleasure and

thrills, but it is more `a-propos to seek something or to be something...Wisdom means contentment and it's not a sloppy sort of thing. It's a contentment that comes from involvement, and it is contentment from being alive, and a contentment from the realization that you are interdependent, not independent and not dependent." (#110).

To summarize, the themes of socially unobtrusive interpersonal style, humanistic and generative values, and intrinsic motivation supports the idea that wisdom functions to promote growth in others and encourages personal development. As discussed above, there is a desire to make the relationship meaningful for both the self and the other, in the sense that it is experienced as constructive and enjoyable. The role of the wise person in this process is not to pass on information regarding the solution to one's problem, but to communicate support for the other's search for direction. This stance shows in action, rather than words, a respect for the other as an autonomous human being, whose values and goals are accepted as being different from one's own, as well as an awareness of the limitations of the self in knowing the right answer to another's problem.

Theme # 4: Openness of the Personality

As was evident in the quantitative analyses, the personality dimension of openness was associated with wisdom. But what exactly does it mean that wise people are open, and how was this openness experienced by the author?

Subtheme: Non-defensiveness

One of the most striking observations I had was how the openness of the individuals came across not just in how they were able to take information *in*, but in their *willingness to share* their experiences, some of which were painful, with the interviewer. It was the openness to reveal oneself to another which I found to be most impressive in

these interviews. The life stories, for the most part, were not particularly extraordinary; in fact, for the most part, the life stories of wise people appeared quite ordinary and in keeping with normative events for this age group. It was the capacity to share these experiences and to be able to reflect on them in a manner that demonstrated understanding and insight that revealed how a person would be impressed by the wisdom of the individual. Thus one aspect of openness could be described as a relatively non-defensive manner of relating, permitting a high level of affect intensity in the interviews.

Subtheme: Openness to emotions, to ideas, and to spirituality

The wise nominees discussed three other aspects of openness. Openness to one's emotional experience, to multiplicity of ideas, and to spirituality.

"Wisdom is a combination of reasoning in the head and to be open to feelings, the feelings of other people. It is the harmonizing of these two. Some people feel superior because they disdain emotions and find only reasons in their head. But to me, not to feel the needs of other people is a handicap." (#141).

"I've learned an awful lot in living. I'm a mass of contradictions. For example, I'm a reticent private person who has spent his life in sales which is a contradiction in itself because you have to reach out to other people....I've done a lot of things that more outgoing people do and by doing these things I've learned a lot. Also I read quite a bit...What interests me is the learning process. And that's a contradiction too because perhaps I'd fit better in an academic pursuit rather than a business pursuit....I'm very active in groups. Since the age of thirty-five I've been involved in some sort of group all the time. I'm interested in people and as I get older I become less interested in things and more interested in people." (#110).

The second aspect of openness, openness to ideas, is intimately connected with awareness of limitation, particularly of the subjectivity of one's own point of view. There comes a move away from egocentric attitudes towards a broadened perspective on reality.

"What I regret most about people as they age is when their world narrows and becomes a lot of authoritative pronouncements. They know it all without knowing much." (#141).

"I recognize wise people by their openness and their presentation of themselves as learners, as always seeing whatever they know as limited by the level of information they have and aware that there are all sorts of pieces of information they need in order to keep moving." (#187).

"It comes down to attitude. And the attitude that's necessary is openness. When I was younger I had a lot of beliefs. Today I have very few beliefs but I have more faith. And the difference is, beliefs are a closed thing. If I believe your sweater is green, that is my truth and you can argue that it's red till you're blue in the face but that won't change my belief. Faith on the other hand is something that is open. You say to yourself, I don't know where that's going to lead. You say it's red, it looks green to me, but if you say it's red and other people say it's red, maybe it's red... Faith says there is some truth in what you have, there is some truth in what I have, but the truth we share is more important than the differences. The open attitude is something that heals differences, that unites. Beliefs on the other hand, the most horrid things done in this world have been done out of beliefs and the attitude that you are wrong and it is my duty to correct that. If on the other hand I accept your right to your opinion, I have to accept that I can't change you." (#110).

At times however, extreme openness led to difficulty in making commitments.

"Sometimes seeing all the sides leads to a situation where you're right and you're right and you're right. That can really hamper you." (#119).

The third aspect of openness involved an awareness of the limitations of rational thought in understanding human nature or life in general. This awareness was associated with openness to spirituality in at least one of the participants.

"I'm a spiritual person in the sense of seeing more to life than the objective truth. In that sense I'm quite open to variations that people present around their feelings and thinking." (#187).

Theme # 5: Critical Awareness

The personality dimension of openness may be associated with wisdom by virtue of facilitating the expression and taking in of information in a relatively nondistorted way. This in turn would lead to enhanced understanding of people, and of ideas. The capacity to tolerate ambiguity and complexity appears to underlie this process. However openness was not seen as synonymous with acceptance of anything and everything. Participants discussed the need to temper openness with a critical stance, and valued the ability to distance one's self and reflect critically on the problem.

"The distance makes you accept the limitations of your actions, the limitations of your knowledge of problems and accept even your mistakes. And that's not easy to do." (#141).

This stance tended to lead to a more cautious outlook.

"My grand daughter is 21 and she is very easily involved in things, and very enthusiastic and loving and I see myself in her quite a bit, of getting involved in the women's movement. She's not too reflective at this time in her life, very involved in things that effect her emotionally, and I think at that age I was very similar. I haven't changed that much but I've gotten more reflective as time goes on... Experience gives you more caution in getting involved in things. When you are 21 it doesn't occur to you that anything bad could happen, at least for certain kinds of people. When I was 21 I didn't expect anything bad could happen. " (#191).

Subtheme: Self-clarity

A recurrent subtheme involved adopting a critical stance in relation to evaluating information in general, and one's conclusions and biases in particular. The manner in which the participants discussed this critical stance implied that it was learned later in life as the means to examine childhood beliefs and attitudes from the point of view of the self as an adult. This process led to greater self clarity. In the words of one participant, "Wisdom has to be a dynamic thing. It is not a state, it is a process." (#141).

"It is not wise to accept every statement as fact without first examining it and analyzing it for yourself. It is easier to accept them but it is not wise...We are all raised with certain prejudices and attitudes. I am prejudiced but I am not a bigot meaning that I recognize these attitudes and choose not to act on them. We have to think over what we have been taught and what we believe and to question them."(#119).

"You hear some people who say, 'That is how I was taught so that is what we are going to do'. That is fixed, and that is not going towards wisdom. That is towards repeating the same errors because you throw a blanket over what has happened and you idealize it. Idealization is not being wise." (#141).

One of the participants discussed a critical examination of his life history from the point of view of being open to one's past mistakes and accepting responsibility for them.

"My directions or aims were not wrong before. I think they were important. But there comes a point in life where you have to stop and question things. You can't just accept things at face value. It's the results that count. If the results turn out wrong, you have to ask why." (#158).

In summary, the previous quotations describe the move towards wisdom as a process involving an interplay between broadening one's horizons while simultaneously applying a critical stance in evaluating ideas. This interplay between openness, a personality variable, and critical reflection, a cognitive process, fostered greater self awareness and mindful as opposed to automatic ways of behaving.

Theme #6: Personality Integration of Negative Characteristics

In addition to personality-cognitive integration (i.e., openness & critical reflection) a second aspect of integration became evident which was in line with the theories of Erikson (1959). A number of the participants discussed a process of embracing both one's positive and negative characteristics, and discarding those aspects that were not genuine in the sense that they were externally and not internally driven. The outcome was a more unified, integrated, and whole person. Wise people were cognizant of and more or less accepting of their own negative characteristics in interpersonal relationships although they may choose not to reveal them to others.

"There's something about myself that I don't particularly like when I look in the mirror. I'm kind, but I'm impatient. I think I'm very impulsive." (#156).

"I learned that honesty may be the best policy for one's own conscience, but it is not the best policy for your understanding of life around you." (#158).

"I may be aggressive, but I cover it because I have learned easier ways to get somewhere with others... I have tried not to hide from myself the things I don't like about myself, and that's not easy. I'm not always the heroine of my story. Sometimes I'm the villain." (#119).

Integration of negative characteristics necessitated becoming aware of one's limitations and then taking responsibility for change.

"One of the things that stays with me is what I learn about people. I identified closely with work, it was an emotional thing. I was hurt about the people I thought would support me who didn't and I was amazed at the people I thought couldn't give a damn who were there for me. And the biggest support came from my family... My brother had lost his job six months before me. Outwardly he didn't seem too disturbed. And thinking back I realize that I didn't give him too much support. So the shock came when I realized the pain from my friends who hadn't given me any support and how I too didn't support him. That was a learning experience. I've incorporated into myself the ability to feel empathy for someone in this position. The friends who didn't support me had not been through this experience. There is always spill over. I think more in terms of what people need than a show." (#110).

"At age thirty-five, I went through a religious experience that was the start of a tremendous change in attitude. I spent time examining my life and determining what was missing. For me it was my lack of experience of community. I had been a solitary person. Thinking back, I wouldn't want to change a thing, but I wouldn't want to go through that again. It was very very difficult. It is stupid how long it takes to come to insights about one's own behaviour and how difficult it is. So say hey that's your fault and no one else's. What's the difference who's' fault it is? Are you any happier if it's someone else's fault?" (#110).

Integration of one's negative characteristics would permit an enhanced capacity to tolerate and empathize with the limitations of other people, the participants primarily discussed such integration in terms of a feeling of honesty with one's self (as opposed to self delusion or deception) and feeling comfortable with one's aims and directions. Integration of the personality was associated with less intrapersonal conflict and more self clarity.

"Wisdom happens when people have unified all their needs and aspirations and don't feel torn apart by different wants...I have to define it (i.e., wisdom) in the person. I cannot define it in the abstract. The wisest person I can think of was my grandmother. She grew old without a sense of desperation. As a young person she was definite in her judgements but in her last 20 years, she lived to age 87, she grew more tolerant in her positions." (#141).

"I believe that in order to be a whole person, we need to have all parts of ourselves involved. I love metaphor and intuition, and hunches. I feel I have been able to integrate what used to be dichotomous ideas. I feel I live my world as a rich complexity without trying to simplify it." (#140).

"I never wanted to be anyone else than who I am and I never wanted to be any age then the age I am. I'm 79 now and I'm just as happy as when I was 16. Happiness is a silly word. I'm not just happy, I think I'm a sad person inside, my paintings show that. Art is always a reflection of yourself. I used to do portraits and got a lot of money for them but I stopped because people always wanted to be pretty. My nose does not look like that, what is that green spot? and I was afraid if I continued, it would be a prostitution of art."(#156).

In summary, the themes of openness, critical awareness, and integration of negative characteristics supports Orwoll and Perlmutter's (1990) contention that wisdom involves a combination of exceptional personality development and exceptional cognitive development. The process by which this occurs appears to involve an interplay between a openness to various ideas which may be distinct from one's own, and a critical, reflective stance which scrutinizes these ideas as well as one's own biases and preconceptions which may, if left unexamined, hinder understanding. There is a willingness to apply this process to one's own life; to acknowledge one's biases and pitfalls, and to take responsibility for them. The end result is greater self understanding, authenticity, and genuineness.

Theme #7: Affective Dimension of Wisdom

The hypothesis that wisdom is associated with affect competence was further explored, both in terms of how one feels in the presence of wise people (i.e., elicited affect) and in terms of how affect is expressed by wise people. In terms of affect elicited, these encounters with wise people were felt not as being awestruck by a superior being, but were experienced as an intimate conversation, almost as though we were old friends. This atmosphere was a testament to the warmth and interpersonal skills of the participants which created a climate of security and comfort.

In terms of affect expression, there was tremendous variability in the level and degree of affect expressed during the interviews. Three of the ten participants cried during the interview when discussing past losses. These tears were appropriate, and once expressed, they disappeared as easily as they appeared. I was struck by how naturally emotions were expressed by these three. There was no effort to conceal them, to suppress them, or to deny them. In fact, emotional expression and connectedness were valued and deliberately cultivated by several of the participants.

"Basically I consider myself a very emotional person, not a rational person, and I would base a lot of wisdom on emotion. There are a lot of people who are very bright and understand very well the way things should be in the world, but either they don't care, or they're too separated from the life they're leading and they're not really deeply involved in living. Then it's very hard for them to make much of a life. You can be a very excellent teacher from the point of view of knowledge and facts, but if you're going to make your students enjoy your program and enjoy learning, you have to have feeling for your students, and feeling for the kind of information you're giving, otherwise it has no meaning." (#191).

"I'm a person who always thought of myself as very logical and not that emotional. Today I realize that it is very logical to act on emotions. One of my abilities is to size up people quickly. I've discovered that quite

often when I just can't make a decision, I should follow what my emotions are saying. Through my experience I have found that emotions can be a better indicator than intelligence. I tell myself it's logical to act according to emotions." (#110).

"It seems to me that through love you acquire more wisdom than in any other way. Love in the sense of caring, relating to, being empathetic to individuals or to other peoples. So not in the narrow sense but in the wider sense of the word. It seems to me that if you love something, you won't be unwise in relating to them. You wouldn't say things or do things that would cause undo worry but would try to be as helpful as possible. You can't separate the two." (#170).

"I don't think you can grow older and be truly alive unless you're open to change. I'm not a very moral person because I don't think in terms of right and wrong. But many years ago I was a very moral person and thought in those terms. Today I would probably think more in terms of whether a particular action was a loving action. That's not very moral really." (#110).

Subtheme: Emotional modulation

In contrast to this emphasis on emotional expression, some of the participants downplayed emotional expression and instead emphasized the capacity to modulate their affect.

"I'm not very expressive. I'm responsive to others, but in terms of my own angers and joys I tend to be rather low key." (#187).

"At the time of my divorce I felt like going into a deep depression, but I didn't have time. There was too much to do to dwell on the pain. It became a transformation." (#141).

For one of the participants, her discomfort with expressing negative feelings and confronting others frequently led to numbness and ultimately being overwhelmed by

her feelings. She learned to recognize the importance of emotional expression as the means to face unpleasant realities and losses.

"We stuck it out my husband and I. I adjusted - I'm a great adjuster...That's bad. You got to get it out. But sometimes it feels like there is nothing there to get out...maybe I don't know about them, they' re buried so deep, but I just don't feel any bad feelings... For a long time after my father died I couldn't say *my father is dead* without crying, any place in public. But after a while I said to myself, well that's enough, enough's enough. So I came home and I started screaming and yelling at myself *MY FATHER IS DEAD MY FATHER IS DEAD!* until all the tears came out. From then on I could say it without crying, without emotion... Another time things were very bad between my husband and myself. I needed desperately to speak to someone but I didn't want to air our dirty laundry in public. So I came home when no one was home and I smacked the pillows together and screamed until all the junk was out. And I never had to do it again." (#156).

Subtheme: Emotions as encouraging an outward focus

The point was made by several participants, that certain emotions are critical in wisdom in so far as they promote an outward focus permitting connections between people and in terms of motivating the self to take action when necessary. Interestingly, anger was identified by several of the participants as an important motivating force. When emotions lead to an overly inward focus, however, they were seen as narrowing one's focus and consequently hindering wisdom.

Anger & sadness

"Wisdom is seeing life as it is, in proportion and in perspective - beyond your own fears and biases. You need to be free from the emotional pain and hurts in life, not free in the sense that they didn't happen, but free in that you've overcome them... I think that deep emotional burdens are a barrier to wisdom, but if you can overcome suffering with the help of other people, it is a stepping stone to wisdom... If the emotions are all

turned inwards, like self pity, it is a barrier, but the emotions directed outwards take you out of yourself and towards other people. Like sorrow or anger. Anger at what's happening to the Croatians. The anger to see people in Montreal who don't have a place to sleep. It can create an anger within you that is a positive force, which builds you up and hopefully motivates you to do something." (#169).

"You don't know someone unless you know their anger. You aren't really in touch with someone unless you understand what makes them angry." (#187).

"I have a lot of anger about things that are not right and I'm not philosophical about them. I try to work to correct them. That is what has kept me going. I don't feel that I have the distance a wise person has. I feel very deeply about things." (#141).

One mechanism for freeing the self from self absorption involved forgiveness of the self for not being perfect. This forgiveness was discussed as permitting a more genuine connection to others.

"You can acquire wisdom if you're able not to be so involved with yourself and look out a bit. Wisdom isn't only for yourself, it's dealing with others. And if you are so self involved you will be handicapped in your relations with others. To be wise you have to like who you are so you can forget about yourself and you have to like the people you are with to be genuine with others. There's no point in pretending. People will always see through that." (#119).

Fear

Where anger appears as a driving force motivating people to act, and sadness as an awareness of and recognition of loss, understanding fear posed a challenge to two of the nominees. Fear was discussed in terms of distorting experience and leading to an important piece of reality being compartmentalized and divorced from

awareness. Facing fear was discussed as leading to important discoveries about the self. In the first case, the roots of fear reached the depths of childhood.

"Another thing I discovered about my own behaviour was related to fear. There were two black people in the group. I started to realize that there was something going on there because I was calling one by the other's name. I learned long ago when there is something going on I do these sorts of things so I understood that there was something going on between these two. Later I dreamed a scene where I came home for the holidays after my mother died. The servants were sleeping in our beds. I still remember my father's rage. He struck one of them. All of a sudden I realized that there was that kind of rage between these two persons who were both black, and I didn't know how to do anything about it and I was afraid...It all ended up getting worked out in the group, but not until I got over my own compulsiveness. I was raised that Christian men don't hit other men and so I just put it out of sight as a young person for all those years. I was so frightened by what happened at home that I blanked out the rage as if it never took place. Mixing up the names was a cue to me that there is something here that I was afraid of." (#187).

In the second case, fear came to be understood as a symptom of disconnection from others.

"As we grow old we have to be careful of fear. The fear of growing old. The fear of people. I have discovered myself that when I grow more fearful it is because I am sick and trapped in the house - not being in the world, not being in touch with people. Being at home sick, and worrying about all kinds of things we fear. Poverty, sickness, death. No one is immune to this, but the wise way is to realize that being too closed in is the cause of this fear. When I see myself becoming fearful, I make a special effort to reach out to people and to go beyond my own self. And in turn, they reach me also. At these times we have to make an effort." (#141).

In summary, affect competence revealed itself as a critical dimension of these wise people, one they valued as the means to connect with and to understand others, a motivating force to translate their values into action, and one that could lead to expansion of their focus. Emotions which led to inward focus were considered to be barriers to wisdom. Again, the characteristic of openness, discussed previously as nondefensiveness, revealed itself in the capacity to tolerate, and to examine one's own emotional state without unduly distorting it or avoiding it. The interplay of openness and critical reflection applied to the emotional realm permitted self discovery and had clear adaptive consequences for these individuals.

Theme # 8: Experience

Some support was found in the quantitative analysis for the hypothesis that wisdom is associated with experience. This finding was further examined by focusing on the kinds of experiences which participants identified as facilitating their wisdom. There appeared to be two distinct subthemes linking experience with wisdom which could be roughly categorized as experiences which promote breadth and experiences which promote depth.

Subtheme: Broad perspective

Several participants discussed how experience enabled them to reflect on situations with breadth and perspective. The implication is that experience leads to wisdom by virtue of an accumulation of knowledge and skills. Specifically, a link was made between life experience and the ability to step back sufficiently from the issue at hand to be able to critically evaluate what was happening. Thus, this association emphasized the cognitive dimension of wisdom.

"Some of the experiences I had in the war years , we were very much confronted with symptoms of the third world, how villages not far from us were wiped out over night with cholera and things like that...I think of Canada as a great place to live but not the only place." (#170).

"Wisdom is something coming from an appreciation of the human condition. I see it related to some kind of historical perspective on being here and some kind of confidence in our ability to cope with that. Knowing that it's complicated but you're here and there's got to be some way to work on the complications, whatever they are. When I say historical, I mean knowing that we've been around a long time as human beings and we need to get perspective on what's happening to allow you to apply some frames to get working on the issues, whatever they are. If I was asked, was Einstein wise, I would say yes but not because of his intelligence but because he had a real appreciation of the human condition and saw himself in that context." (#187).

Thus a historical perspective can prepare a person for a major life change by virtue of enhancing confidence and self efficacy. It can also prepare the individual for how difficult that change may be.

"My decision left us with a feeling of uncertainty as to what I'd be doing. So well, we got back to saying we learned how to start something before and presumably from that experience we will do whatever is necessary to start something again. So around that frame you reconnect around the fact that a new beginning is a new beginning and there may be changes -having to tighten your belt and so on. So we had that kind of discussion, that the decision we are making is one we are prepared to live with and work through and so on. " (#187).

"An awful lot of years and continuous contact with people. Not shallow people but people who thought about life like who am I?, why am I?, where do I come from?, where am I going? I've been continuously involved in that for twenty-six years and the kind of reading I do leads me to continuously question my values. I am certainly open to changing my

values. I think if I'm not willing to change I'm dead. So while I'm alive my contact with people and my reading habits will lead to change." (#110).

Subtheme: Depth and Existential Awareness

The second subtheme linking wisdom with experience emphasized experiences which promoted depth, more in line with Dittmann-Kohli and Baltes' (1983) construct of philosophical wisdom. For a number of the participants, wisdom emerged in the context of an important matter of adjustment and many of the participants connected wisdom with tragic life experiences. An important issue is how and why such experiences would be associated with wisdom, and what exactly does one take away from such experiences. Closer examination of the participants' dialogues suggests that certain types of adjustments, including but not limited to tragedy, confronted individuals with existential issues such as freedom and responsibility, aloneness, meaninglessness, and ultimately, coming to terms with one's limitations and mortality. Thus experience may lead to wisdom out of the manner in which it motivates the person to reflect upon deeper underlying issues of existence, which in turn, would facilitate understanding of the struggles faced by us all.

Freedom & Responsibility

Each of the dilemmas discussed involved a major change of some sort. Some of the changes described involved well thought out choices to alter one's direction in life. These changes, though voluntary, were also described as stressful and requiring courage and adjustment. But in the end, they contributed to a sense of having taken responsibility for the path of one's life.

" In 1980, I decided to terminate my employment (at age 60) and go back to school. When I first started, the first six weeks, I thought oh what have I done, was I crazy? ...After a while a light came on and I began to see a little substance in the fog. There were set-backs, and I must say that it

was a big change to go from a 9 to 5 basis, to know where you are coming and going, to have a regular pay cheque, to go from a well ordered life to something that was a little less ordered. It felt more chaotic for a while but it became something that I was happy with and it has opened up a whole new vista in me and with new people, and these things have all led to something very different, very rich, and very rewarding." (#170).

"I'm very free today. I wasn't before, I was a captive. You are a captive when you expect that you have to do certain things. For example, I was in church during mass, and we were told there was going to be a meeting after. At that point I had no children and I wasn't interested in the meeting. He asked me if I was busy etc. but I said I don't want to go. No excuses. I have to do the things I want to do rather than the things others want me to do. But you can't abuse that freedom. It carries with it some responsibility. If you know more than anyone else about this behaviour, then you also have a larger responsibility than anyone else. It's not an imprisoning thing. When you do the things you want to do, rather than for appearances, you do them well." (#110).

Thus awareness of freedom and responsibility involved a move from passive, automatic ways of behaving towards a deeper understanding of the self and a more thoughtful consideration of one's choices. Wisdom involved a process of becoming more true to the self and less influenced by external pressures or forces. One of the mechanisms through which this process occurred involved the experience of loss. This mechanism is revealed in one of the participant's decision to leave the priesthood.

"For me, moving into something tended to shape me rather than shape it. But twice in my life I had to make a decision to move away or out of something. When I went in, I had a deep conviction, a certainty that this was the way for me. To leave felt like a betrayal of my parents and it also meant sacrifice. But everything within me was saying that this is not the life for you, even as everything else, the externals, the fear of going

against God, against my parents, made it difficult to face that... In the end, you've got to make the decision yourself. Decisions can be very difficult and are often not everything you want. It calls for courage and strength to face that and make the decision." (#169).

"When I became disenchanted with left wing politics it was a terrible shock; that my ideas that I had clung to had to be thrown away. I learned that you couldn't trust words only, you need to judge actions and be more critical that way. That gave me a new appreciation of people's ideas." (#158).

For two of the participants, becoming more mindful and accepting responsibility for their behaviour led to a liberation from traps arising from the past.

"One of the weaknesses I had that I had always looked at as a strength was being a peacemaker, and I had great skills in that area. I always considered it a virtue. Not until many years later when I was involved in human relations training, I quite compulsively intervened in a little war that was developing between two individuals and one of them said "get out of this, it's none of your affair". And it wasn't until that hit me between the eyes that I realized I was a compulsive peacemaker, not just a peacemaker. It was a real learning experience. It had to happen under stressful circumstances - where things were stressful enough that I became a peacemaker. It's an area where I'm still good at, but *I no longer allow myself to be trapped into it*. I'll say, I became compulsive out of the family situation but I had to learn myself that that was how I was behaving." (#187).

"I learned that like many women, I did not act in my own best interests at the time. Now I avoid traps better. I have learned that a trap is a trap and you don't embellish it. And a bad decision is a bad decision and you don't rationalize it." (#141).

Awareness of uncertainty

A second existential outcome of experiencing change appears to be an increased awareness of the inevitability of change, or put another way, an awareness and acceptance of life's uncertainty. Part of awareness involved anticipation of the grief one needs to work through over what has been lost.

"The most recent thing that has happened has been losing my sight, and that's been upsetting to me. I hope to be able to recover some of my sight by taking this medication, but if not I'm going to have to make the adjustment and work it out. It's just that it limits your life so much. Up until this point I always had a car at my disposal and I could go anywhere I liked by car. I was a very active person in many organizations and I could do this because I was mobile- so this is something that will be difficult for me from now on." (#191).

"Some times small miracles happen when a need is met at the time it is felt. But you can't be sure about that."(#141).

Acceptance of uncertainty as a given in life seems to lead to a liberation from anxiety associated with awareness that one cannot be in control over all that happens in life.

"All these things are relative. Today you might feel secure but tomorrow that might change. We try not to consume more than we are producing, but we realize that down the road we might have to live more modestly... I guess I learned that you can make changes in life and it doesn't have to be a disaster. Change can be very exhilarating. It doesn't have to be harmful, it can be beautiful. It can really be something that inspires you to go on. I think that because I had this exposure that I got more out of life. I haven't lost anything." (#170).

Aloneness

A common experience described as a dilemma, involved parents who struggled to come to terms with the differences between themselves and their children. This tended to be a rather painful experience for many, and confronted individuals with an awareness of their limitations as parents, a recognition of the separateness between themselves and their children, and ultimately an awareness that we are all alone in our life struggles.

"I learned that everyone has to march to their own drummer. My dreams were not their dreams. We are all individuals...When I look back, I could see that his illness created a certain dissension in the home; it had to have a disturbing effect. But I handled it the best way that I knew how and I had to forgive myself for not being perfect...You can't be everything to everyone. I used to think of life like a dream, but it's not like that." (#119).

Death

Awareness of being alone was also associated with experiences with death. Death of one's parents, one's spouse, or one's friends, confronted the individual with their isolation and the inevitability of their own mortality.

"To the extent of a real sense of personal loss was the death of my mother and before that the death of my father. It is one thing to read in the paper that someone has died, or to be involved with people who are dealing with death, and another thing to be directly involved, to be making the funeral arrangements and so on. A person who has been around all your life is suddenly no longer there. I consider this a trauma which is quite disruptive and quite numbing and it takes a long time to get over it. (#170).

"At age fifty-one I discovered I had diabetes. And that was the first time I came across a disease that could not be cured, only relieved. That was my first encounter with my mortality. We know that we're going to die

intellectually, but when you come into that contact with the realization that you are mortal, and that you are going downhill, then your life has to change. You start thinking about your mortality and it's very interesting to say the least. That's a change I'm going through right now. My recent operation caused me to do more of the same. Once again I have to reset my priorities. A career, money, and success is not that important and there is the change for me, from the importance of things to the importance of people. For example a thought that has crossed my mind almost continuously for the past couple of years is that I would hate to leave this life without leaving my mark somehow. And that mark is in terms of friendships and whether I've contributed something. I would hate to go out and have contributed nothing but watching TV, playing golf. I'm not condemning these things but there has to be more. Life needs to have a purpose." (#110).

There appeared to be several levels of working through one's death anxiety. For one participant, death served as a reminder that her life long work as a social activist was nearing an end. She had not yet come to terms with what Erikson describes as a "detached concern for life itself, in the face of death itself."

"At times suffering has kept me from growing. Then I would feel as if I was in a black hole. Growing old is not always a joke. At times you find you have more difficulty doing things, you get tired easily. Also you see so many things you'd like to do and so little time to do them. It gives the feeling that there is little time left. I'm not afraid of dying. I'm afraid that things won't get done. At the same time I have less energy I feel I have more to do. It's a conflict." (#141).

Evidence of having worked through his death anxiety was demonstrated by this volunteer in palliative care who discussed how facing death head on enabled him to appreciate life and to relate to the dying person.

"When you're caring for the dying, it's like Western culture in reverse. The dying person is surrounded by people who are doing things. Important things, but some times they are doing things because they can't relate to the dying person, to face the reality. I am just there. To watch the body language so we can break down the barriers and speak about what is important. I'm not just doing something, I'm standing there." (#169).

Thus difficult life experiences were seen as promoting wisdom by means of encouraging breadth and depth in one's outlook. However, some of the participants qualified the association between experience and wisdom with a recognition that the experience must be processed and resolved before it can become a source of strength and wisdom. Thus experience was seen as a necessary, but not sufficient, contributor of wisdom. There was a consensus that experience is an important teacher, but there must also be resilience of the person to be able to benefit from experience, and personal fortitude and courage to face the uncomfortable truths of responsibility, aloneness, limitation, and mortality.

"Wisdom is tested by the reversals of life; when you have an injury or loss. How you overcame it...Almost all events in life are either a blessing or a curse and which of the two they are depends entirely on you...Some people will turn inwards while the same event can help another develop as a person. You still suffer but you grow."(#169).

"There are some people who are happy by nature. Who feel that they have a good life. They do not always become wise because the suffering may not happen. But there has to be something in the nature so that you are not too defeated by events, or disappointments, or separations. There has to be a will to go on." (#141).

In summary, for these participants, experience was intimately connected with wisdom on two levels. The first level, consistent with cognitive dimension of wisdom, suggested that experience had lead to a breadth of perspective, which permitted a

certain degree of distance in being able to critically evaluate situations in relation to one's ever expanding knowledge base. On the second level, experience of adjustment, change, and tragedy facilitated wisdom by confronting the individual with fundamental existential truths; truths which deepened one's awareness of aloneness, responsibility, uncertainty, and mortality.

The outcome of enhanced existential awareness for these participants appeared to be a reordering of values and priorities; from agentic values oriented towards personal achievements and acquisitions, to terminal values focused on an appreciation of fundamentals in life. To one of the individuals, letting go of her previous value system led to an almost paradoxical increase in her involvement as a social activist.

"You don't deprive yourself of things as you grow older, you replace them...I have found that everything that I care about, that I want to do, I can do in a very simple manner. I was always involved but now I am not distracted from the issues I care about. It is a more profound involvement once you let go of distractions." (#141).

"I think I am more caring, sympathetic and compassionate than when I was younger. It seemed at that age that it was more important to have certain goals to reach, financial goals and things like that. Now that seems not so important...the simple life seems less demanding, less complicated, and more enriching." (#170).

"I'm sort of happy being where I am, just as I'm happy at any age I am. I'm happy being where I am and what I am, and I use happy as, ah, I just am, never mind about happy. Just being somehow seems to be enough for me. Even when I go away it's good to get back home. Sometime's I'm lonely and sometimes I get bored, but it doesn't change the picture. I just like to be."(#156).

DISCUSSION

Summary

The main purpose of this study was to contribute to the empirical development of the wisdom construct in psychology by relating wisdom to standard measures of functioning. The intention was to address the present top heavy state of the wisdom literature in which there is a wealth of divergent theoretical formulations concerning the nature of wisdom but little in the way of empirically established foundations.

In line with the first goal of the study, to quantify wisdom, a set of seven criteria was developed. This set included five criteria to assess performance in the domain of fundamental life pragmatics (Smith & Baltes, 1990) and two criteria to assess the character of wise people. These criteria were developed to address some of the limitations of the two current empirical approaches to the study of wisdom. Specifically, the folk approaches offer a broad and detailed formulation of descriptions of wise people but fall short of specifying what wisdom is. Performance approaches offer more in the way of understanding wisdom-related processes, but due to their focus on wisdom as a product they have neglected central dimensions of wise people.

The second goal of the study was to assess wisdom in a criterion group of elderly men and women selected for wisdom by nomination in order to increase the probability of including truly wise participants in the sample. The nominees were compared with nominators and with a group of individuals who nominated themselves as wise. The wisdom criteria were applied to responses to a standard interview in order to evaluate a number of theoretically driven hypotheses concerning the relationship among the standardized measures and the wisdom scores. A second analysis was conducted on the manifest content elicited in the wisdom interview in relation to nomination status and gender.

The third goal of the study was to examine the more elusive dimensions of the construct using an interpretive qualitative procedure which was written from the point of view of the author. This procedure was restricted to the ten individuals who scored highest on the wisdom criteria. While this section is limited in the sense that another author may have interpreted the interviews differently, it explored the potential meaning of the variables revealed as significantly related to wisdom in the quantitative analyses such as openness, reflection, and life satisfaction and offered a preliminary account of the interpersonal style, motivation, and existential awareness of wise people.

Findings

Nature of Wisdom

The wisdom criteria were correlated which is to be expected given that the criteria were intended to represent aspects of the same underlying construct. However, unlike Smith and Baltes (1990) who found very high correlations amongst all of the criteria, the correlations found in the present study were more varied, similar to the varied correlations found by Staudinger (1989). Some of the correlations were very high which suggests a fair amount of redundancy may be present between the criteria. In particular, the criteria of "rich factual knowledge" may be too broad as it tended to correlate highly with all of the criteria (range: $r = .55$ to $.75$).

Underlying the seven wisdom criteria appear to be three distinct but related components or factors which the present study labeled "connectedness" (i.e., generativity, relativism, affect integration), "pragmatics" (i.e., procedural knowledge, awareness of uncertainty), and "knowledge" (i.e., contextualism, factual knowledge). These three dimensions roughly correspond to the affective, reflective, and cognitive dimensions proposed by Clayton & Birren (1980) and to Birren and Fisher's (1990) three dimensional model of wisdom which defines wisdom as the balance between affect,

volition, and cognition. As in previous studies the dimensions are not identical. In particular, while there may be an element of reflectiveness inherent in awareness of uncertainty, the factor identified as pragmatics may reflect the emphasis on wisdom related performance taken by the present study. Nonetheless, the correspondence between Clayton and Birren's (1980) three factor model, Birren and Fisher's (1990) three factor model and the present's study's three component model, supports the contention that the addition of generativity and affect-integration criteria to measure wisdom succeeded in broadening the operationalization of the construct to be more in line with dimensions found in folk approaches.

There was some evidence of variability in wisdom depending on the question asked which is similar to Smith and Baltes' (1990) finding that younger and older participants scored higher on dilemmas involving same age peers. In the present study the more conceptual or abstract question (i.e., what is wisdom?) elicited wisdom in some people but not in others. Specifically, gender had an impact on performance with men scoring higher on the wisdom question, but not on the real-life dilemma nor on the gender question. This gender difference appears to reflect very low scores on the wisdom question obtained by self-referred women. The reasons for low scores on one question are not clear and may simply signify that the self-referred women were less wise and that the wisdom question was a sensitive indicator of this. However the implication is that when attempting to measure wisdom care needs to be taken to sample questions which do not favour one culture, age, or gender, over another.

In general, nominated participants answered more wisely than self-referred participants, supporting the utility of the nomination procedure in increasing the probability of including wise people in the sample. The finding that the highest wisdom score obtained in the present study represented only 51% of the total potential wisdom score implies that the participants did not achieve scores which were close to the wisdom "ideal" as defined by the criteria. Baltes, Staudinger, Maercker and Smith (1995)

reported similar low levels of wisdom even among the best two groups, the older clinical psychologists and the nominated group with wisdom scores found to be relatively low and located around the mean of the 7 point rating scale. The similarity between levels of wisdom reported by Baltes et al (1995) and by the present study is compelling, especially given the steps taken by Baltes to optimize wisdom related performance. Baltes' nomination procedure required nominees to be independently nominated by two journalists and the sample was trained on the think-aloud procedure prior to being presented with the interview questions. A second major difference between the two studies concerns the difference between wisdom elicited in response to hypothetical dilemmas utilized in Baltes' paradigm versus wisdom elicited in response to three different domains comprising a real-life dilemma, a social question (i.e., gender question), and an abstract/conceptual question (i.e., define wisdom). It is possible that this mixture of personal, social and abstract/conceptual questions was more personally meaningful to the participants, enabling them to demonstrate their wisdom without prior think-aloud training. The studies also differed in terms of how wisdom was measured. Baltes' paradigm utilized five criteria while the present study measured wisdom along 7 criteria, and while Baltes' wisdom criteria were scored on a 7 point scale, the present study scored wisdom on a 3 point scale. These differences limit the extent to which the present study's nominated participants could be judged as more or less wise than the Baltes study's participants. However the finding that participants in both Baltes et al's (1995) study and present study did not reach the ideal as defined by the wisdom criteria despite being nominated as wise by others calls into question the sensitivity of these criteria in identifying wise people. Although the present study expanded the criteria to include generativity and affect integration, the remaining five criteria were heavily weighted to assess expertise. The results of the qualitative analysis suggest that wisdom may have less to do with expertise and more to do with existential

awareness, implying that additional or alternative criteria may be more sensitive in assessing wisdom related performance.

Experience

The first hypothesis predicted that nominees would have experience in interpersonal problem solving and in situations which required adjustment. Specifically, it was predicted that nominated participants would come from advising occupations. It was also predicted that nominees would emphasize tragic experiences as turning points in their development.

The occupational data support the prediction that wisdom will be associated with experience in interpersonal problem solving. Almost seventy percent of the nominees were employed, or were retired from, occupations which demand well developed interpersonal skills and an understanding of human nature. Several of these occupations may also be viewed as generative in as much as they focus on passing on one's knowledge to, and encouraging the growth of others such as the occupations of teachers, ministers and counselors. The importance of the interpersonal dimension in wisdom is further supported by the positive association found between wisdom scores and experience in interpersonal/advising occupations.

Contrary to predications, although many of the significant life events described as turning points by the participants were tragic, wisdom scores tended to be associated with recalling experiences in a more positive light. Though the predicted association between wisdom and tragedy was not supported, the experiences may still be viewed as events which necessitated a significant adjustment. The life events most frequently cited tended to focus on adjustments involving interpersonal relations including marriage, being a parent, the death of one's own parents or spouse, and care giving. Non-interpersonal adjustments were also listed such as personal illness or injury, retirement, and other major life style changes. The qualitative interviews suggested that

experience with significant adjustments and major life changes facilitated a deepening of one's perspective in the form of increasing existential awareness. When asked specifically what they had learned from these experiences, wise people described existential truths such as accepting responsibility for one's choices, becoming aware of the limitations of the self, tolerance for uncertainty, and facing and coming to terms with one's mortality. It could be argued that these existential truths underlie most if not all of the most difficult dilemmas and choices we face in life (Yalom, 1980). Thus wise people may be gifted not so much in terms of their intellectual capacity to manage complex problems but in their ability to see through this complexity to the underlying existential issue at hand, and to reframe the issue in a positive manner.

While the association between wisdom and existential awareness is compelling, the design of the study does not permit strong causal conclusions. It is possible that experiences reported as turning points by the individuals may not in fact have been identical to the experiences which led to a shaping or accumulation of their wisdom. Therefore the present study can only conclude that these experiences were part of the unique, life history of wise individuals, and that the participants were able to express their wisdom through the medium of recounting these events, not that the experiences caused the participants to become wise.

Cognitive style

The second hypothesis predicted that wisdom would be associated with advanced cognitive development in the form of dialectical reasoning, and it was expected that wisdom would be incompatible with an absolute cognitive style.

Consistent with predictions wisdom scores were positively associated with a dialectical cognitive style. The qualitative data left little doubt that wise people were competent in their ability to understand mutually incompatible points of view and demonstrated awareness and comfort with such multiplicity. The qualitative data also

indicated an awareness that relativism was limited insofar as extreme relativism was described as hindering the ability to make commitments. An interesting issue concerns why dialectical reasoning was significantly associated with wisdom while relativism was not. This finding has implications for the conceptualization of wisdom as an accumulation of varied experiences leading to a quantitative increase in expertise (i.e., Baltes, 1991) or as a hierarchical, developmental account of wisdom in which there is assumed to be a qualitative reorganization of thinking structures (i.e., Kramer, 1990). Given that wisdom was associated with dialectical rather than relativistic thinking, the present study supports the latter over the former point of view. However, although dialectical reasoning has been conceptualized as a developmental variable a negative relationship was found between dialectical reasoning and age in the present study while the "less developed" thinking of absolute reasoning was found to be positively associated with age. Due to the restricted age range of the sample and the risk of age being confounded with cohort effects, there are limitations on how to interpret this pattern. All that can be said is that wisdom was found to be associated with a dialectical cognitive style, but the results suggest that such cognitive development may be less likely to be found in the present cohort of older people.

A second issue concerns the mechanism by which dialectical thinking develops in wise people. The key difference between relativism, which recognizes the subjectivity inherent in any point of view, and dialectical reasoning, in which commitments are possible in the face of awareness of such subjectivity, appears to be the ability to detach one's self and reflect critically on issues using alternative or additional modes of thought to logical reasoning. The qualitative data suggested that openness may be one of the qualities which facilitates the thinker in stepping back from the morass of relativism. Specifically, a number of wise participants described their openness to additional and alternative modes of interpreting experience such as

spirituality, psychodynamics, affect, metaphor, and intuition. These modes were cited by wise people as enriching their perception of reality.

Affect

The third hypothesis predicted that wisdom would be associated with affect-cognitive integration and with affect competence. Specifically, it was expected that: a) wisdom would be associated with affect complexity; b) affect-cognitive integration would be associated with the other six wisdom criteria; c) affect complexity would be associated with a dialectical cognitive style, and d) wisdom would be associated with life satisfaction.

Contrary to the first prediction, wisdom appeared unrelated to describing others in an emotionally complex way. Examination of comments participants made was revealing, suggesting that many participants were reluctant to speculate on the feelings of another due to the limited contextual information with which they had been provided. Thus the lack of association between wisdom and emotionally complex descriptions of others may reflect the wise person's awareness of limitation rather than a lack of emotional complexity per se. In line with this interpretation, a weak positive trend was found between wisdom and greater emotional complexity of self-descriptions suggesting that the participants were capable of emotional complexity. Thus wiser people expressed greater differentiation of feeling and awareness of affective consequences for the self in relation to interpersonal situations than did less wise people. When asked the direct question "Do you think emotions are related to wisdom?" in the content analysis, the majority of the participants responded that some emotions facilitate wisdom insofar as they informed one's judgments, enhanced involvement, and enriched experience. Other participants saw emotions as inducing unacceptable bias and distortion into one's views.

In support of the second predication, the criteria of affect-cognitive integration, (operationalized both in terms of affect expression, and evidence that the participant was likely not in a state of despair), was associated with the other wisdom criteria particularly with generativity, contextualism and relativism. Affect-cognitive integration loaded on a factor with relativism and generativity which was interpreted to reflect a capacity for wise people to be emotionally connected to others. This interpretation is consistent with the qualitative theme that wisdom is enhanced by the ability to look outwards and be free from self absorption. Participants described how acceptance and forgiveness of themselves for past mistakes and for their limitations enabled them to "forget the self" enhancing their ability to appreciate the unique point of view and emotional struggles of others as well as permitting an enhanced functional relationship with the world. These results are consistent with arguments presented by Orwoll and Perlmutter (1990) who described the importance of freedom from wish-fear conflicts and self-transcendence in wisdom.

Resolution of such wish/fear conflicts was associated with emotional acceptance of previously disowned negative aspects of the self according to the qualitative analysis. Thus successful resolution of crises in terms of affect-cognitive integration involved not only an awareness of the limitations of the self, but an acceptance of those limitations as an important and integral part of one's overall make up. The implication is that wisdom did not involve being perfect and free from limitations, but rather being aware of and accepting of one's limitations. It is perhaps for this reason, that many of the nominated participants were uncomfortable with the label of wise and spoke openly of their limitations. In contrast, the self-referred participants seemed to deemphasize their limitations. Indeed, to nominate oneself as wise suggests a more grandiose self which goes against the formulation of wisdom presented in this investigation and elsewhere (e.g., Meacham, 1990; Smith & Baltes, 1990; Taranto, 1989).

In support of the third prediction, there was a trend for affect complexity to be positively associated with a dialectical cognitive style. This finding supports models which argue that dialectical reasoning has a significant affective component (e.g., Kramer, 1990), and challenges models which posit formal logic as the endpoint to cognitive development.

Finally, in support of the fourth prediction wisdom was negatively associated with dissatisfaction and negative appraisal of one's life on the MUNSH. This finding is consistent with the finding that wisdom was associated with reporting positive experiences as turning points. Wisdom was not associated with higher life satisfaction. However, this may be due to the tendency for most participants to report being satisfied with their lives which likely introduces a ceiling effect into the data.

Personality

The fourth hypothesis predicted that wisdom would be associated with central dimensions of the personality. Specifically, it was expected that wisdom would be positively associated with openness, negatively associated with neuroticism, and positively associated with extraversion. Predictions had also been made concerning the preferred coping style of wise people. It was expected that wise people would favour reflection over avoidance or distraction as a coping style, and that wisdom would not be associated with high internal control beliefs.

As predicted, personality revealed itself to be an important correlate of wisdom. This is not surprising given the emphasis on exceptional "character" evident in the literature (e.g. Clayton & Birren, 1980; Holliday & Chandler, 1986; Baltes, 1991). Of all the variables investigated by the present study, the personality dimension of *openness to experience* emerged as the strongest predictor of wisdom. The openness scale measures both inner and outer experiences. In terms of openness to outer experiences, wise people tended to endorse more items indicating a willingness to

become involved in novel experiences which may reflect an attitude of curiosity. Such an attitude would be expected to lead to experience with varied situations and would therefore be conducive to the development of a broad perspective. The openness scale also measures openness to inner experiences including emotional receptivity and fantasy which may reflect a quality one could label imagination and/or psychological mindedness. This quality would be expected to contribute to a deepened perspective in the sense of facilitating awareness of the complexities of human behaviour. A third aspect of openness involves openness to ideas and to the reexamination of one's values suggesting that such a quality may contribute to the development of relativism and dialectical reasoning. Finally, although not explicitly measured by the personality inventory, the qualitative interviews revealed that wise people approached the interview in a rather open, nondefensive manner, and were therefore willing to share their experiences in an intimate way with the interviewer. Nondefensiveness likely facilitated the recognition of wisdom by the nominators as well as by the researchers. This capacity to share one's experiences openly with another would encourage supportive and growth enhancing relationships.

Contrary to predictions, neuroticism was not significantly associated with wisdom. The tempting conclusion is that wisdom is unrelated to mental health which is surprising and seems inconsistent with descriptions of wise people as well adjusted and serene. Underlying the neuroticism scale is the assumption that certain emotions such as anxiety and anger are inherently "negative". However it became clear in the qualitative interviews that wise people differentiate between emotions not based on their "negativity" or unpleasantness, but in their capacity to induce a self-focus versus outward focus. The consensus was that emotions which lead to an outward focus enhance wisdom while those which lead to an inward self-focus are a barrier to wisdom. Such self-focused emotions could cut across the positive/negative distinction assumed in the neuroticism scale to include negative affective states such as self pity

as well as positive affective states such as pride. A number of the wisest individuals indicated that they valued and paid attention to certain so called negative emotions such as anger, sadness, and fear. Anger was valued in terms of its capacity to motivate the individual to take action and become involved in important issues. Several wise people recognized the necessity of experiencing and expressing sadness for the purposes of empathizing with others and for working through and accepting losses. Two of the nominees stated that awareness and examination of their own fear had led to important insights and increased self awareness.

Contrary to predictions, the personality dimension introversion/extroversion was not significantly related to wisdom although there appeared to be a trend towards higher extroversion in wiser people. While the qualitative data implied that wise people were interpersonally oriented, insofar as they valued relationships over material possessions, they did not come across as extroverted in the sense of being gregarious and liking to be in the center of attention, but were instead socially unobtrusive. The extroversion scale may therefore not be sensitive in differentiating the desire to be involved with others from a characteristic inconsistent with wisdom such as narcissism. Further research is needed to illuminate the personality structure of wise people using scales which differentiate between adjustment versus openness to negative emotional experience in the case of neuroticism, and between social involvement versus narcissism in the case of extraversion.

In summary, while personality emerged as an important dimension of wisdom, the findings suggest that measures such as the NEO PI may not have sufficient specificity to describe the personality structure of wise people. Alternatively, it may be that only openness is associated with wisdom, and other dimensions of personality are less important and may even be irrelevant. Further research to test the hypotheses emerging from this study is necessary. In particular, it would be interesting to more

thoroughly address the question of whether wisdom is manifest in psychological adjustment and mental health.

The prediction that wise people would prefer to use reflection over avoidance or distraction as a means of coping with sadness was supported and as predicted higher wisdom scores were associated with the endorsement of less belief in the controllability of one's life. Wise nominees as a group endorsed less belief in control than did self-referred participants. This finding is consistent with characterizations of wise people as being able to differentiate between situations that are within versus beyond their control. Among nominated participants, belief in control was negatively associated with an absolute world view and positively associated with relativism suggesting that the scale may be tapping into a cognitive dimension akin to cognitive flexibility. The qualitative interview data revealed that wise people are aware of the limitation of the self in directing, or taking responsibility for, the behaviours of other people. In this context, a lower control orientation may not mean less self confidence or self efficacy, but instead, may mean a willingness to respect the efficacy and autonomy of others.

An interesting implication of the control and coping findings is that wisdom may have an unfortunate *edge* in the sense that some of the variables associated with wisdom such as lower control beliefs and preferring to use reflection over avoidance or distraction when coping with sadness may leave wise people vulnerable to dysphoria. The links between depression and ruminating styles, and depression and low internal control beliefs are widely documented (Billings & Moos, 1981; Kleinke, Staneski, & Mason, 1982; Burger, 1984). Indeed, the content analysis suggested that sadness was the third most commonly expressed emotion by the nominated participants, and during the qualitative interview, three of the participants cried over past losses. This sadness was appropriate, and did not preclude the expression of positive affect which refutes the argument that the wise participants were clinically depressed. Moreover, the results from the MUNSH revealed that wisdom was associated with less life dissatisfaction which

further supports the view that the wise participants were not in a state of despair. However the results of this study do not paint a picture of the wise person as a joyful optimist who is free from the pains of emotional struggles. The emerging picture of the wise person is one who does not avoid, but struggles, with emotional pain and accepts this struggle as inherent in life.

Gender

The fifth hypothesis focused on the relationship between wisdom and gender. It had been predicted that both men and women would be represented among the wise nominees, that men and women would be equally wise after controlling for level of education, and that wisdom would be associated with gender integration in men and women.

Consistent with the first prediction, both men and women were nominated as wise people, but contrary to previous research (e.g., Orwoll & Perlmutter, 1990; Denny, Dew & Kroupa, 1995; Baltes, Staudinger, Maercker & Smith, 1995) almost twice as many women as men were nominated in the present study. One of the key differences between this study and previous research was that people who were nominated had to be known *personally* to the nominator and had to be alive, available, and willing to be interviewed. Other research which does not require the nominee to be known may elicit nominations of well known public figures such as politicians, scientists, or philosophers which may introduce a bias in favour of males. This gender bias is particularly relevant to the Baltes et al (1995) study who concedes that utilizing journalists as nominators may introduce inclusion biases against young people and against women. In this study, the large number of women nominated relative to men may reflect the population demographics in this age group. That is, if "base rates" of wisdom were roughly equal for men and women one would expect to see more wise women in the oldest groups.

In this sample, the men tended to be better educated than the women and tended to score more highly on the wisdom interview. However, in support of the second prediction there was no evidence that one gender was wiser than another once level of education was controlled. Thus, the statement that men and women are equally wise needs to be qualified in terms of education. This finding supports the explanation that gender differences in nominations biased in favour of males may reflect differences in education, and also indirectly supports Baltes'(1991) conceptualization of education as a variable that facilitates and modifies wisdom.

Finally, the hypothesis that wisdom would be associated with gender integration (i.e., androgyny) was not supported. Instead, wisdom was associated with higher communal scores on the gender identity scale (i.e., E-PAQ) for male nominees but not for female nominees. This difference is difficult to interpret but may reflect that female nominees as a group scored higher on the communal subscale of the E-PAQ than did male nominees irrespective of their level of wisdom. In contrast, male nominees who scored high on the communal subscale could be considered as less stereotypic. Further research investigating the associations between wisdom and gender are needed to reveal variables which promote or discourage its development.

Context

The sixth hypothesis was formulated to assess how wisdom may be manifest in the relationship between individuals. Specifically, it had been predicted that people would nominate individuals as wise who tended to be more cognitively complex (i.e., higher cognitive level of development), emotionally complex, and older than themselves.

As predicted, nominees tended to score more highly on the measure of cognitive complexity (SPBI) and were older than the nominators, but contrary to predictions nominees were not found to be more emotionally complex than the

nominators. While the hypothesis that people perceive wisdom in others who are more emotionally complex than themselves may be incorrect, it is also possible that this type of aggregate statistical analysis was not appropriate to the question. Specifically, it had been hypothesized that wisdom is manifest in the relationship between individuals which implies that the relationship itself would have been the more appropriate unit of study. In line with this argument, Baltes, Staudinger, Maercker and Smith (1995) discussed the limitations of applying a single person paradigm to bodies of knowledge that are socially interactive. To date, no research has investigated the impact of relationship variables on wisdom related performance. However the relationship has been considered and analyzed with some success in the clinical psychology literature in terms of variables associated with therapeutic process and outcome. Future research which could focus on such wisdom related processes as they occur in an interactive social relationship may prove more fruitful in testing the hypothesis than single person paradigms such as the current study.

Other findings

Age

The present study was not designed to investigate age differences in wisdom and in fact found no association between wisdom and age. However, consistent with previous research (e.g., Smith & Baltes, 1990) some of the oldest individuals produced some of the wisest protocols. The finding that old people are capable of high levels of wisdom stands in sharp contrast to the research on fluid intelligence which finds a negative association with age. Indeed, the negative age-fluid intelligence (as estimated by WAIS-R Block Design scores) association was replicated by the present study. Given that the sample did manifest the expected negative association between age and fluid abilities, the lack of association between wisdom and age is all the more striking and suggests that wisdom follows a different age trajectory than does fluid

intelligence which supports Baltes, Dittmann-Kohli and Dixon's (1984) dual process conceptualization of intelligence and wisdom. On the other hand, a positive association was found between wisdom and scores on WAIS-R Vocabulary and Block Design subtests which implies that wisdom and intelligence are not independent constructs. The association between wisdom and verbal skills is consistent with the idea that skill at verbal expression is associated with wisdom, and with the argument that both vocabulary and wisdom may benefit from experience. The positive association between wisdom and Block Design is more difficult to interpret but may be viewed as evidence of general ability or "cognitive intactness". Baltes et al (1995) computed age correlations with wisdom separately for those aged 60-69 years and 69-88 years. While the correlation for the younger group was not significant, ($r = -.12$, $p > .05$) there was a significant negative correlation between wisdom and age in the older group ($r = -.46$, $p < .05$). The results suggested a discontinuity of wisdom related performance which appeared to occur around age 75.

Taken together, the results of this study lend some support to the hypothesis that wisdom may follow a different age trajectory than does fluid intelligence as well as the hypothesis that general intelligence may be one dimension of wisdom. Longitudinal research is necessary to clarify if there is a discontinuity in wisdom related performance among octogenarians.

Existential Awareness

The present study was designed to explore how wisdom may be adaptive for elderly people and to capture some of the more elusive dimensions of the construct. These objectives were addressed by incorporating a qualitative procedure which involved an interpretive ground-up approach. The results of this approach suggest that wisdom may be adaptive for elderly individuals in coming to terms with existential issues underlying experiences of loss, death, declining health, and accepting change and

adjustments in general. The relevance and importance of this theme is supported by recent research which indicates that elderly people identify the ability to accept change as the hallmark of successful aging (Ryff, 1989). Further support for the importance of existential awareness in wisdom can be found in Baltes, Staudinger, Maercker & Smith (1995) who reported that relative to the control groups, wise nominees performed highest on a task requiring existential life management. The difference was attributable to significantly higher relativism scores among the nominees on the existential task. Baltes argued that existential life management tasks are "closer to the center of wisdom" (Baltes et al, 1995, p. 164) than other tasks such as life planning. Such existential awareness would presumably assist the individual in adjusting to the challenges of aging such as coming to terms with loss of family or friends, facing one's physical limitations, and ultimately one's inevitable mortality. Given that this interpretation is based on the reflections of a single author, further research is necessary to replicate the finding that existential awareness is a core feature of wisdom.

Limitations and suggestions for future research

An attempt was made in this study to do some justice to the breadth and depth of the wisdom construct, but given its long history and complexity any empirical attempt to investigate wisdom is an ambitious undertaking which is bound to fall short of adequately defining and exploring the meaning of construct. Specific methodological and design limitations evident in this investigation which may have implications for the design of future research include limitations in the sampling and nomination procedures as well as in using semi-structured interviews for the dual purpose of measuring wisdom and collecting qualitative data.

Statistical limitations:

A relatively large number of measures had been collected in order to tap into the multifaceted nature of the wisdom construct. While this permitted an exploration of wisdom in relation to several measures of functioning there is a risk that some of the reported associations between wisdom and the standard measures occurred by chance as they were based on a single sample at a single point in time (Lazalere et al, 1977). Therefore further replication is needed to increase confidence in the reported associations between wisdom and dialectical reasoning, intelligence, openness, life dissatisfaction, control beliefs, and coping style.

Sample Limitations:

The intent of this investigation was to examine wisdom as it is manifested in old people. Because of the restricted age range of the sample, little could be said concerning whether wisdom increases with age, or whether the kind of wisdom manifest in this age group would be similar to or different from that found in younger people. The finding that wisdom is associated with openness and reflection suggests that wisdom may be apparent in certain young people. This conclusion has some precedent in the literature (Smith & Baltes, 1991). Baltes' findings also suggested age differences in wisdom as a function of the age appropriateness of the problem. An interesting research question would be whether there is a change in the domain in which wisdom operates as a function of life-span related tasks. For example, would the wisdom of the young person be more likely to be directed towards questions relevant to identity formation than the wisdom of the elderly person, or would the same existential issues and questions reveal themselves to the young as to the old?

A second issue which would be interesting to consider in future research concerns the association between wisdom and the interpersonal domain. It could be argued that the emphasis placed on interpersonal relationships by the participants was

an artifact of the nomination procedure in selecting the sample. This procedure was considered to be justified by the literature which has defined wisdom as manifest in the interpersonal domain (e.g., Holliday & Chandler, 1986). However the processes and facilitating variables found to be most relevant to wisdom in the present study such as openness and reflection are not necessarily restricted to the interpersonal domain. If wisdom is conceptualized as emerging from a process of dynamic interplay between openness, intelligence and reflection, alternative kinds of wisdom may be possible which are less focused on interpersonal relationships, such as social but not interpersonal wisdom. There was some evidence of overlap between this "type" of wisdom in the present study especially in participants who were oriented towards global concerns and who professed to have an international perspective in their thinking. It is possible that there is a wisdom "family" which may be related in terms of the interplay between openness, reflection, and value systems, but which may differ in terms of the domain in which wisdom is manifest. Candidates for alternative domains of wisdom include social, political, and spiritual domains.

A related limitation with the sampling procedure is that the sample of nominated participants was restricted to wisdom as it is perceived by a group of predominantly English speaking, white, middle class, elderly Montrealers. Future research on cross cultural differences in wisdom may help to establish convergent and discriminate validity and by doing so, more clearly delineate the boundaries of the construct.

Limitations in the Measurement of Wisdom:

A relatively large sample was needed for the quantitative analyses, and in some respects, this design limited the in depth exploration of the lives of individual wise people. As it was, attempts to clarify the meaning of the participants' discourse risked violating the standardization of the interviews. Yet strict adherence to the standard format left much unsaid. The present study attempted to address this limitation through

a compromise strategy involving limiting the coding of the protocols to the specific wisdom criteria, and then examining a smaller number of protocols in more depth. The advantage of this approach was that the participants only needed to be interviewed once, and their wisdom could easily be related to the context and content of their discussions. The disadvantage of this approach was that variability in interviewer skill and style introduced variability into the data. Future research may benefit from maintaining strict standardization of interviews for the purposes of obtaining wisdom scores as a preliminary screening procedure, and then conducting follow-up interviews with a small number of highly wise individuals in which standardization is less of a priority.

Despite these methodological limitations, the combination of qualitative and quantitative approaches in the investigation of wisdom offered the means of taking a broad based approach necessary to avoid distorting the construct beyond recognition. The integrated methodology succeeded in its goal to relate standardized psychological variables with the more elusive dimensions of the construct such as revealing the connection between openness, reflection and wisdom in the quantitative analyses, and between wisdom and existential awareness in the qualitative analysis. Existential awareness may be an important dimension of wisdom akin to the "philosophical wisdom" which had eluded previous approaches (Dittmann-Kohli, & Baltes, 1983) and is consistent with Erikson's (1959) description of wisdom as a "detached concern for life itself in the face of death itself". Further research which explores the existential awareness of wise people appears to be both feasible and worthwhile to pursue.

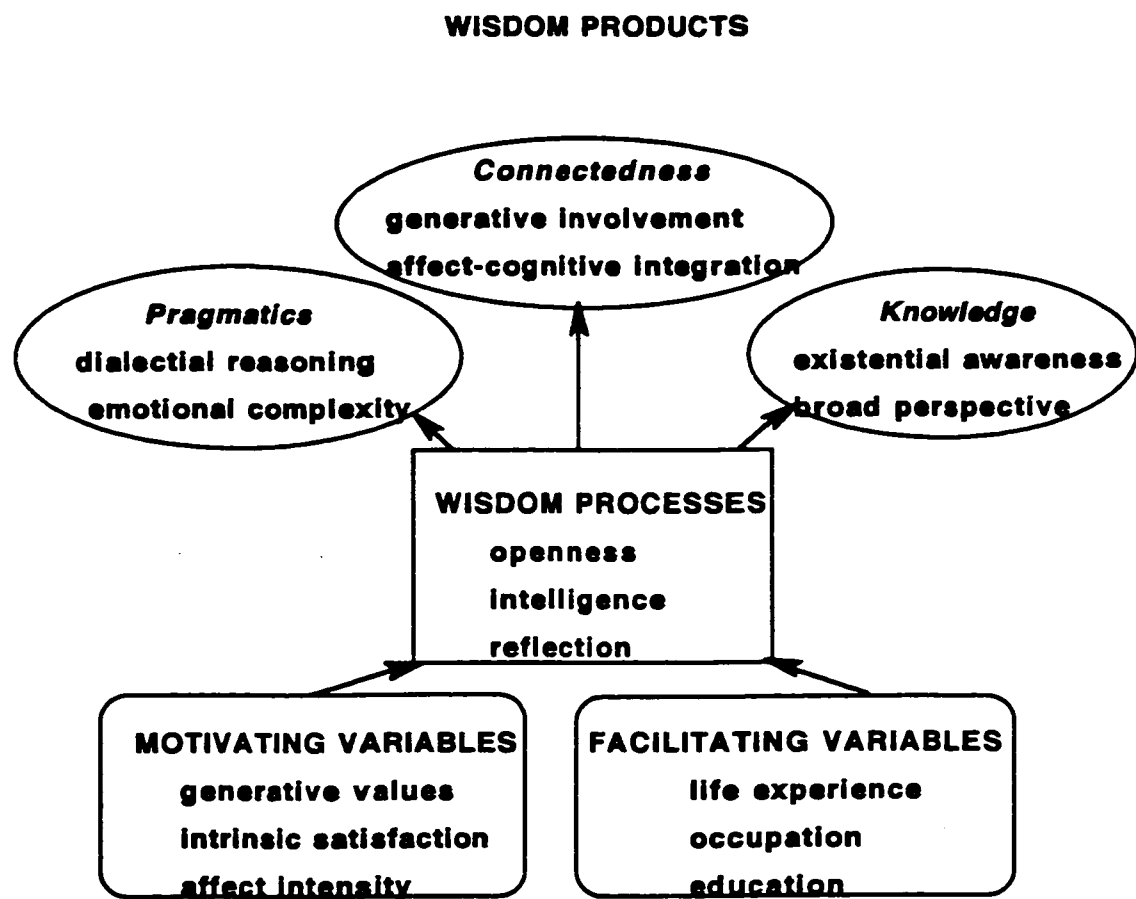
The study of wisdom encourages a broader understanding of intellectual competency, and resonates with arguments for examination of competency within a meaningful naturalistic context. Perhaps most importantly, the study of wisdom challenges unqualified assertions regarding global intellectual decline with age, and directs our attention towards examining individual differences in openness to growth

and how these interact with normative experiences in the aged population. Besides expanding our understanding of wisdom itself, the empirical investigation of wisdom in psychology offers rich rewards in terms of encouraging a person centered and multivariate consideration of psychological competency, and in terms of challenging investigators to create innovative research methodologies and analyses.

Conclusions

The findings of the present study may be summarized in a model which differentiates between variables which represent key wisdom related processes (i.e., openness, intelligence, reflection), variables which motivate or drive the process (e.g., affect intensity, generative values), variables which facilitate and encourage the development of wisdom (e.g., education, life experience), and variables which represent wisdom related products by virtue of emerging from wisdom processes (e.g., affect and cognitive development, existential awareness). The wisdom related products can be subdivided into three categories: knowledge, which includes existential awareness and a broad perspective; connectedness which includes generative involvement with others and affect-cognitive integration; and pragmatics which includes dialectical reasoning and emotional complexity. This model, which represents the development of wisdom, is depicted by Figure 9.

Figure 9:
Research Model: The Development of Wisdom



The findings from this study suggest that the development of wisdom consists of a process which encourages both a broadening and deepening of one's understanding of life and of human nature. Openness, by virtue of preventing premature closure in thinking (i.e., closed mindedness) broadens one's perspective and encourages development throughout life in multiple areas including cognitive, emotional, and perhaps spiritual domains. Intelligence, combined with a tendency towards reflection, leads to critically reflecting on issues and ideas thereby encouraging depth and the ability to evaluate complex issues in terms of their underlying existential significance. This model is consistent with characterizations of wise people as being able to simplify complex problems to the underlying issue.

Because wisdom is depicted as a process rather than a product, the model implies that there is no true "end state" to wisdom, in terms of reaching some pinnacle of perfection. Instead, the process of wisdom will be manifest in day to day experiences and in the struggle to create meaning and understanding of life.

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APPENDIX A

Participant Information and Dependent Measures



Code No. _____

CONSENT FORM

I wish to participate as a volunteer in your research project examining competency among older people and the concept of wisdom. I understand that my participation in this project includes a personal history interview and the completion of a series of questionnaires and that I will be asked about my perceptions of wisdom, everyday activities, and psychological characteristics. I understand that the interview may be audiotaped or videotaped, that the tape will only be viewed by the research team and then erased at the completion of the study. I understand that all information obtained in this study will be treated completely confidentially and that I am free to discontinue any time I desire.

Signature

Witness

Date

Name: _____

Address: _____

(no., street, apt. no.)

(City)

(Province)

(Postal Code, P.O. Box)

Telephone: (____) _____

(Area Code)

WISDOM QUALITATIVE INTERVIEW SCHEDULE

As you know, you were nominated by _____ for your wisdom.

A1. To begin with, how do you feel about this nomination?

A2. Do you have any ideas as to why he/she singled you out as a wise person?

Section B-Self-Descriptions

B1. How would you describe yourself ?

B2. Is the way you see yourself now different than the way you saw yourself in the past? **IF YES:** What led to the changes?

B3. I'd like you to list the major turning points in your life starting with the present and working your way back? **PROBE WHEN EVENT TOOK PLACE & OUTCOME/RESULT.**

Section C-Gender

C1. Do you think there are important psychological or character differences between men and women?

C2. Do you see yourself as more masculine or more feminine? What sorts of things do you do that are masculine; what sorts of things do you do that are feminine?

C3. Has your sense of yourself as a man/woman always been like this?
IF NOT, - What led to the changes?

Section D: Values:

- D1. What kinds of things are important to you? **PROBE HOW IS THIS PRIORITY EXPRESSED IN TERMS OF HOW PARTICIPANT SPENDS THEIR TIME**
- D2. Have you always felt this way or have your priorities changed?
IF CHANGED - What led to the change?

Section E-Real Life problem/Dilemma

Everyone has had the experience of being in situations where they had to make an important decision, or were faced with a difficult problem, but weren't sure what was the best thing for them to do. I'd like for you to think about a difficult situation which created a dilemma for you or which you feel may have had an impact on your development. Please describe it to me in as much detail as possible.

- E1. When did the situation occur?
- E2. What was the conflict for you in the situation?
- E3. In thinking what to do, what did you consider? How did you weigh each alternative?
- E4. What did you decide to do? What happened?
- E5. Looking back on it now, are you happy with how you handled the situation?
- E6. Thinking back over the whole thing, what did you learn from it?
- E7. Do you think you handled the problem wisely?

Section F: Wisdom

- F1. What do you think wisdom is?
- F2. How do you recognize wisdom in others?
- F3. How does a person become wise?
- F4. Does this way of looking at things effect the way you live your life? How?
- F5. Do emotions have a place in wisdom? Why or why not?

Section G-Conclusion:

Are there any other questions that I should have asked you, that would have shed some light on the meaning of wisdom?

Levels of Emotional Awareness Scale:

INSTRUCTIONS: To be read by examiner.

"Please describe what you would feel in the following situations. You may make your answers as brief or as long as necessary to express how you would really feel. In each situation there is another person mentioned. Please indicate how you would think that other person would feel as well".

1. A loved one gives you a back rub after you return from a hard days work. How would you feel? How would your partner feel?
2. You are traveling in a foreign country. An acquaintance makes derogatory remarks about your native country. How would you feel? How would your acquaintance feel?
3. As you drive over a suspension bridge you see a man standing on the other side of the guard-rail looking down at the water. How would you feel? How would the man feel?
4. Your boss tells you that your work has been unacceptable and needs to be improved. How would you feel? How would your boss feel?
5. You are standing in line at the bank. The person in front of you steps up to the window and begins a very complicated transaction. How would you feel? How would the person in front of you feel?
6. You have been working hard on a project for several months. Several days after submitting it, your boss stops by and tells you that your work was excellent. How would you feel? How would your boss feel?
7. You tell a friend who is feeling lonely that she/he can call you whenever she/he needs to talk. One night she/he calls at 4:00 a.m. How would you feel? How would your friend feel?
8. Someone who has been critical of you in the past pays you a compliment. How would you feel? How would the other person feel?
9. You sell a favorite possession of your own in order to buy an expensive gift for your spouse. When you give him/her the gift, he/she asks you whether you sold the possession. How would you feel? How would your spouse feel?
10. You fall in love with someone who is both attractive and intelligent. Although this person is not well off financially, this does not matter to you - your income is adequate. When you begin to discuss marriage, you learn that she/he is actually from an extremely wealthy family. She/he did not want that known for fear that people would only be interested in her/him for her/his money. How would you feel? How would she/he feel?

Social Paradigm Belief Inventory (SPBI Short form)

INSTRUCTIONS:

This questionnaire is about how people think about other people, relationships, and social institutions. There are no right or wrong answers -- we are just interested in the ideas that you have about human nature.

Read each item and choose the statement (that is, 'a', 'b', or 'c',) which best corresponds to your view on the topic. If none of the statements is exactly like your own thoughts, choose the statement that comes closest -- only circle one answer.

1. a. You cannot know a person completely. This is because getting to know a person in a particular way means not getting to know him or her in some other way.

b. You cannot know a person completely. This is because a person seems different all the time depending on what part of him or her you look at.

c. You can know a person completely. This is because after a long enough time, a person's real self emerges, allowing you to see what makes him or her tick.

2. a. There are absolute moral principles. This is because some behaviours are universally wrong (i.e., wrong everywhere) and there is no justification for going against them.

b. There are non-absolute moral principles. This is because we each form a set of consistent rules to guide our lives, which make the most sense in terms of our overall life goals.

c. There are no absolute moral principles. This is because morality is personal, and people have different ideas about what morality is.

3. a. Dissension is not necessarily dangerous. This is because you can never say for sure that giving in to dissenters will cause problems later because life is unpredictable.

b. Dissension is a dangerous thing. This is because surrendering to deserter places you at the mercy of anyone who wants to impose his or her ideas on society.

c. Dissension is a healthy sign. This is because if you oppress others unnecessarily you might destroy yourself in the process and become inhumane.

4. a. Frame of mind sets the stage for whether or not you can work with someone. This is because if you like someone and expect to work well with him or her, you probably will, but if you have a bad attitude, you may not.

b. It is difficult to tell what influences whether you can work with someone. This is because feeling uncomfortable with a new person can generate a vicious cycle of feelings between you, with neither knowing how these came about.

c. Personality determines whether you can work with someone. This is because there are certain types of personalities which are innately compatible and you know immediately whether you can work with such a person.

5. a. There is a right person for everyone. This is because some people just belong together because they have the same type of personality and as a result are perfectly compatible.

b. There is no one right person for anyone. This is because relationships form on the basis of who's there at the time, whether these people want a relationship, and can make it work.

c. There is no one right person for anyone. This is because characteristics you find attractive will also seem unattractive in some ways.

6. a. People are essentially contradictory. This is because people are simply full of contradictions in how they act, and we cannot hope to understand these contradictions, no matter how hard we try.

b. People are not essentially contradictory. This is because you see contradictions in another's actions only if you are thinking in a faulty manner, or in other words, if you are making an error.

c. People are essentially contradictory. This is because people are always changing and becoming something new, which contradicts the old self.

7. a. Personality may or may not be molded in childhood. This is because it is continually influenced by the environment, but also influences it, so we cannot say for sure where personality comes from.

b. Personality is molded in childhood. This is because it's influenced by one's parents, peers, teachers, etc., and once it's formed in this way, it's set.

c. Personality is not molded in childhood. This is because it continuously changes to fit the immediate environment, in order to adapt and obtain what's needed to get along in life.

8. a. There should be tough mandatory sentences for certain crimes. This is because society is obligated to discourage such actions in order to make life safe for its citizens.

b. There should be no mandatory sentences for any crimes. This is because every case is different and each has to be evaluated on its own.

c. There can be mandatory sentences for crimes but this will create still new problems. This is because in order to have a crime-free society, something else, such as personal liberty, will be given up.

9. a. When somebody is not doing a good job, he or she can change. This is because all that is needed to do a good job is to put your heart into it and then you can do just about anything.

b. When somebody is not doing a good job, this can be changed. This is because he or she probably has a related strength which is not being utilized.

c. When somebody is not doing a good job, it is unlikely that he or she will change. This is because people stay essentially the same and either have the ability to do the job or lack it.

6. BLOCK DESIGN Discontinue after 3 consecutive failures.				Score (Circle the appropriate score for each design.)			
Design	Time	Pass-Fail					
1. 60"	1		2				
	2		0	1			
2. 60"	1		2				
	2		0	1			
3. 60"			0	16-60 4	11-15 5	1-10 6	
4. 60"			0	16-60 4	11-15 5	1-10 6	
5. 60"			0	21-60 4	16-20 5	11-15 6	1-10 7
6. 120"			0	36-120 4	26-35 5	21-25 6	1-20 7
7. 120"			0	61-120 4	46-60 5	31-45 6	1-30 7
8. 120"			0	76-120 4	56-75 5	41-55 6	1-40 7
9. 120"			0	76-120 4	56-75 5	41-55 6	1-40 7
Total							Max=51

11. SIMILARITIES Discontinue after 4 consecutive failures.	Score 2, 1, or 0
1. Orange—banana	
2. Dog—lion	
3. Coat—suit	
4. Boat—automobile	
5. Eye—ear	
6. Button—zipper	
7. North—west	
8. Egg—seed	
9. Table—chair	
10. Air—water	
11. Poem—statue	
12. Work—play	
13. Fly—tree	
14. Praise—punishment	
Total	Max=28

5. VOCABULARY Discontinue after 5 consecutive failures.		Score 2, 1, or 0
1. Bed		
2. Ship		
3. Penny		
START → 4. Winter		
5. Breakfast		
6. Repair		
7. Fabric		
8. Assemble		
9. Enormous		
10. Conceal		
11. Sentence		
12. Consume		
13. Regulate		
14. Terminate		
15. Commence		
16. Domestic		
17. Tranquil		
18. Ponder		
19. Designate		
20. Reluctant		
21. Obstruct		
22. Sanctuary		
23. Compassion		
24. Evasive		
25. Remorse		
26. Perimeter		
27. Generate		
28. Matchless		
29. Fortitude		
30. Tangible		
31. Plagiarize		
32. Ominous		
33. Encumber		
34. Audacious		
35. Tirade		
Note: Be sure to include scores for Items 1-3 in Total.		Max=70
Total		

NEO Five-Factor Inventory

Form S

by Paul T. Costa, Jr., Ph.D. and Robert R. McCrae, Ph.D.

Instructions

Write only where indicated in this booklet. Carefully read all of the instructions before beginning. This questionnaire contains 60 statements. Read each statement carefully. For each statement fill in the circle with the response that best represents your opinion. Make sure that your answer is in the correct box.

Fill in SD if you *strongly disagree* or the statement is definitely false.

Fill in D if you *disagree* or the statement is mostly false.

Fill in N if you are *neutral* in the statement, you cannot decide, or the statement is about equally true and false.

Fill in A if you *agree* or the statement is mostly true.

Fill in SA if you *strongly agree* or the statement is definitely true.

For example, if you *strongly disagree* or believe that a statement is definitely false, you would fill in the SD for that statement.

Example



Fill in only one response for each statement. Respond to all of the statements, making sure that you fill in the correct response. **DO NOT ERASE!** If you need to change an answer, make an "X" through the incorrect response and then fill in the correct response.

Note that the responses are numbered in rows. Before responding to the statements, turn to the inside of the booklet and enter your name, age, and sex and the date.

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9 3 7 6 5 4 3 2 1

Printed in the U.S.A.

Name _____ Age _____ Sex _____ Date _____

1. I am not a worrier.
2. I like to have a lot of people around me.
3. I don't like to waste my time daydreaming.
4. I try to be courteous to everyone I meet.
5. I keep my belongings clean and neat.
6. I often feel inferior to others.
7. I laugh easily.
8. Once I find the right way to do something, I stick to it.
9. I often get into arguments with my family and co-workers.
10. I'm pretty good about pacing myself so as to get things done on time.
11. When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.
12. I don't consider myself especially "light-hearted."
13. I am intrigued by the patterns I find in art and nature.
14. Some people think I'm selfish and egotistical.
15. I am not a very methodical person.
16. I rarely feel lonely or blue.
17. I really enjoy talking to people.
18. I believe letting students hear controversial speakers can only confuse and mislead them.
19. I would rather cooperate with others than compete with them.
20. I try to perform all the tasks assigned to me conscientiously.
21. I often feel tense and jittery.
22. I like to be where the action is.
23. Poetry has little or no effect on me.
24. I tend to be cynical and skeptical of others' intentions.
25. I have a clear set of goals and work toward them in an orderly fashion.
26. Sometimes I feel completely worthless.
27. I usually prefer to do things alone.
28. I often try new and foreign foods.
29. I believe that most people will take advantage of you if you let them.
30. I waste a lot of time before settling down to work.
31. I rarely feel fearful or anxious.
32. I often feel as if I'm bursting with energy.
33. I seldom notice the moods or feelings that different environments produce.
34. Most people I know like me.
35. I work hard to accomplish my goals.
36. I often get angry at the way people treat me.
37. I am a cheerful, high-spirited person.
38. I believe we should look to our religious authorities for decisions on moral issues.
39. Some people think of me as cold and calculating.
40. When I make a commitment, I can always be counted on to follow through.

- 41. Too often, when things go wrong, I get discouraged and feel like giving up.
- 42. I am not a cheerful optimist.
- 43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
- 44. I'm hard-headed and tough-minded in my attitudes.
- 45. Sometimes I'm not as dependable or reliable as I should be.
- 46. I am seldom sad or depressed.
- 47. My life is fast-paced.
- 48. I have little interest in speculating on the nature of the universe or the human condition.
- 49. I generally try to be thoughtful and considerate.
- 50. I am a productive person who always gets the job done.
- 51. I often feel helpless and want someone else to solve my problems.
- 52. I am a very active person.
- 53. I have a lot of intellectual curiosity.
- 54. If I don't like people, I let them know it.
- 55. I never seem to be able to get organized.
- 56. At times I have been so ashamed I just wanted to hide.
- 57. I would rather go my own way than be a leader of others.
- 58. I often enjoy playing with theories or abstract ideas.
- 59. If necessary, I am willing to manipulate people to get what I want.
- 60. I strive for excellence in everything I do.

Enter your responses here—remember to enter responses *across the rows*.
 SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

1 <input type="radio"/> SD <input type="radio"/> D <input type="radio"/> N <input type="radio"/> A <input type="radio"/> SA	2 <input type="radio"/> SD <input type="radio"/> D <input type="radio"/> N <input type="radio"/> A <input type="radio"/> SA	3 <input type="radio"/> SD <input type="radio"/> D <input type="radio"/> N <input type="radio"/> A <input type="radio"/> SA	4 <input type="radio"/> SD <input type="radio"/> D <input type="radio"/> N <input type="radio"/> A <input type="radio"/> SA	5 <input type="radio"/> SD <input type="radio"/> D <input type="radio"/> N <input type="radio"/> A <input type="radio"/> SA
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Have you responded to all of the statements? _____ Yes _____ No
 Have you entered your responses in the correct boxes? _____ Yes _____ No
 Have you responded accurately and honestly? _____ Yes _____ No

The MUNSH Scale

We would like to ask you some questions about how things have been going. Please answer "Yes" if a statement is true for you and "No" if it does not apply to you. In the past months have you been feeling:

(1) On top of the world? (PA)

1
Yes

2
No

3
Don't Know

(2) In high spirits? (PA)

(3) Particularly content with your life? (PA)

(4) Lucky? (PA)

(5) Bored? (NA)

(6) Very lonely or remote from other people? (NA)

(7) Depressed or very unhappy? (NA)

(8) Flustered because you didn't know what was expected of you? (NA)

(9) Bitter about the way your life has turned out? (NA)

(10) Generally satisfied with the way your life has turned out? (PA)

The next 14 questions have to do with more general life experiences:

(11) This is the dreariest time of my life. (NE)

(12) I am just as happy as when I was younger. (PE)

(13) Most of the things I do are boring or monotonous. (NE)

(14) The things I do are as interesting to me as they ever were. (PE)

(15) As I look back on my life, I am fairly well satisfied. (PE)

(16) Things are getting worse as I get older. (NE)

(MUNSH Scale continued)

- (17) How much do you feel lonely? (NE)
- (18) Little things bother me more this year. (NE)
- (19) If you could live where you wanted, where would you live? (PE)
- (20) I sometimes feel that life isn't worth living. (NE)
- (21) I am as happy now as I was when I was younger. (PE)
- (22) Life is hard for me most of the time. (NE)
- (23) How satisfied are you with your life today? (PE)
- (24) My health is the same or better than most people my age. (PE)

Note: PA, positive affect; NA, negative affect; PE, positive experience; NE negative experience.

Scoring: Yes = 2; Don't know = 1; No = 0. Item 19: Present location = 2; other locations = 0.
Item 23: Satisfied = 2; not satisfied = 0. MUNSH Total = PA - NA + PE - NE.

APPENDIX B
COPING QUESTIONNAIRE

ID # _____

SRDC QUESTIONNAIRE

The statements in this questionnaire describe various things that people may do when they feel blue or sad. Please read each statement and circle the number on the scale which indicates how the statement applies to you when you feel sad.

I get together with one very close person or friend.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

I do something physical.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

I get away and do something I enjoy.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

I go out to meet people at a party or club.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

I cry.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

I try to determine why I'm depressed.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

I ignore the problem and think about other things.
1 2 3 4 5 6 7
never sometimes quite a bit almost always

- I take alcoholic beverages (e.g., beer).
 1 2 3 4 5 6 7
 never sometimes quite a bit almost always
- I take drugs.
 1 2 3 4 5 6 7
 never sometimes quite a bit almost always
- I avoid thinking of reasons why I'm depressed.
 1 2 3 4 5 6 7
 never sometimes quite a bit almost always
- I write to express my feelings.
 1 2 3 4 5 6 7
 never sometimes quite a bit almost always
- I talk to others about my feelings.
 1 2 3 4 5 6 7
 never sometimes quite a bit almost always

Code no.: _____

General Belief Survey 1:

The purpose of this questionnaire is to determine your attitudes and beliefs on a variety of matters pertaining to everyday living. There are two parts to this study. The first part asks you to rate how desirable different events are to you. The second part asks you to rate the degree to which you agree or disagree with various statements.

Part 1: Desire of Outcomes

There are many activities or events which happen to ourselves in everyday living. Some of these events are more important or desirable to you than others. Listed below are statements mentioning some of these activities or events. Would you please rate the extent to which each event described is important or not to you. We emphasize that we are concerned here with the importance to you, not to others.

1. How desirable is it to you that people ask you for advice and suggestions?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

2. How important is it to you that you maintain your health?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

3. Is being able to arrange for outings important to you?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

4. Is being able to get along with people you meet important?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

5. Is being able to contact your family whenever you wish, desirable to you?

1	2	3	4	5
very desirable	desirable	undecided	undesirable	very undesirable

6. How important is being able to spend your time doing whatever you wish?

1	2	3	4	5
very desirable	desirable	undecided	undesirable	very undesirable

7. How important is it that you do the chores yourself without any help?

1	2	3	4	5
very desirable	desirable	undecided	undesirable	very undesirable

8. Is having your friends and family visit when you invite them important to you?

1	2	3	4	5
very desirable	desirable	undecided	undesirable	very undesirable

9. How desirable is it to you that you can be active whenever you wish?

1	2	3	4	5
very desirable	desirable	undecided	undesirable	very undesirable

10. How important is it that you find people who are interested in hearing what you have to say?

1	2	3	4	5
very desirable	desirable	undecided	undesirable	very undesirable

11. How desirable is it to you to get away from the house (or home)?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

12. How desirable to you is having your family visit you?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

13. How desirable to you is it to be able to help others?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

14. How important is it to you that you have your friends over whenever you want?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

15. Is keeping in contact with interesting ideas desirable to you?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

16. Is being able to find privacy important to you?

1	2	3	4	5
very				very
desirable	desirable	undecided	undesirable	undesirable

Part II: Beliefs and Attitudes

The following are statements which may describe either yourself or the beliefs you have. Would you please respond to each statement, designating on the scale given with each item the degree to which you agree or disagree in your own opinion, not your judgement of what others think. From time to time you may find that some items seem to be repeated. Don't worry about this for each item is purposefully different in terms of its specific wording. Would you please go ahead and rate your degree of agreement or disagreement to each statement.

1. People tend to ignore my advice and suggestions.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

2. Maintaining my level of health strongly depends on my own efforts.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

3. It is difficult for me to get to know people.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

4. I can usually arrange to go on outings that I'm interested in.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

5. The situation I live in prevents me from contacting my family as much as I wish.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

6. I spend my time usually doing what I want.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

7. Although it is sometimes strenuous, I try to do the chores by myself.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

8. I find that if I ask my friends or family to visit me, they come.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

9. I have quite a bit of influence on the degree to which I can be involved in activities.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

10. I can rarely find people who will listen closely to me.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

11. My getting away from the house (home) generally depends on someone else making the decisions.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

12. Visits from my family or friends seem to be due to their own decisions, and not my influence.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

13. People generally do not allow me to help them.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

14. I can entertain friends when I want.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

15. Keeping in contact with interesting ideas is easy for me to do.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

16. I am able to find privacy when I want it.

1	2	3	4	5
strongly agree	agree	undecided	disagree	strongly disagree

Code No.: _____

E-PAQ

The items below inquire about what kind of a person you think you are. Each item consists of a pair of characteristics, with the letters A-E in between. For example:

Not at all artistic A...B...C...D...E Very artistic

Each pair describes contradictory characteristics, that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose A. If you think you are pretty good, you might choose D. If you are only medium, you might choose C, and so forth.

-
- | | | | |
|-----|---|-------------------|--|
| 1. | Not at all aggressive | A...B...C...D...E | Very aggressive |
| 2. | Not at all whiny | A...B...C...D...E | Very whiny |
| 3. | Not at all independent | A...B...C...D...E | Very independent |
| 4. | Not at all arrogant | A...B...C...D...E | Very arrogant |
| 5. | Not at all emotional | A...B...C...D...E | Very emotional |
| 6. | Very submissive | A...B...C...D...E | Very dominant |
| 7. | Not at all boastful | A...B...C...D...E | Very boastful |
| 8. | Not at all excitable
in a <u>major</u> crisis | A...B...C...D...E | Very excitable
in a <u>major</u> crisis |
| 9. | Very passive | A...B...C...D...E | Very active |
| 10. | Not at all egotistical | A...B...C...D...E | Very egotistical |
| 11. | Not at all able to
devote self completely
to others | A...B...C...D...E | Able to devote
self completely
to others |
| 12. | Not at all spineless | A...B...C...D...E | Very spineless |

13.	Very rough	A...B...C...D...E	Very gentle
14.	Not at all complaining	A...B...C...D...E	Very complaining
15.	Not at all helpful to others	A...B...C...D...E	Very helpful to others
16.	Not at all competitive	A...B...C...D...E	Very competitive
17.	Does not subordinate to others	A...B...C...D...E	Subordinates self to others
18.	Very home oriented	A...B...C...D...E	Very worldly
19.	Not at all greedy	A...B...C...D...E	Very greedy
20.	Not at all kind	A...B...C...D...E	Very kind
21.	Indifferent to others' approval	A...B...C...D...E	Highly needful of others' approval
22.	Not at all dictatorial	A...B...C...D...E	Very dictatorial
23.	Feelings not easily hurt	A...B...C...D...E	Feelings easily hurt
24.	Not at all nagging	A...B...C...D...E	Very nagging
25.	Not at all aware of feelings of others	A...B...C...D...E	Very aware of feelings of others
26.	Can make decisions easily	A...B...C...D...E	Has difficulty making decisions
27.	Not at all fussy	A...B...C...D...E	Very fussy
28.	Gives up very easily	A...B...C...D...E	Never gives up easily
29.	Not at all cynical	A...B...C...D...E	Very cynical
30.	Never cries	A...B...C...D...E	Cries very easily
31.	Not at all self- confident	A...B...C...D...E	Very self- confident
32.	Does not look out only for self	A...B...C...D...E	Looks out only for self

33.	Feels very inferior	A...B...C...D...E	Feels very superior
34.	Not at all hostile	A...B...C...D...E	Very hostile
35.	Not at all understanding of others	A...B...C...D...E	Very understanding of others
36.	Very cold in relations with others	A...B...C...D...E	Very warm in relations with others
37.	Not at all servile	A...B...C...D...E	Very servile
38.	Very little need for security	A...B...C...D...E	Very strong need for security
39.	Not at all gullible	A...B...C...D...E	Very gullible
40.	Goes to pieces under pressure	A...B...C...D...E	Stands up well under pressure

CODE NO. _____

POST INTERVIEW RATINGS

Interviewer _____ Viewer _____ Date of interview _____ Date of ratings _____

1) How difficult was it for the participant to respond to the qualitative interview?

1	2	3	4	5	6	7
not at all			moderately			extremely
easy			easy			easy

2) How well did the participant cooperate to help the interview flow smoothly?

1	2	3	4	5	6	7
not at all			moderately			extremely
cooperative			cooperative			cooperative

3) How well did the participant communicate their ideas to you (eg. speaks fluently, good vocabulary, puts things across well)?

1	2	3	4	5	6	7
not at all			moderately			extremely
well			well			well

4) How insightful/reflective did the participant appear to be?

1	2	3	4	5	6	7
not at all			moderately			extremely
reflective			reflective			reflective

5) How open was the participant?

1	2	3	4	5	6	7
not at all			moderately			extremely
open			open			open

6) How warm/friendly was the participant?

1	2	3	4	5	6	7
not at all			moderately			extremely
warm			warm			warm

7) How comfortable did you feel with the participant?

1	2	3	4	5	6	7
not at all			moderately			extremely
comfortable			comfortable			comfortable

8) Did the participant demonstrate a good sense of humour?

1	2	3	4	5	6	7
not at all			moderately			extremely
humorous			humorous			humorous

9) Based on how they came across in the interview, how wise do you think the participant is?

1	2	3	4	5	6	7
not at all			moderately			extremely
wise			wise			wise

10) Did you observe any difficulties that may affect the validity of the results?

1 _____ hearing impairment

2 _____ visual impairment

3 _____ memory impairment

4 _____ language impairment

5 _____ fatigue

6 _____ anxiety

7 _____ other (please specify) _____

Overall Comments/impressions: _____

APPENDIX B

Coding Manuals

Wisdom Qualitative Interview Schedule (WQIS)

Levels of Emotional Awareness Scale (LEAS)

**CODING SCHEME FOR WISDOM QUALITATIVE INTERVIEW
VERSION 3: 04/17/92**

CRITERIA EVIDENT IN GENDER, REAL LIFE DILEMMA & WISDOM SECTIONS

SCORE AS ABSENT=0.

MARGINALLY DEVELOPED=1,

MODERATELY DEVELOPED=2,

CLOSE TO IDEAL AS DESCRIBED BELOW=3.

SUM TOTAL ACROSS GENDER, DILEMMA, & WISDOM
(RANGE FROM 0=NOT PRESENT, TO 9 = CLOSE TO IDEAL IN ALL 3
SECTIONS).

USE THESE AS EXAMPLES OF IDEAL RESPONSES

1) RICH FACTUAL KNOWLEDGE: Participant demonstrates general and/or specific knowledge about the conditions of life and its variations.

ASK YOURSELF THE QUESTION: To what extent does the participant give the impression that he or she has a rich knowledge about difficult life situations, problems, and about the process of planning for the future?

To gain a top score, the participant should answer the question in a way that indicates they have a depth of factual knowledge about life matters. General knowledge includes information about and interpretations of human intentions, dispositions, and relationships organized in terms of goals (e.g., satisfaction, enjoyment, achievement, preservation, crisis, instrumental) and themes (e.g., role themes, interpersonal themes, and life themes). Depth is indicated by a detailed discussion of specific themes or issues relevant to the question and inferences that concern the general conditions of life. Participant may reveal this knowledge by discussing the nature of typical events and decisions, the vulnerability, emotions and needs of individuals (e.g., attachment, sense of self, health), and the controllability of goals throughout the life-span. May also quote literature, relate response to politics, history or prior experience.

CUES IN PROTOCOL:

GIVES DETAILED INFORMATION

WHO, WHEN, WHERE?

SPECIFIC KNOWLEDGE, SCRIPTS, EXAMPLES, VARIATIONS

GENERAL KNOWLEDGE OF EMOTIONS, VULNERABILITY, AND MULTIPLE OPTIONS.

2) PROCEDURAL KNOWLEDGE: Participant demonstrates rich procedural knowledge about strategies of judgement and advice concerning matters of life.

ASK YOURSELF THE QUESTION: To what extent does the participant give the impression that he or she has a rich procedural knowledge about difficult life matters?

To gain a top score, the participant should demonstrate that he or she is very knowledgeable about strategies and procedures about decision making in life matters: for example, considering multiple factors, balancing gains and losses, knowing whom to ask for assistance. The participant should be able to consider one or more options to the dilemma, with associated risks and benefits, and show knowledge about the process of making a life plan for example by indicating an awareness of implications of their decision, indicate one or more future goals, determine ways to achieve these goals (short and long term), evaluate the plausibility of success, and know about ways to monitor progress.

CUES IN PROTOCOL: HOW TO INFORMATION

STRATEGIES OF INFORMATION SEARCH, DECISION MAKING, AND ADVICE GIVING

TIMING OF ADVICE

MONITORING OF EMOTIONAL REACTIONS

STRATEGIES OF COST-BENEFIT ANALYSIS.

3) LIFE SPAN CONTEXTUALISM: Participant demonstrates knowledge about the contexts of life and their relationships (e.g., historical, cultural, racial and gender influences on behaviour).

ASK YOURSELF THE QUESTION: To what extent does the participant give the impression that he or she knows a great deal about the past, current, and possible future circumstances surrounding life problems and about the many contexts in which an individual's life is imbedded?

The ideal response should reveal consideration of the multiple life contexts in which people are embedded (age related, sociohistorical, personal). Such consideration is revealed in: a) discussion of important relationships that the participant has with significant others and the priorities of various life themes (family, work, leisure); b) consideration of developmental changes in life priorities; c) consideration of the connections, tensions, and conflicts between different choices/contexts. For example, if the participant moves in one direction, what are the implications for others in his or her life? what tensions exist between social expectations and individual goals? and d) the participant should be able to set priorities with regard to which contexts are relevant and important for short term and long term planning.

CUES IN PROTOCOL:

UNDERSTANDING OF CHANGE AND GROWTH
 NEED TO CONSIDER SOCIOHISTORICAL & PERSONAL CONTEXT
 COORDINATION OF LIFE THEMES (FAMILY, EDUCATION, WORK) AND TEMPORAL
 CHANGES.
 CONTEXTUAL CONFLICTS AND TENSIONS

4) RELATIVISM: Participant demonstrates knowledge about differences in values and priorities.

ASK YOURSELF THE QUESTION: To what extent does the person give the impression that instead of being rigid (egocentric) in their judgement he or she can consider motives, values, and goals that may be different from his or her own, and has the ability to appreciate that his or her own view may be different from others (e.g., young people, the interviewer)?

To attain a top score, the participant should: a) be able to separate or distance his or her own personal values, preferences, and life experiences from the problem at hand, &/or qualify their opinions in an explicit manner; b) describe the point of view or interests of others involved in a relative way, that is take into account that their interests, values, goals may not be the same as the participant's; c) empathize with others. Absence of relativism is suggested by participants who preach their views or seem highly opinionated.

CUES IN PROTOCOL:

RELIGIOUS AND PERSONAL PREFERENCES
 CURRENT/FUTURE GOAL, VALUES
 CULTURAL, HISTORICAL DIFFERENCES

5) AWARENESS OF UNCERTAINTY: Participant demonstrates awareness about the relative indeterminacy and unpredictability of life.

ASK YOURSELF THE QUESTION: To what extent does the participant give the impression that he or she has a good understanding of the inherent uncertainty of life (in terms of interpreting the past and predicting the future) as well as a repertoire of effective strategies for managing this uncertainty?

The ideal response should a) comment, in general, about the basic uncertainties of life or the fact that one can never know everything about a problem and indicate the ultimate uncertainty in any plan or decision; b) suggest decisions and plans in which one could or should take a risk (i.e., give or withhold advice about acting in the

face of uncertainty); c) display caution about the unexpected; d) display awareness of limitations in the self & others.

CUES IN PROTOCOL:

NO PERFECT SOLUTION, COULD BE WRONG,

OPTIMIZATION OF GAINS/LOSSES

FUTURE NOT FULLY PREDICTABLE, KNOWING THAT YOU CAN'T ALWAYS KNOW

BACK-UP PLAN/SOLUTIONS

6) ACTION/GENERATIVITY: Participant values and emphasizes the ability to interact effectively and contribute to society.

ASK YOURSELF THE QUESTION: To what extent does the participant give the impression that he or she can conduct adequate interpersonal relationships, and is committed to applying their knowledge/experience for the benefit of society?

The ideal response should indicate that the participant uses their knowledge /skills in guiding future generations. Such involvement may relate to; a) becoming involved in community activities/programs; b) emphasizing knowing when and when not to act; c) nurturing capacities such as higher than average involvement with children or grandchildren, spouse, friends, siblings; d) including the use of cooperative and tolerant modes of conflict resolution.

CUES IN PROTOCOL:

IMPORTANCE OF COMMUNITY, POLITICS

WISH TO GIVE BACK TO SOCIETY

WAYS TO GET ALONG WITH OTHERS

MANAGEMENT STRATEGIES

ADVISING OTHERS

7) AFFECT-COGNITIVE INTEGRATION: Participant is able to evaluate their life in such a way as to achieve meaning and continuity.

ASK YOURSELF THE QUESTION: To what extent does the participant give the impression that they find life meaningful and fulfilling?

The ideal response should indicate that the participant has resolved or come to terms with difficult problems, experiences, or conflicts in their life. Integration of emotion should be apparent in the response (i.e., level 2 LEAS key words and above apparent in the response) and the response should be free from extreme bitterness and despair. Affect-cognitive integration may also be indicated; a) in a broad perspective on issues; b) affect management of self and others; c) a sense of connection with others (i.e. uses

empathy to relate to others); d) paying attention to how you feel about life experiences;
e) emphasis on spirituality and personal meaning.

CUES IN PROTOCOL:

PERSONAL TRANSFORMATION, CONVERSION EXPERIENCE
ACCEPTANCE, LOVE, CONNECTION WITH OTHERS
QUEST FOR MEANING IN ONE'S LIFE

INDUCTIVE THEMES/CONTENT ANALYSIS:

A1. To begin with, how do you feel about this nomination?

1) EXPLICIT AFFECT CONTENT: must meet level 2 or above of LEAS criterion. IF YES, CODE 1
IF NO CODE 0. (e.g.'s flattered, okay, embarrassed , undeserving, uncomfortable).

IF AFFECT PRESENT, CODE AFFECT VALENCE:

1=POSITIVE; e.g., flattered, appreciated it, care, touched.

2=NEGATIVE; e.g., embarrassed, intimidated, anxious, angry.

3=MIXED AFFECT; e.g.,mixed feelings, appreciate it but concerned that... good
and bad

2) COGNITIVE CONTENT, (e.g., Saw article in paper and thought it interesting, intrigued,
expected it, curious). IF YES, CODE 1 IF NO CODE 0.

IF COGNITIVE PRESENT, CODE CONTENT

1=AGREEMENT WITH NOMINATION (may be implied); e.g., I make good
decisions, I understand why she nominated me.

2=INTEREST IN INVESTIGATION; e.g., I am here to contribute what I can, thought it
would be interesting to participate, wondered how wisdom is measured.

3=DISAGREEMENT WITH NOMINATION; e.g., I'm not wise.

4=CRITICISM OF INVESTIGATION; e.g.,I don't think you can measure wisdom
scientifically.

5=OTHER COGNITIVE CONTENT, SPECIFY.

A2. Do you have any ideas as to why he/she singled you out as a wise person?**CONTENT: CODE 1=PRESENT OR 0=ABSENT FOR EACH THEME**

1-no idea or nomination is inappropriate (e.g., he doesn't even know me that well).

2-self-description which does not focus on qualities of the relationship or specify why this would lead to the perception of wisdom (e.g., the way I talk, because of my volunteer work).

3-description of nominator (e.g., perceptiveness/intelligence) response does not specify reasons why this would lead to a nomination.

RELATIONSHIP THEMES

4-mutual friendship (e.g., we like each other, known each other along time, she knows me well).

5-emphasis on compatibility (i.e., we think alike, agree on issues, work well together).

6-admiration (e.g., she has seen me cope with hard times, he knows the difficulties I had with my son, she say me go through widowhood, she liked the way I taught my class).

7-advisory nature of the relationship, response implies that nominee has helped nominator in some way (e.g., I have acted as a sounding board for him, she trusts my advice/decisions).

8-other, specify.

A2/QUALITY OF RESPONSE:

1. DOES RESPONSE OF PART A SUGGEST AN EGOCENTRIC ORIENTATION? -participant describes him/herself rather than taking the point of view of nominator or considering qualities of the relationship with nominator in accounting for the nomination.

CODE DEGREE OF EGOCENTRISM/SELF FOCUS

ABSENT=0, clear focus on nominator or nominator's point of view: (e.g., she is a wonderful person, she trusts my judgement).

MODERATE=2-3, moderate tendency to focus on the self or on the relationship from the point of view of the self (e.g., I listen to her problems, I have given her good advice in the past).

EXTREME=5, response focuses entirely on the self and gives the impression that the point of view of the nominator is not being considered at all (e.g., I make good decisions, I have good judgment).

2.OFF TARGET VERBOSITY: IF YES, CODE (1), IF NO, CODE (0).

SECTION B: SELF DESCRIPTIONS

B1. How would you describe yourself ?

CONTENT THEMES/CATEGORIES:

0=QUESTION NOT ANSWERED (e.g., don't know, can't say).

1=UNDIFFERENTIATED SELF DESCRIPTION (e.g., same as anyone else, ordinary, normal).

SELF DESCRIBED IN TERMS OF:

2=PRESENT DEMOGRAPHIC VARIABLES: gender, age, present place of residence (e.g., I am a woman , aged 85, a widow, I live in Montreal).

3=HISTORICAL VARIABLES/REFLECTIONS ABOUT ONE'S LIFE: PAST INFORMATION (e.g., I was born in Europe, I escaped from the Holocaust, I have had a fortunate life).

4=PROFESSION/OCCUPATION: (e.g., I am/was a nurse, I work(ed) at the university).

5=HOBBIES/INTERESTS AT HOME: (e.g., I like doing crosswords, reading the paper, painting, I collect _____).

6=HOBBIES/INTERESTS REQUIRING INVOLVEMENT OUTSIDE THE HOME, not including formal volunteer work: (e.g., I am putting together my family's family tree, I like to travel, I take courses).

7=FORMAL VOLUNTEER WORK: (I cook for meals on wheels, I am on the board of my co-op).

8=INFORMAL VOLUNTEERING/CAREGIVING: (e.g., I take care of my spouse/ neighbor).

9=EVERYDAY COMPETENCE/DAILY ROUTINE/LIFE SKILLS: focus on what they do (e.g., I keep busy, I do my own housekeeping, I go for walks everyday, I am good at...).

10=HEALTH PROBLEMS/LIMITATIONS WITH BIOLOGICAL BASIS: (e.g., I have a heart condition, I can't get around as easy as I used to, my memory isn't what it used to be).

11= SOCIAL RELATIONSHIPS not including family: (e.g., I have many good friends).

12=FAMILY RELATIONSHIPS: (e.g., I am a grandmother, my family is important to me).

13=GENERAL PERSONALITY TRAITS/CHARACTERISTICS: DOES NOT MENTION OTHER PEOPLE IN THIS DESCRIPTION (e.g., I am confident, curious, kind, independent, intelligent, a loner, outgoing).

14=INTERPERSONAL STYLE: must involve communicating/relating to others (e.g., I get along with others, I don't like to argue with people, I try to be helpful to people, I am a good leader).

15=COGNITION: focus on process of thinking (e.g., I am rational, logical, I think things through, consider all sides of an issue).

16=RELIGIOUS COMMITMENT/ MORAL ATTITUDES or VIRTUOUS BEHAVIOUR: (e.g., I am a Christian, I believe it is better to give than to receive, I have strong moral beliefs).

17=LIFE KNOWLEDGE: (e.g., I have learned that..., I have a lot of experience in...).

18=EMOTIONS: affect integrated into other categories or self described in terms of mood/feelings. MUST FIT LEAS LEVEL 2 CRITERION OR HIGHER (e.g., I am lonely, happy, satisfied, I feel good/bad, I am caring/compassionate).

IF EMOTION PRESENT, CODE VALENCE, 1=POSITIVE, 2=NEGATIVE, 3=MIXED

19=POLITICAL ATTITUDES (e.g., I am a knee jerk liberal, feminist, member of the equality party).

20=OTHER, SPECIFY.

B1/ STRUCTURE /QUALITY OF RESPONSE:

1. FOR CATEGORIES 2-19, CODE ELABORATION, THAT IS NUMBER OF ASPECTS CONTAINED IN THE SELF DEFINING CATEGORY:

e.g.1. "I am a man/ who is 75 years old" (category =demographics, elaboration=2).

e.g.2. "During my life I have been to many places and have seen a lot (category=reflections about life, elaboration=1).

e.g.3. "Politics interest me./ Especially how the situation in Quebec will work out./ I check the paper about this everyday." (category= politics, elaboration=3).

2. CODE TOTAL # THEMES PRESENT IN SELF DESCRIPTION (sum all 1's excluding categories 0 & 1).

3. IF PARTICIPANT EMPHASIZES ONE MAIN THEME OVER ALL OTHERS, CODE AS DOMINANT THEME; may repeat/return to the same theme or give particular emphasis to it (e.g., I am someone who gets along with others. This is the most important thing to me.... as I said before my relationships are very important to me)

IF PRESENT=1, ABSENT=0; IF PRESENT CODE CATEGORY #, (e.g., INTERPERSONAL STYLE=12).

B2. Is the way you see yourself now different than the way you saw yourself in the past?

IF PARTICIPANT EMPHASIZES

DISCONTINUITY (change) CODE (1);

CONTINUITY (no change) CODE (0).

IF CHANGED: 1) DOES PARTICIPANT DESCRIBE HOW THEY HAVE CHANGED? 0=no, 1=yes

IF YES, CODE NATURE OF SELF PERCEIVED CHANGE:

1=RELATIVE INCREASE AUTONOMY/INSTRUMENTALITY: (e.g., I am more assertive, confident, ambitious, can make decisions easier, can stand up for myself better, more independent).

2=RELATIVE DECREASE AUTONOMY/INSTRUMENTALITY: (e.g., I am less ambitious, less concerned with being on top, making money, less aggressive, my work is not as important to me as it used to be).

3=RELATIVE INCREASE EXPRESSIVENESS/CONNECTEDNESS: (e.g., I care more about people/my family, I am more in touch with my feelings).

4=RELATIVE DECREASE EXPRESSIVENESS/CONNECTEDNESS: (e.g., I am less dependent on others to feel good about myself, I am less soft than I used to be).

5=EMOTION: change in experience of affect/self esteem (e.g., I am happier, more satisfied with my life, mellower, I like myself more, things don't bother me as much as they used to). IF CHANGE OF AFFECT, CODE VALENCE 1=POSITIVE, 2=NEGATIVE, 3=MIXED.

6=REALISM: change in expectancies, ideals, goals (e.g., I used to be an idealist, I am more moderate/less extreme in my views, I don't expect so much from myself/others/life).

7=TIME PERSPECTIVE: subjective shift in focus of planning, thoughts, or behaviour (e.g., I now take things one day at a time, I'm not so concerned with the future, I live more in the past).

8=CAUTION: less impulsive/reckless or more cautious/careful.

9=OTHER, SPECIFY.

IF CHANGED: 2) What led to the change?

CODE EXPLANATION OF CHANGE:

1=NONSPECIFIC EXPERIENCE/PROCESS (e.g., gradual aging, general experiences in life, growing older).

2=SPECIFIC EVENTS -uncontrollable or unexpected event or crisis (e.g., death of a spouse) or an event with a well defined start and ending such as a move.

3=SPECIFIC PROCESS -indicates that participant was prepared for a transformation in his/herself which was only incidentally triggered by an event- (e.g., recognized the self as stagnating and then was faced with an experience which transformed the self). Participant may have deliberately sought out an experience to compensate for something amiss in his/her life. May be associated with some

controllability/choice. Less likely to have a well defined start and end point than specific event (e.g., going back to school).

IF CHANGED: Code Content themes & Valence for explanation of change:

MARITAL

1=death of spouse

2=separation, divorce

3=marriage, self, or marital relationship

RELATIONSHIPS

4=friendship

5=birth of child, child rearing, being a parent

6=birth of grandchild, becoming a grandparent

7=children leaving home, empty nest.

LIFESTYLE, LIFE PRAGMATICS

8=retirement, pension

9=change of residence, relocation, moving, immigration

10=change in occupation, financial change, promotion which is not expressed as a qualitative shift in lifestyle (i.e., does not meet criteria in code 12).

11=major lifestyle change; may or may not be described as a crisis (e.g., living alone for the first time, caregiving full time, homemaker returning to work or beginning a career for the first time).

HEALTH/ILLNESS/DEATH

12=physical illness, injury, or disability, self (e.g., hearing impairment, hip fracture).

13=physical illness, injury, or disability, other

14=reproductive change (i.e., menopause).

15=death other than spouse

ENRICHMENT/HEALING EXPERIENCES

16=educational experience including informal research, reading (e.g., return to school, graduation).

17=therapeutic experience (e.g., involvement in consciousness raising or self-help group, formal therapy, ALANON, AA).

18=involvement in community/political/volunteer/church organization.

19=religious or spiritual transformation which may or may not be associated with a particular event (e.g., I awakened, opened my eyes for the first time).

20=OTHER SPECIFY.

CODE POSITIVE OR NEGATIVE VALENCE FOR CONTENT OF CHANGE EVENT/PROCESS:

1=positive,

2=negative,

3=neutral (i.e., not expressed in evaluative or affective terms).

4=mixed (i.e., both positive and negative evaluations/affect expressed; e.g., it was the worst thing that ever happened to me but I handled it well, kids can be a pain but they also give meaning to your life).

B2.COMPLEXITY/QUALITIES OF RESPONSE

1. IF PARTICIPANT EMPHASIZES ONE MAIN THEME OVER ALL OTHERS or REPEATS SAME THEME SEVERAL TIMES, CODE AS DOMINANT THEME PRESENT=1, ABSENT=0,

IF PRESENT CODE CATEGORY #, (e.g., COMMUNITY INVOLVEMENT=12).

2. OFF TARGET VERBOSITY IF YES, CODE (1), IF NO, CODE (0).

B3. I'd like you to list the major turning points in your life starting with the present ?**CONTENT THEMES:**

0-None perceived, question not answered, or attempt to avoid answering (e.g., I just go along, there haven't been any changes).

MARITAL/FAMILY THEMES

1-marriage/ self

2-marriage of children or children leaving home

3-divorce/separation self

4-family conflict which does not result in separation/divorce (e.g., difficulties with child management, estrangement of parent/sibling or other family member).

BIRTHS

5-birth of child/children, being a parent, child rearing

6-birth of grandchild

DEATHS

7-death of spouse

8-death of parent

9-death of other close family member (e.g., sibling, child).

10-death of friend or acquaintance

OCCUPATION/ FINANCIAL/LIFESTYLE

11-retirement

12-major shift in lifestyle: decision to leave home/church/career and embark on qualitatively different path (e.g., homemaker who returns to work after children have left, person who leaves business and embarks on community service, person who leaves seminary/priesthood and accepts a job).

13-change of job emphasis or promotion which does not represent starting something completely new (i.e., participant already has some prior experience or new job is related to old job in some way).

14-pension

CHANGE OF RESIDENCE

15-general move due to occupation or reasons not having to do with difficulties in managing home (e.g., desire to be closer to family members).

16-move to smaller residence/apartment for financial or difficulty with upkeep reasons.

17-immigration, move to new country

ENRICHING EXPERIENCES

18-returning to school, taking courses, graduation

19-community involvement /volunteer work/political involvement

20-spiritual awakening/religious or conversion experience

MENTAL OR PHYSICAL HEALTH

21-experience of personal illness, injury, or disability (e.g., heart attack, loss of vision).

22-illness/caregiving for/or decision to institutionalize ill spouse

23-illness/caregiving for/ or decision to institutionalize parent

24-mental or behavioural problem, self (e.g., depression, alcoholism).

25-mental or behavioural problem, other

GLOBAL OR NATIONAL EVENTS

26-war, involvement in or flee from (e.g., flee from Germany, conscription, military service, combat experience).

27-the Depression (do not confuse with emotional disorder of #24 & 25).

28-OTHER, SPECIFY.

29-MAJOR SHIFT IN VALUES: (e.g., began to realize honesty is not the best policy, I became disillusioned with my views and started looking at things completely differently).

B3/QUALITIES OF RESPONSE

A. IF PARTICIPANT EMPHASIZES ONE MAIN THEME OVER ALL OTHERS, CODE AS **DOMINANT THEME** (IE, PRESENT=1, ABSENT=0): IF PRESENT CODE CATEGORY #.

B. CODE POSITIVE OR NEGATIVE **VALENCE** FOR ALL TURNING POINTS IDENTIFIED

1=positive,

2=negative,

3=neutral (i.e., not expressed in evaluative or affective terms).

4=mixed (i.e., both positive and negative evaluations/affect expressed; e.g., it was the worst thing that ever happened to me but I handled it well, kids can be a pain but they also give meaning to your life).

C. CODE **TIME OF LIFE** WHEN EACH EVENT TOOK PLACE:

1=OLD AGE (age 60+), 2=MIDDLE-AGE (40-59), 3=YOUTH (less than 40)

D. CODE **TEMPORAL RANK** (i.e., order in which events occurred from most recent to earliest).

E. IF PARTICIPANT LISTS MORE THAN ONE TURNING POINT WITHIN ONE CATEGORY (e.g., three different changes in jobs) LIST TEMPORAL RANK, CATEGORY, VALENCE AND TIME OF LIFE FOR EACH **REPEATED THEME**.

SUMMARY STATS/QUALITIES OF RESPONSE

1. CODE TOTAL # THEMES LISTED AS TURNING POINTS (sum all 1's in categories 1-28) DO NOT FORGET TO INCLUDE ANY REPEATED THEMES IN THIS TOTAL.

2. SUM TOTAL EACH OF POSITIVE, NEGATIVE, NEUTRAL & MIXED AFFECT FOR EACH EVENT LISTED.

3. SUM TOTAL EACH OF OLD, MIDDLE & YOUNG TURNING POINTS.

4. OFF TARGET VERBOSITY IF YES, CODE (1), IF NO, CODE (0).

SECTION C: GENDER

C1. Do you think there are important psychological differences between men and women?

CODE ONLY ONE OF THE FOLLOWING:

1=BIOLOGICAL ORIENTATION: differences considered innate or closely tied with reproduction (e.g., women more nurturing because they have children, men are naturally more aggressive, men and women were made/created differently).

2= TRAIT ORIENTATION: clear distinction made but response not explained in terms of roles or reproduction. May qualify response by noting overlap between the sexes, but suggests that certain traits are more likely to be found in one sex than the other (e.g., women tend to be more emotional, sensitive, intuitive, men tend to be more confident, rational, some men are sensitive but women tend to be more emotional).

3=QUALIFIED YES, DIFFERENCES DUE TO ROLES, SOCIALIZATION: states that differences may be environmentally/historically/culturally learned therefore may change (e.g., in my generation men were taught to be the providers, I see differences but now that women are in the work place they may not apply).

4=NO, SEX IS IRRELEVANT: RESPONSE SUGGESTS LOW GENDER SALIENCE (e.g., men can be just as sensitive as women and women can be just as career oriented as men, it depends on the person, you can't generalize because each individual is different).

C2. Do you see yourself as more masculine or more feminine?

CODE ONE ONLY OF FOLLOWING

0=QUESTION NOT ANSWERED & DOES NOT FIT CODE 3: (e.g., can't say, never look at aspects of myself).

1=SEES SELF AS CONSISTENT WITH BIOLOGICAL SEX

2=SEES SELF AS CONSISTENT WITH OTHER SEX

3=EXPLICIT RECOGNITION OF HAVING BOTH A MASCULINE AND FEMININE

SIDE/INTEGRATION: participant may emphasize one over the other but recognizes having two sides (e.g., I am a mixture, some of each).

C3. What sorts of things do you do that are associated with participant's biological sex?

CODE ALL THAT ARE RELEVANT:

0=DON'T KNOW, CAN'T SAY, NONE, or doesn't answer question (e.g., I don't have a masculine/feminine side; nothing).

1=PHYSICAL CHARACTERISTICS, may relate to appearance or strength (e.g., I like clothes/make-up, I can/can't lift heavy objects).

2=PERSONALITY/TRAIT DESCRIPTIONS (e.g., I am sensitive, driven, an achiever, emotional, confident, independent).

3=GENERAL INTERPERSONAL STYLE or RELATIONSHIP SKILLS/PREFERENCES (e.g., I am a good leader, I dislike conflict with others, I get along with women).

4=SEX TYPED /ROLE BEHAVIOURS RELEVANT TO HOME (e.g., I wash dishes, raise children, fix things around the house).

5=SEX TYPED /ROLE BEHAVIOURS RELEVANT OUTSIDE HOME INCLUDING OCCUPATION (e.g., I play sports, my work, I'm good at book keeping).

6=OTHER, SPECIFY.

C3-2. What sorts of things do you do that are NOT associated with participant's biological sex?

I.E., MASCULINE FOR WOMEN, FEMININE FOR MEN.

CODE ALL THAT ARE RELEVANT:

0=DON'T KNOW, CAN'T SAY, NONE or doesn't answer question.

1=PHYSICAL CHARACTERISTICS, may relate to appearance or strength (e.g., I like clothes/make-up, I can/can't lift heavy objects).

2=PERSONALITY/TRAIT DESCRIPTIONS (e.g., I am sensitive, emotional, confident, independent).

3=GENERAL INTERPERSONAL STYLE or RELATIONSHIP SKILLS/PREFERENCES (e.g., I am a good leader, I dislike conflict with others, I get along with women).

4=SEX TYPED /ROLE BEHAVIOURS RELEVANT TO HOME (e.g., I wash dishes, raise children, fix things around the house).

5=SEX TYPED /ROLE BEHAVIOURS RELEVANT OUTSIDE HOME INCLUDING OCCUPATION (e.g., I play sports, my work, I'm good at book keeping).

6=OTHER, SPECIFY.

C3. COMPLEXITY/QUALITIES OF RESPONSE

1. CODE TOTAL # THEMES PRESENT IN SELF DESCRIPTION (sum all 1's).
2. OFF TARGET VERBOSITY IF YES, CODE (1), IF NO, CODE (0).

C4. Has your sense of yourself as a man/woman always been like this?

IF PARTICIPANT EMPHASIZES DISCONTINUITY (change) CODE (1);
CONTINUITY (no change) CODE (0).

IF CHANGED: 1) DOES PARTICIPANT DESCRIBE HOW THEY HAVE CHANGED? 0=no, 1=yes

IF YES, CODE NATURE OF SELF PERCEIVED CHANGE:

1= RELATIVE INCREASE IN INSTRUMENTALITY/AUTONOMY (e.g., I am more assertive, confident, can make decisions easier, can stand up for myself better, more independent).

2=RELATIVE DECREASE IN INSTRUMENTALITY/AUTONOMY (e.g., I am less ambitious, less work oriented).

3=RELATIVE INCREASE IN EXPRESSIVENESS/CONNECTEDNESS (e.g., I care more about people, more involved/concerned with my family, I show my emotions more).

4=RELATIVE DECREASE IN EXPRESSIVENESS/CONNECTEDNESS (e.g., I am less dependent on others, less emotional about things).

5=SELF ACCEPTANCE, has more emotional tone than confidence (e.g., I accept myself for what I am, things that used to bother me about myself I no longer take so seriously).

6=OTHER, SPECIFY.

IF CHANGED: 2) What led to the change?

CODE EXPLANATION OF CHANGE:

1=NONSPECIFIC EXPERIENCE/PROCESS (e.g., gradual aging, general experiences in life, growing older).

2=SPECIFIC EVENTS -uncontrollable or unexpected event or crisis (e.g., death of a spouse) or an event with a well defined start and ending such as a move.

3=SPECIFIC PROCESS -indicates that participant was prepared for a transformation in his/herself which was only incidentally triggered by an event- (e.g., recognized the self as stagnating and then was faced with an experience which transformed the self). Participant may have deliberately sought out an experience to compensate for something amiss in his/her life. May be associated with some controllability/choice. Less likely to have a well defined start and end point than specific event (e.g., going back to school).

IF CHANGED: Code Content themes & Valence for explanation of Change:**MARITAL**

- 1=death of spouse
- 2=separation, divorce
- 3=marriage, self, or marital relationship

RELATIONSHIPS

- 4=friendship
- 5=birth of child, child rearing, being a parent
- 6=birth of grandchild, becoming a grandparent
- 7=children leaving home, empty nest.

LIFESTYLE, LIFE PRAGMATICS

- 8=retirement, pension
- 9=change of residence, relocation, moving, immigration
- 10=change in occupation, financial change, promotion which is not expressed as a qualitative shift in lifestyle (i.e., does not meet criteria in code 11).

11=major lifestyle change; may or may not be described as a crisis (e.g., living alone for the first time, caregiving full time, homemaker returning to work or beginning a career for the first time).

HEALTH/ILLNESS/DEATH

- 12=physical illness, injury, or disability, self (e.g., hearing impairment, hip fracture).
- 13=physical illness, injury, or disability, other
- 14=reproductive change (i.e., menopause).
- 15=death other than spouse

ENRICHMENT/HEALING EXPERIENCES

- 16=educational experience (e.g., return to school, graduation).
- 17=therapeutic experience (e.g., involvement in consciousness raising or self-help group, formal therapy, ALANON, AA).
- 18=involvement in community/political/volunteer organization.
- 19=religious or spiritual transformation which may or may not be associated with a particular event (e.g., I awakened, opened my eyes for the first time).
- 20=OTHER SPECIFY.

SECTION D: VALUES

D1. What is important to you? - what do you care about, think about?

CONTENT THEMES, CODE ALL THAT ARE RELEVANT & LIST RANK ORDER .

RELATIONSHIPS

1= family: their health, happiness, relationship to.

2=friends

3=nonhuman relationships (i.e., pets)

SELF CONSERVATION/ PRAGMATICS OF LIFE.

4=own health

5=lifestyle (e.g., eating out, my home)

6=happiness, to enjoy/appreciate my life

7=financial security (Nb. this must be explicit, person who says their job my mean security or performance=15).

GENERATIVITY - concern for future generations

8=environment, future of the planet, state of the world

9=next generation/grandchildren, caring for them

10=society/community, contributing to

MORALITY/IDEOLOGY

11=moral principles (e.g., justice, equality, respect or responsibility for others).

12=politics

13=religion/spirituality

SELF PERFORMANCE /INTEGRITY

14=improving myself, doing my best, acting properly, keeping up to date with the times.

15=career performance/advancement

16=acceptance, people liking me,

17=personal integrity, being genuine, true to myself.

18=OTHER, SPECIFY.

D1. COMPLEXITY/QUALITIES OF RESPONSE

1. CODE TOTAL # THEMES IDENTIFIED AS VALUES (sum all 1's).

2. DO PRIORITIES CORRESPOND TO SELF DESCRIPTION ? (e.g., person describes him/herself as easy to get along with and lists relationships or being acceptable to people as a top priority).

YES (1), NO (0)

IF YES, CODE CATEGORY OF DOMINANT THEME

1=RELATIONSHIPS: orientation to family, friends, or social involvement for the sake of company and connecting with others.

2=SELF CONSERVATION/PRAGMATICS OF LIFE: basic needs such as security, health.

3=GENERATIVITY: desire to contribute to community or society. Wish to 'give back something', concern with future generations or the state of the world.

4=MORALITY/IDEOLOGY: principles of thought and behaviour, what is right/wrong, code of living.

5=SELF PERFORMANCE/INTEGRITY: doing and being the best one can be, self improvement, thirst for knowledge, value of competence and performance.

6=OTHER, SPECIFY

D2. Have you always felt this way or have your priorities changed?

IF PARTICIPANT EMPHASIZES 0=CONTINUITY (no change) (e.g., I've always felt like this).

1=DISCONTINUITY (change)

2=SAME PRIORITIES BUT DEEPENING OF VALUES, (e.g., they were always important to me but I take them more seriously now, my beliefs are deeper now than they were before).

IF 1 OR 2 CODE NATURE OF CHANGE:

1=NONSPECIFIC EXPERIENCE/PROCESS (e.g., gradual aging).

2=SPECIFIC EVENTS -uncontrollable or unexpected event or crisis (e.g., death of a spouse) or an event with a well defined start and ending such as getting a job.

3=SPECIFIC PROCESS - May be associated with some controllability/choice. Less likely to have a well defined start and end point than specific event (e.g., going back to school).

IF CHANGED: What led to the change?**Code Content themes & Valence for explanation of change:****MARITAL**

1=death of spouse

2=separation, divorce

3=marriage, self, or marital relationship

RELATIONSHIPS

4=friendship

5=birth of child, child rearing, being a parent

6=birth of grandchild, becoming a grandparent

7=children leaving home, empty nest.

LIFESTYLE, LIFE PRAGMATICS

8=retirement, pension

9=change of residence, relocation, moving, immigration

10=change in occupation, financial change, promotion which is not expressed as a qualitative shift in lifestyle (i.e., does not meet criteria in code 12).

11=major lifestyle change; may or may not be described as a crisis (e.g., living alone for the first time, caregiving full time, homemaker returning to work or beginning a career for the first time).

HEALTH/ILLNESS/DEATH

12=physical illness, injury, or disability, self (e.g., hearing impairment, hip fracture).

13=physical illness, injury, or disability, other

14=reproductive change (i.e., menopause).

15=death other than spouse

ENRICHMENT/HEALING EXPERIENCES

16=educational experience (e.g., return to school, graduation).

17=therapeutic experience (e.g., involvement in consciousness raising or self-help group, formal therapy, ALANON, AA).

18=involvement in community/political/volunteer organization.

19=religious or spiritual transformation which may or may not be associated with a particular event (e.g., I awakened, opened my eyes for the first time).

20=OTHER SPECIFY.

CODE POSITIVE OR NEGATIVE VALENCE FOR CONTENT OF CHANGE EVENT/PROCESS:

1=positive,

2=negative,

3=neutral (i.e., not expressed in evaluative or affective terms).

4=mixed (i.e., both positive and negative evaluations/affect expressed; e.g., it was the worst thing that ever happened to me but I handled it well, kids can be a pain but they also give meaning to your life).

D-QUALITY:

1. DOES RESPONSE TO PART D SUGGEST A BROAD PERSPECTIVE? (e.g., degree to which participant is concerned with issues which go beyond immediate gratification or immediate family such as the environment, the future).

0=participant appears completely concerned with own lifestyle, enjoyment, situation, or needs. Others are not mentioned except in so far as they contribute to the self.

1-2=moderately broad: participant's values and concerns extend to family members, and outwards into the local community (e.g., other people's children, community programs etc.).

3-4=broad perspective: participant is oriented towards the needs of community and beyond to international issues, environmental issues, or planetary scale of concerns.

2. VERBOSITY : OFF TARGET; IF YES, CODE (1), IF NO, CODE (0).

Section E-Real Life Problem/Dilemma

CHOICE OF PROBLEM:

1. WAS DILEMMA/PROBLEM DESCRIBED PREVIOUSLY CITED AS ONE OF TURNING POINTS?
IF YES CODE(1), NO CODE(0).

2. WAS PROBLEM EXPLICITLY DESCRIBED AS AN EMOTIONAL CRISIS FOR THE SELF? (e.g., it was the worst thing that ever happened to me, a catastrophe, life crisis). IF YES CODE 1, IF NO CODE 0.

3. CONTENT OF PROBLEM-CHOOSE ONE ONLY OF THE FOLLOWING

CONTENT THEMES: VERSION C

0-None perceived, question not answered, or attempt to avoid answering (e.g., I just go along, there haven't been any changes).

MARITAL/FAMILY THEMES

1-marriage/ self

2-marriage of children

3-divorce/separation self

4-family conflict which does not result in separation/divorce (e.g., difficulties with child management, estrangement of parent/sibling or other family member).

BIRTHS

5-birth of child/children, being a parent, child rearing

6-birth of grandchild

DEATHS

7-death of spouse

8-death of parent

9-death of other close family member (e.g., sibling, child).

10-death of friend

OCCUPATION/ FINANCIAL/LIFESTYLE

11-retirement

12-major shift in lifestyle: decision to leave home/church/career and embark on qualitatively different path (e.g., homemaker who returns to work after children have left, person who leaves business and embarks on community service, person who leaves seminary/priesthood and accepts a job).

13-change of job emphasis or promotion which does not represent starting something completely new (i.e., participant already has some prior experience or new job is related to old job in some way).

14-pension

CHANGE OF RESIDENCE

15-general move due to occupation or reasons not having to do with difficulties in managing home (e.g., desire to be closer to family members).

16-move to smaller residence/apartment for financial or difficulty with upkeep reasons.

17-immigration, move to new country

ENRICHING EXPERIENCES

18-returning to school, taking courses, graduation

19-community involvement /volunteer work/political involvement

20-spiritual awakening/religious or conversion experience

MENTAL OR PHYSICAL HEALTH

21-experience of personal illness, injury, or disability (e.g., heart attack, loss of vision).

22-illness/caregiving for/or decision to institutionalize ill spouse

23-illness/caregiving for/ or decision to institutionalize parent

24-mental or behavioural problem, self (e.g., depression, alcoholism).

25-mental or behavioural problem, other

GLOBAL OR NATIONAL EVENTS

26-war, involvement in or flee from (e.g., flee from Germany, conscription, military service, combat experience).

27-the Depression (do not confuse with emotional disorder of #24 & 25).

28-OTHER, SPECIFY.

29-MAJOR SHIFT IN VAUES: (e.g., began to realize honesty is not always the best policy, I became less tied to one view, I became disillusioned with my views and started looking at things completely differently).

4. CODE VALENCE OF PROBLEM: 1=POSITIVE, 2=NEGATIVE, 3=NEUTRAL, 4=MIXED AFFECT.

E1. When did the situation occur?

CODE TIME OF LIFE WHEN EVENT TOOK PLACE:

0=PRESENT

1=OLD AGE (age 60+)

2=MIDDLE-AGE (40-59)

3=YOUNG-ADULT (20-39)

4=CHILDHOOD OR ADOLESCENCE (0-19)

E2. What was the conflict for you in the situation?

1. DOES CONFLICT OBVIOUSLY CORRESPOND TO PRIORITIES EXPRESSED IN VALUES? (e.g., person who identifies family relationships as priority discusses conflict over management of son, person who identifies health as a priority describes trauma of an illness) IF YES CODE (1) IF NO CODE(0)

IF YES, CODE CATEGORY OF RECURRENT THEME

1=RELATIONSHIPS: importance of, value of, concern with, care/responsibility of others.

2=SELF CONSERVATION/PRAGMATICS OF LIFE: concern with maintenance of lifestyle, security, and being able to enjoy one's life.

3=GENERATIVITY: wish to contribute to society, community, future generations, make the world a better place for all.

4=MORALITY/IDEOLOGY: concern with issues of what is right and what is wrong, following principles in one's life such as obligations, duty, loyalty, justice.

5=SELF PERFORMANCE/INTEGRITY: being and doing the best one can be, intellectually, socially, emotionally, or physically.

6= OTHER, SPECIFY.

2. Content of Conflict:

A. 'SIMPLE ' CONFLICT, CODE ONE CONTENT CATEGORY FROM BELOW (e.g., the conflict was between myself and my aunt =category 4).

B. COMPLEX CONFLICT : two issues diametrically opposed such as financial benefits conflicting with relations with others) CODE 2 SIDES OF THE CONFLICT (e.g., one the one hand I wanted to help her but I was worried that she would not be able to learn that she needs to be responsible for herself and also it was my life's savings =3 vs 5).

Content of conflict

RELATIONSHIPS

1=relations with others perceived at risk, fear of separation or estrangement (e.g., I feared I would loose her, he would never forgive me).

2=concern about responsibility to others (e.g., financial responsibility for family) concern about interference/decision negatively affecting lives of others, either directly or indirectly (e.g., as I parent I was worried that if I took over he would never be able to stand on his own two feet).

3= interpersonal conflict marked by dissatisfaction, anger, hostility, or mistrust (e.g., I feared she was being influenced by him and I didn't like him, he didn't support me).

SELF PRESERVATION/PRAGMATICS OF LIFE

4=financial risks or benefits, security, maintenance of lifestyle one is accustomed to.

5=safety, security not related to finances (e.g., I had to flee the country for my own safety).

6=health issue/problem

7=uncertain future, fear of unknown

MORAL/IDEOLOGICAL

8=question of doing what is right/wrong

9=issue of loyalty/betrayal to people, country or church

SELF PERFORMANCE/INTEGRITY

10=emotional health (e.g., it was so stressful it was making me sick, I couldn't take feeling like that any more, I felt like I would go crazy).

11=personal integrity (e.g., I needed to be true to myself, I couldn't fake it any more).

12=self-performance (e.g., I knew I could do a good job, I wanted the promotion).

13=OTHER, SPECIFY

E3. In thinking what to do, what did you consider? How did you weigh each alternative?

CODE ONLY ONE OF THE FOLLOWING 3 CHOICES:

0=ONLY ONE PATH OF ACTION DESCRIBED (e.g., There was no choice, no options).

1= PARTICIPANT LISTS TWO OR MORE ALTERNATIVES, OR STATES THAT HE/SHE HAD MORE THAN ONE OPTION, BUT DOES NOT GO INTO PROCESS OF HOW THESE OPTIONS WERE WEIGHED OR WHY ONE WAS BETTER THAN AN OTHER.

2=EXPLICIT STRATEGY TAKEN TO CHOOSE BETWEEN MORE THAN ONE ALTERNATIVE

CODE ALL RELEVANT STRATEGIES

1=CONSULTATION: actively sought out advice (e.g., talked with priest, experts)

2=COGNITIVE: wrote out all pros/cons, research to get all the facts

3=TESTING: feedback approach (e.g., tried one strategy and checked it's effects, decided to see how he would react to it).

4=NONCOMMITTAL: a priori back-up plan (e.g., I knew if it didn't work out I could go back to Israel, just sat back listened without telling them what I thought).

5=OTHER, SPECIFY.

TOTAL NUMBER STRATEGIES UTILIZED.

E4. What did you decide to do?

0=NONACTION (e.g., did nothing, wait and see how things would turn out, decided not to get involved/interfere).

1=ACTION (e.g., went to talk to him, I had to act, tried to change their minds).

2=OTHER, SPECIFY.

E5. Looking back on it now, are you happy with how you handled the situation?

0=NO ANSWER, CAN'T SAY

1=UNQUALIFIED YES, (e.g., I did the right thing, I'm happy with how I handled it, I have no regrets).

2=UNQUALIFIED NO (e.g., I made a mistake, I should have...)

3=QUALIFIED YES/NO (e.g., at the time I did the best thing I knew, but now I would have done things differently).

E6. Thinking back over the whole thing, what did you learn from it?

CODE ALL THAT ARE RELEVANT

0=NOTHING: or question not answered (e.g., Can't say, don't know, I didn't learn much).

TECHNICAL KNOWLEDGE; INFORMATION

1=specialized/ instrumental knowledge which can be used to achieve some control over one's environment (e.g., how to fix a TV, how to use a computer, facts about nature).

PRACTICAL KNOWLEDGE-OTHER ORIENTATION

2=Essentials of Human nature which does not focus on limitation_(e.g., people are the same no matter what language they speak, you can't judge a book by it's cover, people learn from experience).

3=effective strategies to communicate with/influence others (e.g., learned that you have to suggest things subtly and let them come up with the solution on their own; if someone is dogmatic I don't let them know my opinion).

EMANCIPATORY OR SELF KNOWLEDGE

4=issues of autonomy & responsibility, necessity of promoting rather than restricting human potentials(e.g., realized that she is her own person and has a right to make her own decision).

5= Nature of Life , what we may hope in life or what life is all about (e.g., realized that life can be difficult and we just have to do our best, you have to face life head on).

6=awareness of the limitations of the self and of others (e.g., we all make mistakes/we're only human, one has to forgive, I realized I have a problem with anger).

7=procedural self knowledge or insight (e.g., when you are in that kind of a situation, you just have to make a decision and stick with it;).

8=OTHER, SPECIFY.

E6. Do you think you handled the problem wisely?

0=NO ANSWER, CAN'T SAY

1=UNQUALIFIED YES, (e.g., I did the right thing).

2=UNQUALIFIED NO (e.g., I made a mistake, I should have...)

3=QUALIFIED YES/NO (e.g., at the time I did the best thing I knew, but now I might have done things differently, by todays standards yes/no.)

SECTION F: WISDOM

F1. What do you think wisdom is/ How do you recognize wisdom in others?

NATURE OF WISDOM CONSTRUCT.

GIVE 1 OF CODES 1,2, 3 OR 1 OR MORE OF CODES 4 TO 18.

1=NO ANSWER, (I don't know, I never thought about it much).

2=ANSWER OF SOME TYPE: RUDIMENTARY, INCOMPLETE, OR PURELY PRAGMATIC APHORISM OR RELATED TO OTHER CONSTRUCT(e.g., it's wise to eat right and exercise, being smart, dealing with situations wisely).

3=WISDOM IS AN INDEFINABLE CONSTRUCT AND/OR INTRINSICALLY UNCERTAIN - IN OTHER WORDS, A CAN'T KNOW RESPONSE (e.g., no one can answer a question like that).

CONTENT THEMES:

Knowledge

4=WISDOM IS LEARNING FROM EXPERIENCE. ANSWER DOESN'T GO PAST SPECIFYING THIS PROCESS AND THE PERSON DOESN'T INDICATE WHAT IS LEARNED FROM EXPERIENCE OF HOW THE CONTENT OF LEARNING FROM EXPERIENCE IS BENEFICIAL TO THE INDIVIDUAL.

5=WISDOM IS BASED ON PRACTICAL KNOWLEDGE. I.E., KNOWLEDGE OF PEOPLE, RELATIONSHIPS, HOW TO GET ALONG WITH OTHERS, OR COMMON SENSE.

6=WISDOM IS BASED ON TECHNICAL KNOWLEDGE. I.E., KNOWLEDGE OF SCIENCE, THE WORLD, IMPORTANCE OF EDUCATION, KEEPING UP TO DATE WITH THE TIMES, GETTING ALL THE FACTS.

7=WISDOM IS BASED ON EMANCIPATORY KNOWLEDGE. I.E., KNOWLEDGE OF THE SELF, RECOGNITION OF ONE'S LIMITATIONS, AWARENESS OF UNCERTAINTY, MAY INDICATE A PHILOSOPHICAL BASIS.

Cognition=description of how one thinks rather than the content of one's thoughts (i.e. knowledge).

8=CONSTRUCT FOCUSES ON COGNITION AS THE ESSENCE OF WISDOM. EMPHASIZES PROCESSES OF REASON, LOGIC, BEING ANALYTICAL, CRITICAL, OBJECTIVE, THINKING THINGS THROUGH, ASSESSING ALL SIDES OF A SITUATION, BEING INTELLIGENT, DETACHED.

9=CONSTRUCT EMPHASIZES IMPORTANCE OF RELATIVISM, I.E., BEING ABLE TO APPRECIATE MULTIPLE POINTS OF VIEW WHICH MAY BE DIFFERENT THAN ONE'S OWN, AWARENESS OF INDIVIDUALITY.

Emotion & Personality

10= AFFECT AS THE ESSENCE OF WISDOM. PRESCRIPTION FOR AFFECT CONTROL OF SELF (e.g., coming to terms with past conflicts and pain, being able to face your fears, being at ease with yourself, adopting a positive attitude, accepting yourself/others).

11=EXPLICIT MENTION OF AFFECT PROCESS USED IN RELATING TO OTHERS (KEY WORDS: Sympathy, connectedness, compassion, empathy).

12=CONSTRUCT FOCUSES ON PERSONALITY AS THE ESSENCE OF WISDOM (KEY WORDS: openness, patience, temperament, having a sense of humour, being flexible, cautious).

Action & Generativity

13=CONSTRUCT INCLUDES GUIDE FOR VALUES, LIFE-STYLE, ACTION. PRESCRIPTION FOR BEHAVIOUR. MAY INCLUDE SELF-OTHER RELATIONS (e.g., wisdom is how you act/behave, it has to be applied, you have to know when to act and when not to).

14=GENERATIVITY: EMPHASIS ON COMMITMENT, INVOLVEMENT (e.g., you want to make the world a better place for the future, for your grandchildren, it goes beyond getting things for yourself).

Spirituality & Interpersonal skills

15=SPIRITUAL DEPTH: living life from a sense of religious principles, belief in God.

16=INTERPERSONAL SKILLS or STYLE: being able to listen, being able to express yourself clearly, knowing the right way of saying things, not talking too much.

EXPLICIT INTEGRATION : must be explicit attempt to integrate various combinations of cognition, affect, action or personality. Must go beyond listing or adding various categories to give the impression that the participant feels the categories are inseparable(e.g., wisdom is a combination of ..., wisdom needs both.....) (KEY WORDS: BALANCE, BOTH, COMBINATION, INTEGRATION).

17=COGNITIVE + AFFECT (e.g., wisdom involves a balance between thinking and feeling, using compassion in thinking through a problem, taking into account all sides of an issue including people's feelings, think through your life to find meaning).

18=COGNITIVE + ACTION (e.g., you have to both think it through and then apply your knowledge, it's being able to think out all sides of a problem keeping in mind what will benefit society).

19=AFFECT + ACTION (e.g., caring enough about people to do the right thing, you care about others and want to make the world a better place for them).

20=INTEGRATES AT LEAST ONE THEME EACH OF COGNITION, AFFECT AND ACTION

21=OTHER, SPECIFY.

F1. Complexity/quality of response

1. TOTAL NUMBER CATEGORIES MENTIONED NOTE. **total 4-14 as single themes, total 16-19 each =2 instead of 1), category 20=3).

2. OFF TARGET VERBOSITY: IF YES, CODE (1), IF NO, CODE (0).

F2. How does one develop/acquire wisdom?

GIVE ONLY ONE 1 YES CODE HERE. ALL OTHERS MUST BE CODED 0.

0=QUESTION NOT ANSWERED, DON'T KNOW.

1=DEVELOPMENTAL BASIS OF WISDOM (e.g., age related, by growing older, stages of life you go through).

2=EXPERIENTIAL BASIS OF WISDOM (e.g., learning from mistakes, experiences, reading and education).

IF EXPERIENCE, CODE VALENCE OF EXPERIENCE

1 (POSITIVE), 2 (NEGATIVE), 3(NEUTRAL), i.e., general experiences, 4(MIXED) (e.g., need both good and bad experiences).

3=GENETIC BASIS OF WISDOM, OR INBORN INDIVIDUAL DIFFERENCES WHICH MAY NOT BE EXPLICITLY GENETICALLY BASED (e.g., you either have it or you don't, some people are born with it, some people are more open to wisdom than others).

4=RELATIONAL/SOCIAL BASIS/UPBRINGING (e.g., learning from your parents, teachers, mentors, from the way you are brought up).

EXPLICIT INTEGRATION: (KEY WORDS combination, interaction, need both).

5=Development + Experience

6=Development and genetic/individual differences

7=Experience and Individual differences

8=All three bases

9=OTHER, SPECIFY.

F2. Qualities/complexity of response:

1. TOTAL NUMBER CATEGORIES MENTIONED
2. OFF TARGET VERBOSITY: IF YES, CODE (1), IF NO, CODE (0).

F3. How does this way of looking at things affect the way you live your life?

0=No answer, doesn't affect me.

1=KNOWLEDGE: try to keep knowledgeable, up to date with the times, learning from mistakes.

2=ACCEPTANCE: try to accept life, how things are, try to accept my own/other's limitations

3=AGREEABLENESS: try to get along with others, respect other people's opinions/rights, avoid conflicts, don't judge others.

4=LIFESTYLE &/OR INVOLVEMENT: try to keep active, involved, volunteer work, keeping busy.

5=INTEGRITY or SPIRITUALITY: try to abide by principles, be virtuous, be true to myself

6=COGNITIVE: try to be cautious, careful, think things through more thoroughly before making a decision.

8=OTHER, SPECIFY.

F4. Do emotions have a place in wisdom?

0=No answer, I don't know.

1= YES BY DEFAULT: participant doesn't explain how or why emotions are relevant to wisdom. May imply they are related simply because they are part of the human

condition (e.g., we are have emotions so I guess they must be related, emotions are important in life).

2= DEFINITELY NO, UNELABORATED: no explanation as to how or why emotions are not relevant to wisdom.

3=DEFINITELY YES, EMOTIONS AS JUDGEMENTS: emotions considered essential in determining what is a wise course of action. Emphasizes reliance on feeling, compassion, care for others as absolutely necessary to wisdom.

4=DEFINITELY YES, EMOTIONS AS ENRICHMENT OR ACCEPTANCE: emotions such as love, appreciation seen as adding richness and complexity to the human experience. Wisdom seen as an ability to live life to its fullest, emotions give a sense of wholeness or wisdom seen as adapting an attitude of accepting all life has to offer.

5=DEFINITELY NO, EMOTIONS AS BIAS: emotions seen as interfering with objectivity, biasing one's decisions/thoughts. Detached perspective in wisdom emphasized and valued.

6=QUALIFIED YES/NO: emphasizes that positive emotions such as love can add richness to experience or compassion to one's actions, but intense or negative emotions can lead one astray or interfere with human relationships.

7=OTHER, SPECIFY.

F5. Any other questions which should have been asked?

0=No

1=importance of parenting, upbringing

2= association between wisdom and age, can young people be wise

3=OTHER, SPECIFY.

OVERALL INTERVIEW

1. Is Participant 's protocol structured around one or more dominant themes (i.e., same theme present in 2 or more sections, check questions in self, values, and dilemma).

IF YES, CODE CONTENT OF THEME.

1=RELATIONSHIPS; importance of maintaining connections with others

2=LIFE PRAGMATICS; security, lifestyle, keeping healthy.

3=MORALITY/SPIRITUALITY.

4=SELF PERFORMANCE/INTEGRITY: self enhancement/ growth/ improvement

5=other, specify

2. What is the overall emotional tone of the interview:

0=COGNITIVE/AFFECT NOT PRESENT: participant strongly tends to express thoughts not feelings, completely neutral, intellectual.

1=DEFENSIVE: participant appears unusually defensive, evasive, affect may implied but not openly expressed.

NEGATIVE AFFECT:

2=Anger/Hostile: participant is openly hostile, bitter, angry, aggressive.

3=Anxiety: obvious fear or anxiety regarding performance

4=Despair, sadness: participant cries, expresses regret, disappointment, or sorrow over their situation.

5=Impatience: participant is not openly hostile but appears impatient, critical, may state situations they "can't stand".

POSITIVE AFFECT:

6=Joy, happiness: participant is light hearted, enthusiastic, expresses love of their life

7=Peace, serenity: participant expresses acceptance of themselves and others, not the same as 0 or 1 as negative aspects are acknowledged not suppressed/denied but participant is able to accept this as part of life.

8=Pride: participant is openly pleased with their performance, situation, or accomplishments. Emphasizes accomplishments or competence.

9=OTHER, SPECIFY.

GUIDELINES FOR LEAS SCORING

The LEAS consists of 20 scenarios which are each rated on a 5 point scale. These scores are summed to generate a maximum possible total score of 100. The guidelines described below address how the 5 point rating for each scenario is made.

There are three separate ratings which must be made for each scenario: 1) self, 2) other, 3) total. The ratings for "self" and "other" are made in exactly the same way: the description of emotion for each person is assigned the level score from 0 to 4 which is the highest level achieved for that item. Thus, there is one "self" score from 0 to 4 and one "other" score from 0 to 4 for each scenario. Every feeling mentioned in a scenario can potentially be rated for "self" or "other."

In making these ratings, the criteria listed below should be followed explicitly. Emotion which is implied by or can be inferred from a response but which is not explicitly stated should not be scored. If a feeling is explicitly mentioned but denied, e.g., I wouldn't feel embarrassed, it is scored as if the emotion in question was present. If a feeling is not specifically attributed to self or other but to "someone" or "one," it is not rated. Similarly, if emotions are described which are not a response to the scenario per se but rather reflect the general belief system of the respondent, the emotions are not rated. If only one word is listed, attribute it to the self. Incidental comments contained in the description which convey emotion such as "I hope" are rated if they are embedded in the emotional response.

All words in the glossary are classified according to the level that they best fit. If there is another level that they might also fit less commonly, that secondary level is indicated in parentheses. Words must be interpreted in relation to the scenario, e.g., pain in the first scenario is scored 1, while in scenario 12 is scored 3.

The "total" score for each item is the highest of these two ("self" and "other") scores, except in the case of two level 4 scores in which case the guidelines for level 5 should be followed. All of the scoring guidelines for these ratings are listed below.

LEVEL 0

At least one of the following guidelines must be met:

1. No response given to the item.
2. Description of a thought or impression which reflects an act of cognition without any indication of the emotional reaction which followed from the cognitive act. A good rule of thumb here is if the word "think" can substitute for the word "feel" without any change in meaning, e.g. I would feel that they were wrong; I would feel that the remarks were justified.
3. Words that describe cognitive states, e.g. puzzled, confused, uncertain.
4. Words that reflect conclusions reached from evaluative judgements which do not consistently have an associated positive or negative emotional tone, e.g. adequate, alone, justified.

LEVEL 1

At least one of the following guidelines must be met:

1. Explicit, simple statement that the person would feel nothing, a statement that the respondent does not know how the person in question would feel, or a statement acknowledging the possibility of having feelings without specifying what they are, e.g. closed, denial, indifferent.
2. Any bodily sensation or physical feeling, e.g. I'd feel pain, tingling, achy, nauseated.

LEVEL 2

At least one of the following guidelines must be met:

1. An action tendency, e.g. I'd feel like punching the wall. A response would be scored here if the person felt like doing something which required mediation by the voluntary motor system. Actions per se are not rated as feelings.
2. Reference to a conscious state which is global in nature and focuses on a key word whose usual meaning is not emotional, e.g. I'd feel ... good, bad, upset, awful, terrible, great, wierd, etc. Words such as "strong" or "weak" would be scored here if they did not clearly refer to a physical state.
3. Personality traits which have an inherent action component where the person is the initiator of the behavior, e.g., authoritarian, pompous, patriotic, defensive, greedy, haughty.
4. Passively experienced actions with emotional connotations, e.g. abandoned, offended, soothed, manipulated.
5. Actions that inherently convey emotion, e.g. mope, laugh, cry, soothe, console.

6. Nonspecific emotions that cannot be categorized with any one primary emotion, e.g. irritated, upset, aroused.
7. Words that reflect cognitions that have distinctly positive or negative emotional connotations, e.g. fortunate, triumphant, unworthy, lucky.

LEVEL 3

At least one of the following guidelines must be met:

1. Emotions that have a well-differentiated connotation, e.g. happy, sad, angry, want, anticipate, disappointed, etc.
2. Words which are closely allied to specific emotions, e.g. pissed off, look forward, dying for, let down.
3. Words that inherently convey an exchange of emotion, e.g. sympathize, empathize, commiserate.
4. Complex emotions such as "remorse" are scored here if it is the only emotion mentioned.
5. Single words which refer to multiple emotions would be scored here if the multiple emotions were not specified or referred to in some way, e.g. "I'd feel ambivalent."
6. If two or more feelings are expressed which are so similar in meaning that they cannot be readily distinguished, i.e. level 4 criterion #2 is not satisfied.

LEVEL 4

At least one of the following guidelines must be met:

1. Opposing emotions are described. Examples of opposing dyads include joy-sadness, interested-bored, anger-fear, surprise-anticipation, acceptance-disgust.
2. Qualitatively distinct emotions are described. The test of whether a feeling state is distinct is if an outside observer could look at two people, each of whom is manifesting the facial expression of one of the emotions which is to be contrasted, and reliably identify who is feeling what.
3. Quantitatively distinct emotions are described through the use of words that describe different emotions, not use of adverbs such as "more" or "less," e.g. "My feeling was somewhere between ecstatic and delighted." Another sufficient but not necessary criterion for making quantitative distinctions is that provided by #2 above.
4. When different reasons are given for a single emotional response, e.g. I would feel angry with myself and angry with my neighbor.

5. When a metaphor or simile is used to describe an emotional state which is particularly vivid, e.g. He would feel as though the world was collapsing on him; I would feel as if I was in a bad movie. Another example would be a detailed elaboration of a single word which evokes a powerful and vivid sense of an emotion.

LEVEL 5

All of the following guidelines must be met:

1. Each individual's emotional reaction meets level 4 guidelines.
2. The reaction of the two individuals are clearly different from each other, either in specific content or overall tone.
3. Unlike in level 4, the major emotions which are mentioned must be understandable to the rater. For example, the respondent should specify which aspect of the situation accounts for each of the two opposing emotions. If the emotions which contribute to the level 4 score in each of the two individuals are the same, reasons should be given to account for differences in the overall tone of the two reactions.

GLOSSARYLevel 0

adequate
 alerted
 alone
 aloneness
 attentive
 confused
 contemplative
 deserves
 deserving
 detached
 detachment
 different
 disbelief
 disbelieving
 disillusioned
 distant
 diverted
 doubtful
 dumbfounded
 firm (2)
 have faith
 have faith in
 hinderance
 intelligent (2)
 justified
 oblivious
 puzzled
 raising expectations
 ready
 reconcile (3)
 respect
 righteous
 rolling my eyes
 self conscious
 sense of control
 sensitive (2)
 skeptical (2)
 uncertain
 uncoordinated
 under control
 understanding
 undeserving
 unsure
 value
 wonder

Level 1

apathetic
 at a loss for words
 blood pressure goes up
 closed
 denial
 dizzy
 don't know what the person feels
 exhausted
 heart beating
 heart racing
 hot
 hungry
 I wouldn't care how he felt
 impassive
 indifferent
 invigorated
 It wouldn't matter
 like having a heart attack
 nauseous
 no idea
 one's heart goes to one's throat
 pain (3)
 sensual
 sexually ready
 sleepy
 thirsty
 tired
 unaffected
 worn out

<u>Level 2</u>	
abandoned	compelled
acomodating	complacent
acquisitive	complimentary
a duty to	complimented (0)
aggressive	compromised
agitated	conciliatory
aimless	confident
alienated	congratulatory
aloof	conniving
alright	console
altruistic	consoling
antagonistic	constricted
antsy	contrite
apologetic	contrition
appreciated	cranky
aroused	crappy
arrogant	crazy
at ease	crushed
attacked	curse
authoritarian	cynical
awesome	dead inside
awful	deceived
awkward	decent
backed into a corner	decimated
bad	defeated
badly	defensive
begrudge	dependent
belligerant	desirous
betrayed	desolate
better	destroyed
bold	determined
bothered	determination
brave	devastated
brightening up my day	devious
bugged	discomfort (1)
bumped	disturbed
bumped out	dominant
burdened	dreadful
burned out	dumb (1)
businesslike	dutiful
careless	dying inside
catatonic	easy
caught	edgy
cautious	emptiness
challenged	empty
cheated	endangered
close	energetic
closer	excellent
clumsy	exposed
cocky	fantastic
coldhearted	fed up
comfort	fine
comfortable	flattered
comforted	flustered

Level 2 (continued)

foolish
 fortunate
 frail (1)
 freak out
 free
 friendly
 fucked
 full of passion
 funny
 gauche
 generous
 giving
 gloat
 glorified
 good
 good will
 great
 greedy
 grim
 grudge
 grumpy
 hardened
 hassled
 haughty
 helpful
 helpless
 hesitance
 hesitancy
 honored
 horny
 horrible
 humble
 hyped up
 hysterical
 ill at ease
 impatient
 important
 imposed upon
 impressed
 in a bad mood
 inadequate
 incompetent
 inconsiderate
 inconvenienced
 indebted
 ingratiating
 in jeopardy
 injured (1)
 insecure
 in shock
 insignificant
 insincere (0)
 insulted
 intimate

irked
 irresponsible (0)
 irritable
 irritated
 isolated
 I would cry
 I would laugh
 I would smile
 keep your spirits up
 kind
 led on
 leery
 left out
 let down
 lifting spirits
 like an ass
 like a fool
 like a heel
 like an idiot
 like doing something (voluntary)
 like shit
 lonely
 lose one's cool
 lose temper
 loss of confidence
 lost
 lousy
 low
 lousy
 loyal
 lucky
 manipulated
 miserable
 mixed up
 mope
 motivated
 moved
 nasty
 needed
 need to ...
 need to defend
 need to help
 needy
 negative
 negatively
 nice
 numb (1)
 obligated
 obliged
 obliged
 offended
 okay
 on edge
 on top of the world

Level 2 (continued)

oppressed	shocked
optimistic	short tempered
overindulgent	shy
overwhelmed	sick
pampered	silly
paralyzed	sincere (0)
patient	slighted
patriotic	small (1)
patrinizing	smug
pompous	sneaky
poorly	solicitous
positive	soothed
powerful	special
pressed for time	strange
pressured	stressed
protected	strong (1)
psyched	stunned
put off	stupid (0)
put out	sublime
put upon	successful
qualified	suicidal
rattled	superior
ready to fuck	superiority
reassurance (0)	supported
reassured	supportive
reckless	taken advantage of
rejected	taken aback
reluctant	taken care of
repent	tearful
repentant	temptation
resolute	tempted
resolve to	tenderness
resolved to	terrible
respectful	threatened
responsible (0)	tickled pink
restrained (0)	timid
restricted	tolerant
rewarded	torn
romantic	touched
rude	trapped
rushed	triumphant
safe	troubled
secure	trusted
self important	turmoil
selfish	unable to cope
self-righteous	unappreciated
sense of accomplishment	uncomfortable
sense of helplessness	understood
sense of urgency	uneasy
sexually turned on	unnerved
shafted	unprofessional (0)
shaken	unprotected
sheepish	unreliable
shitty	unsettled

Level 2 (continued)

untrustable
 unworthy
 upset
 urgency
 used
 useful
 useless
 victorious
 violated
 virtuous
 vulnerable
 weak (1)
 weighted
 welcome
 welcomes
 willpower
 wonderful
 worthless
 worthwhile
 worthy
 wronged
 zonked out

Level 3

abashed
 affection
 affectionate
 afraid
 aggravated
 agonize
 agony
 alarmed
 amazed
 ambivalent
 amused
 anger
 angered
 angry
 anguish
 animosity
 annoy
 annoyance
 annoyed
 annoying
 anticipate
 anticipated
 anticipating
 anticipation
 anxious
 appalled
 appalling
 appreciate
 appreciative
 apprehensive
 ashamed
 astonished
 at peace
 awe
 bereft
 bitter
 bitterness
 bored
 broken hearted
 calm
 calmdown
 care
 cared for
 caring
 commiserate
 commiseration
 compassionate
 concern
 content
 curious
 dejected
 delighted
 demoralized
 depressed

Level 3 (continued)

depression	frantic
desire	frightened
desirous of	frustrate
despairing	frustrating
desperate	fulfilled
despise	getting hopes up
despondent	glad
devoted	gladness
devotion	grateful
disappointed	gratification
discontent	gratitude
discouraged	gleeful
disdain	grief
disgust	guilty
disgusted	happy
dislike	happiness
disliked	hate
dismayed	hated
distraught	hatred
distressed	hope
distrust	hopeful
doomed	hopefully
dread	hopeless
dreaded	horror
dreading	horror stricken
dying for	hostility
eager	humiliate
eagerness	humiliated
ecstatic	hurt (1)
elated	indignant
embarrass	in love
embarrassed	inquisitive
embarrassment	inspired
empathy	interest
indebted	interested
enjoy	intimidated
enjoyed	intrigued (cf. fascinated)
enjoying	jealous
enraged	jealousy
enthusiastic	jovial
envied	joy
envy	jubilant
envying	like
envious	liked
exasperated	long for
excited	longing
excitement	look forward
exhilarated	looks forward
exhilarating	love
exhilaration	loved
exuberant	loving
expectant	mad
fascinated	melancholic
fear	mellow

Level 3 (continued)

miss
 mixed up emotionally
 mournful
 nervous
 overjoy
 panic
 peaceful
 terror
 peevish
 perturbed
 piqued
 pissed off
 pity
 pleasant
 pleasantly
 pleased
 pleasure
 prefer
 preferred
 proud
 relaxed (1)
 regret
 regretful
 relief
 relieved
 relish
 remorse
 resentful
 resigned
 revel
 revelled
 revelling
 sad
 saddened
 sadness
 satisfaction
 satisfied
 satisfy
 satisfying
 savor
 scare
 scared
 scorn
 self concern
 self hatred
 self pity
 self reproachment
 sense of futility
 sentimental
 sense of loss
 serene
 shame
 smiling ear to ear
 sorrow

sorry
 startled
 suffer (1)
 suffering (1)
 supercilious
 surprise
 surprised
 suspicious
 sympathetic
 sympathy
 tense
 thankful
 ticked off
 trust
 unconcern
 uneasy
 ungrateful
 unhappy
 uptight
 vindicated (cf. relieved)
 want
 wanted
 wants
 warm (affectionate)
 wary
 weary
 willing
 wish
 wishes
 worried
 worries
 worry

Level 4

burst my balloon
 cloud nine
 on top of the world
 pleasantly surprised

APPENDIX C

Summary of Data

Table C.1
Wisdom scores in relation to nomination status, age, and gender

Self-referred				Nominees			
Men		Women		Men		Women	
Age	Wisdom	Age	Wisdom	Age	Wisdom	Age	Wisdom
69	24	70	15	62	32	69	28
69	19	72	14	77	31	64	27
87	18	68	14	60	28	75	26
62	18	70	13	75	26	79	26
67	17	70	13	71	25	63	26
86	16	65	9	74	22	64	23
73	14	70	9	60	21	78	23
66	13	76	8	62	19	60	23
77	10	65	8	62	19	70	22
73	5	76	7	68	18	62	22
		71	7	86	18	64	22
		78	3	62	18	70	22
				74	18	57	19
				79	18	68	19
				65	18	69	19
				66	17	61	19
				73	16	69	18
				63	16	88	17
				77	15	67	17
				60	14	77	17
				69	14	78	17
				85	13	65	16
				67	12	75	16
				60	12	80	16
				70	11	67	15
						69	14
						70	14
						74	13
						70	13
						60	13
						66	13
						68	12
						78	12
						74	12
						70	12
						65	11
						76	11
						71	11
						81	11
						76	10
						60	10
						74	9
						69	9
						69	9
						71	8
						76	8
						<u>Women</u>	
						<u>Age</u>	<u>Wisdom</u>
						76	8
						62	7
						69	7
						75	5
						77	5

Note. Participants aged 75 years and over are in boldface

Table C.2
Means and Standard Deviations of Wisdom Dimensions as a function of Nomination Status and Gender for each Question

Dimension	Self-Referred			Nominees		
	Gender	Dilemma	Wisdom	Gender	Dilemma	Wisdom
Factual Knowledge						
<u>Women</u>						
<u>M</u>	0.75	1.17	0.83	1.32	1.42	1.16
<u>SD</u>	(0.65)	(0.39)	(0.58)	(0.65)	(0.54)	(0.82)
<u>Men</u>						
<u>M</u>	1.30	1.20	1.70	1.20	1.58	1.81
<u>SD</u>	(0.48)	(0.79)	(0.68)	(0.57)	(0.64)	(0.57)
Procedural Knowledge						
<u>Women</u>						
<u>M</u>	0.00	1.08	0.50	0.14	1.00	0.58
<u>SD</u>	(0.00)	(0.52)	(0.52)	(0.35)	(0.70)	(0.58)
<u>Men</u>						
<u>M</u>	0.00	1.10	0.70	0.15	1.31	0.73
<u>SD</u>	(0.00)	(0.74)	(0.68)	(0.37)	(0.84)	(0.53)
Life-span Contextualism						
<u>Women</u>						
<u>M</u>	1.17	1.08	0.58	1.50	1.26	0.78
<u>SD</u>	(0.39)	(0.67)	(0.67)	(0.68)	(0.53)	(0.71)
<u>Men</u>						
<u>M</u>	1.30	1.40	0.90	1.50	1.27	1.08
<u>SD</u>	(0.68)	(0.52)	(0.32)	(0.71)	(0.53)	(0.63)
Relativism						
<u>Women</u>						
<u>M</u>	0.25	0.50	0.33	0.54	0.50	0.62
<u>SD</u>	(0.45)	(0.52)	(0.49)	(0.65)	(0.61)	(0.67)
<u>Men</u>						
<u>M</u>	0.70	0.40	0.70	0.81	0.73	0.81
<u>SD</u>	(0.48)	(0.52)	(0.68)	(0.85)	(0.53)	(0.69)

Table C.2 continued.

Awareness of Uncertainty						
<u>Women</u>						
<u>M</u>	0.00	0.25	0.83	0.14	0.78	0.50
<u>SD</u>	(0.00)	(0.45)	(0.29)	(0.35)	(0.76)	(0.61)
<u>Men</u>						
<u>M</u>	0.00	0.80	0.40	0.35	1.04	0.77
<u>SD</u>	(0.00)	(0.79)	(0.52)	(0.49)	(0.82)	(0.65)
Generativity						
<u>Women</u>						
<u>M</u>	0.00	0.08	0.00	0.30	0.28	0.38
<u>SD</u>	(0.00)	(0.29)	(0.00)	(0.68)	(0.54)	(0.57)
<u>Men</u>						
<u>M</u>	0.00	0.10	0.40	0.23	0.23	0.58
<u>SD</u>	(0.00)	(0.32)	(0.52)	(0.51)	(0.43)	(0.81)
Affect Integration						
<u>Women</u>						
<u>M</u>	0.25	0.50	0.50	0.54	0.78	0.76
<u>SD</u>	(0.62)	(0.52)	(0.67)	(0.61)	(0.74)	(0.74)
<u>Men</u>						
<u>M</u>	0.40	0.80	1.10	0.58	0.65	0.92
<u>SD</u>	(0.70)	(0.79)	(0.57)	(0.70)	(0.56)	(0.80)

Table C.3
Descriptive Statistics of Measures as a Function of Nomination Status

Variable	Nomination Status	
	Self-referred	Nominees
n	21	76
Wisdom		
M	12.41	16.34
SD	5.16	6.40
<u>Emotional Complexity:</u>		
Self		
M	19.73	19.84
SD	5.27	4.84
Other		
M	17.36	19.29
SD	6.18	4.56
<u>Cognitive Style:</u>		
Absolute		
M	3.36	2.61
SD	1.97	1.80
Dialectical		
M	2.32	2.93
SD	1.49	1.34
<u>Personality:</u>		
Neuroticism		
M	16.46	15.21
SD	5.76	6.96
Extraversion		
M	28.27	29.66
SD	6.29	6.00
Openness		
M	29.64	31.75
SD	4.56	5.40
Agreeableness		
M	32.50	34.82
SD	3.73	4.67

Table C.3 continued.Happiness (MUNSH):

Life satisfaction

<u>M</u>	16.77	18.37
<u>SD</u>	6.86	5.03

Life Dissatisfaction

<u>M</u>	3.64	1.80
<u>SD</u>	3.11	2.42

Intelligence:

Vocabulary

<u>M</u>	47.86	57.34
<u>SD</u>	11.02	6.63

Block design

<u>M</u>	21.41	28.49
<u>SD</u>	7.26	8.27

Similarities

<u>M</u>	17.27	21.13
<u>SD</u>	4.55	3.01

Coping Style:

Avoidance

<u>M</u>	10.32	8.66
<u>SD</u>	3.68	3.55

Distraction

<u>M</u>	10.86	10.47
<u>SD</u>	3.30	3.01

Reflection

<u>M</u>	8.82	8.82
<u>SD</u>	3.74	2.99

Control Orientation:

Desire for control

<u>M</u>	71.23	68.26
<u>SD</u>	4.76	5.01

Belief in control

<u>M</u>	53.77	50.76
<u>SD</u>	5.94	3.84

Table C. 4
Means and Standard Deviations as a function of Gender

Variable	Men	Women
<u>n</u>	26	50
Wisdom		
<u>M</u>	18.31	15.26
<u>SD</u>	6.30	6.18
<u>Emotional Complexity (LEAS):</u>		
Self		
<u>M</u>	19.65	19.71
<u>SD</u>	4.13	4.91
<u>Cognitive Style (SPBI):</u>		
Absolute		
<u>M</u>	2.50	2.69
<u>SD</u>	1.79	1.82
Dialectical		
<u>M</u>	3.27	2.71
<u>SD</u>	1.12	1.46
<u>Personality (NEO):</u>		
Neuroticism		
<u>M</u>	14.00	15.94
<u>SD</u>	6.79	6.99
Extraversion		
<u>M</u>	29.77	29.65
<u>SD</u>	6.79	6.99
Openness		
<u>M</u>	30.54	32.37
<u>SD</u>	4.94	5.52
Agreeableness		
<u>M</u>	33.39	35.53
<u>SD</u>	4.56	4.56
<u>Happiness (MUNSH):</u>		
Life satisfaction		
<u>M</u>	20.77	17.08
<u>SD</u>	3.57	5.21
Life dissatisfaction		
<u>M</u>	1.19	2.18
<u>SD</u>	1.94	2.59

Table C.4 continued.

<u>Intelligence (WAIS-R):</u>			
Vocabulary			
<u>M</u>	60.50		55.45
<u>SD</u>	5.46		6.81
Block design			
<u>M</u>	33.19		25.90
<u>SD</u>	7.03		7.84
Similarities			
<u>M</u>	22.19		20.63
<u>SD</u>	2.15		3.24
<u>Coping Style:</u>			
Avoidance			
<u>M</u>	8.92		8.61
<u>SD</u>	3.01		3.83
Distraction			
<u>M</u>	10.39		10.57
<u>SD</u>	2.97		3.05
Reflection			
<u>M</u>	8.27		9.18
<u>SD</u>	2.97		3.01
<u>Control orientation:</u>			
Desire for control			
<u>M</u>	65.92		69.61
<u>SD</u>	5.82		4.15
Belief in control			
<u>M</u>	50.89		50.77
<u>SD</u>	2.94		4.24
Education			
<u>M</u>	4.23		3.45
<u>SD</u>	1.34		1.32

Table C.5
Significant Differences and Trends among Self-referred versus Nominated Participants

Interview Question	Chi 2(1)	Probability
How would you describe yourself? [*] Interests outside the home	5.72	.04 (Fisher's two-tail)
What is important to you? ^{**} Friends	7.17	<u>.007</u>
Personal Integrity	10.58	<u>.007</u> (Fisher's two-tail)
What do you think wisdom is? [°] Generative commitment	3.78	.06 (Fisher's two-tail)

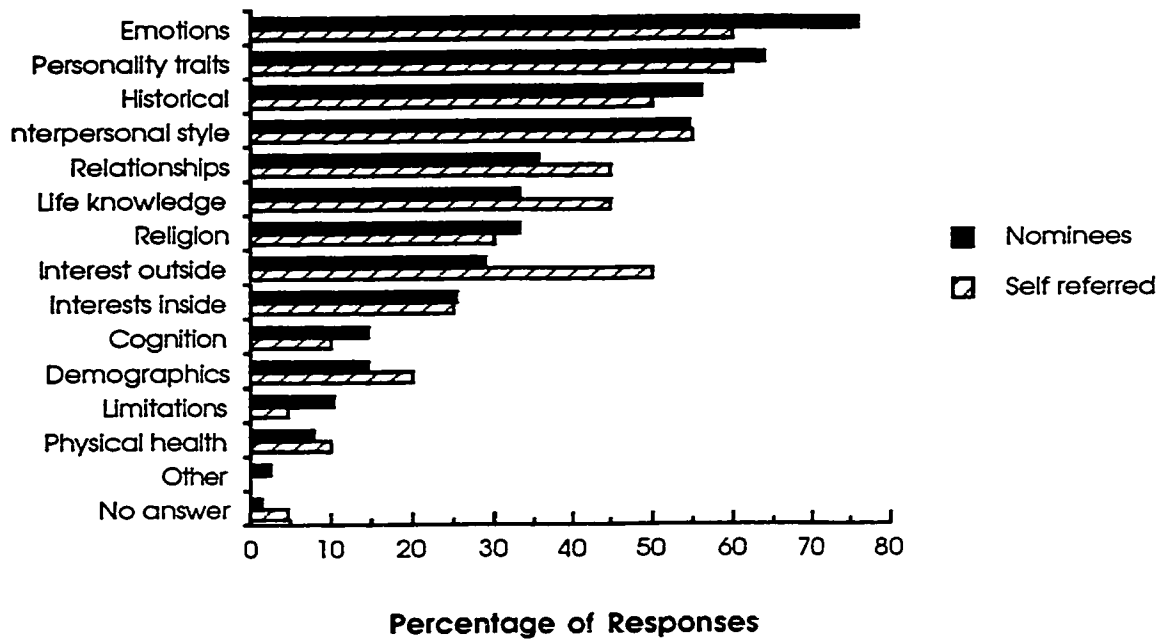
* alpha adjusted $p = .005$. ° alpha adjusted $p = .006$. ** alpha adjusted $p = .007$

Table C.6
Significant Gender Differences and Trends among Male and Female Nominated Participants

Interview Question	Chi 2(1)	Probability
How do you feel about this nomination? [°] Curious, interested in investigation	4.17	.04
How have you changed? ^{**} More expressive/connected	3.55	.05
More positive	3.89	.05
What were turning points? [*] Death of spouse	6.18	.01
Death of parent	4.65	.03
Change of job/occupation	5.05	.02
What is important to you? [*] Friends	4.35	.04
Lifestyle	4.18	.05 (Fisher's two-tail)
What do you think wisdom is? [*] Interpersonal skills	9.01	<u>.003</u>
Not intelligence	12.08	<u>.001</u> (Fisher's two-tail)

° alpha adjusted $p = .02$. ** alpha adjusted $p = .01$. * alpha adjusted $p = .005$

HOW WOULD YOU DESCRIBE YOURSELF?



Nominated participants

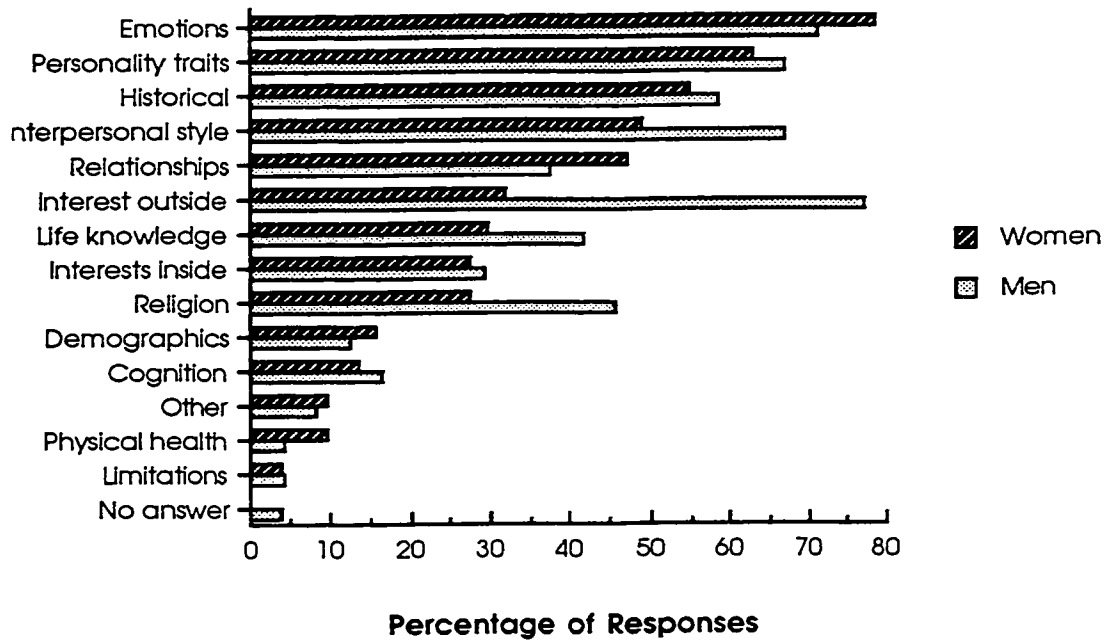
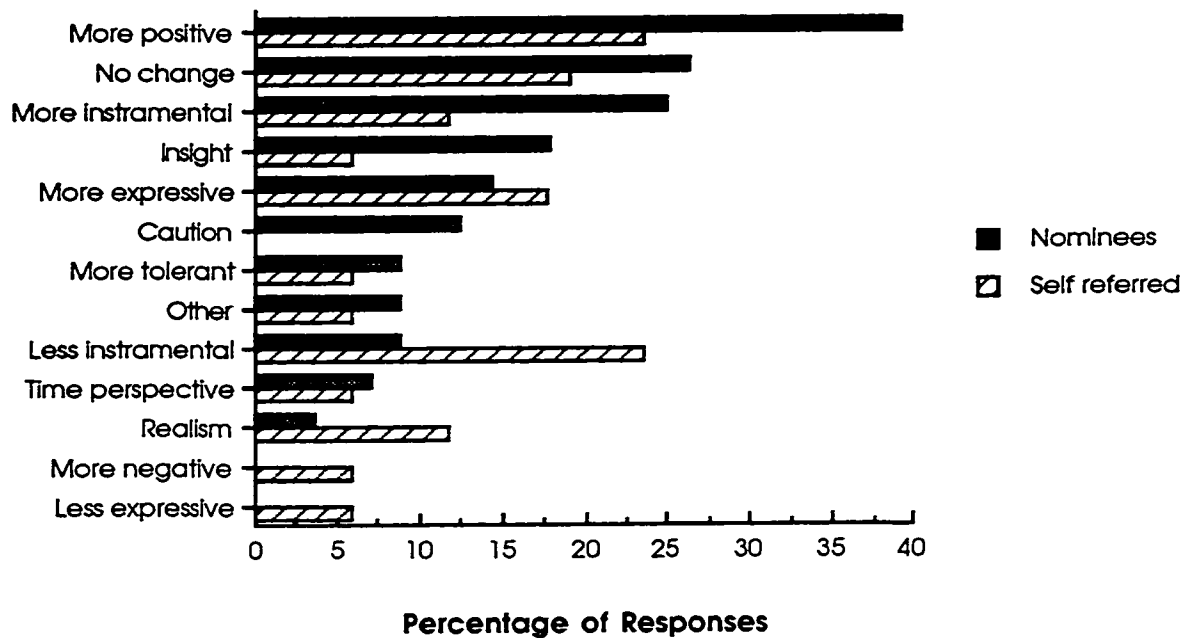


Figure C.1
Responses to the question, "How would you describe yourself?" for self-referred versus nominated participants and for male versus female nominees.

IS THE WAY YOU SEE YOURSELF NOW ANY DIFFERENT THAN IN THE PAST?



Nominated participants

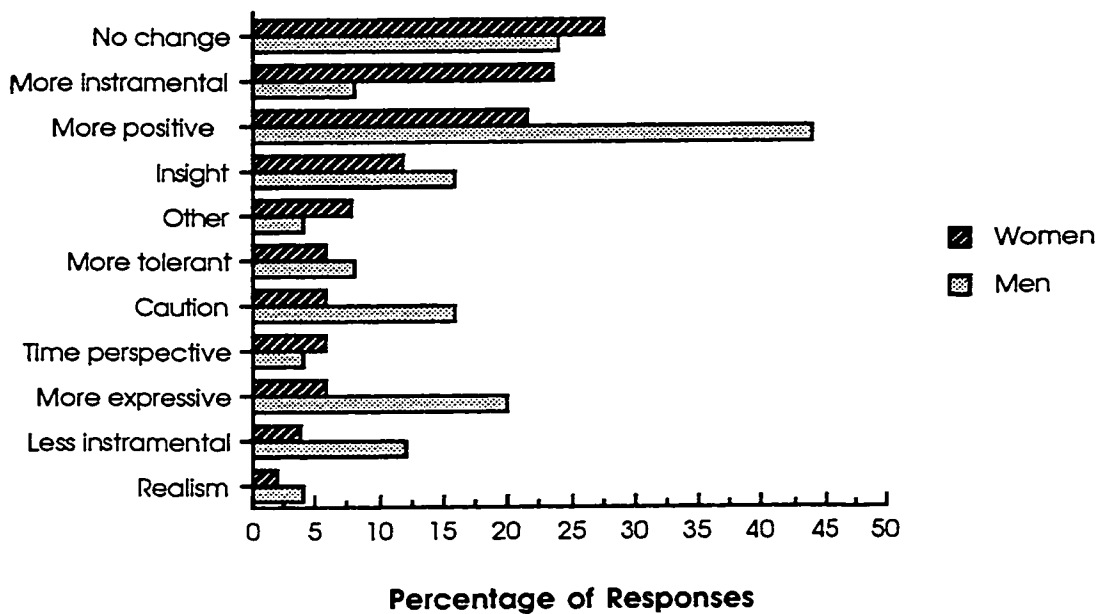
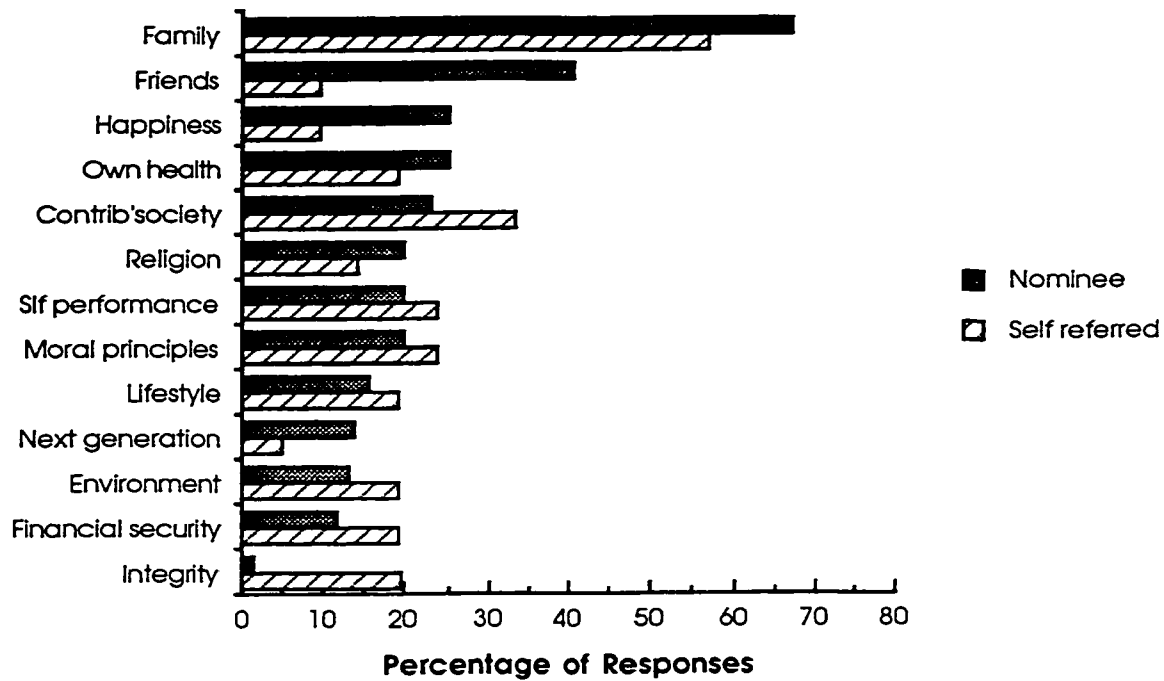


Figure C.2
Responses to the question, "Is the way you see yourself (now) any different than in the past?" for self-referred versus nominated participants and for male versus female nominees.

WHAT IS IMPORTANT TO YOU?



Nominated participants

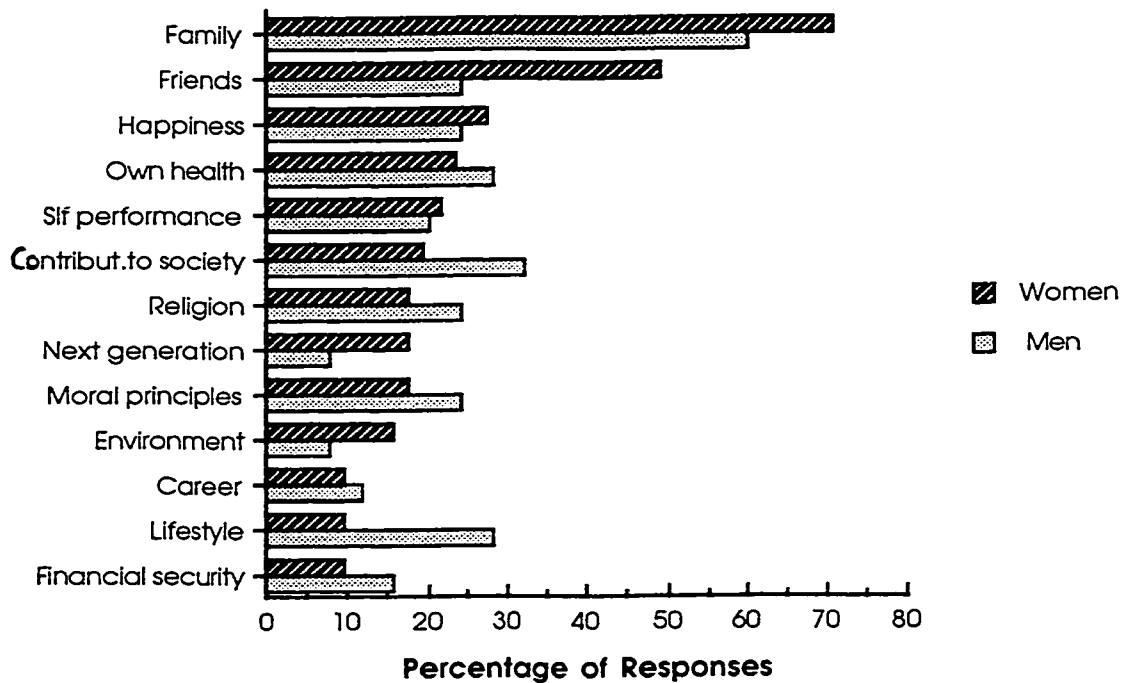


Figure C.3
Responses to the question, "What is important to you?" for self-referred versus nominated participants and for male versus female nominees.