

GEROTRASCENDENCE:
AN EXAMINATION OF A PROPOSED EXTENSION TO
ERIK ERIKSON'S THEORY OF IDENTITY
DEVELOPMENT

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ABSTRACT

Recently, J. Erikson and Tornstam have proposed an extension of E. Erikson's theory of identity development to include an additional stage to account for identity development in the very old. Labeled 'Gerotranscendence', this theory proposed that elderly individuals must make a reorganization of their lives in order to face the final developmental challenge of impending death. This thesis was designed to make an initial evaluation of the psychological components of gerotranscendence. It was thought that by making both a quantitative and qualitative evaluation of individuals who display gerotranscendental qualities, it is possible to make a determination of the validity of the concept. All participants completed a questionnaire, to assess aspects of personality, including tests for gerotranscendence and Erikson's concepts of integrity and despair. While there were no significant differences in gerotranscendent scores between the three participant groups, correlational analyses showed a different pattern of relationship between gerotranscendence and personality characteristics for each of the three participant groups. Individuals identified as being gerotranscendent were further examined in a semi-structured interview. Generally the individuals recognized aspects of gerotranscendence as having meaning in their own life. Consistent with the findings by Tornstam, individuals were able to link the onset of the feeling with a traumatic event in their life. These and other aspects of gerotranscendence are discussed in relation to previous and future literature, while practical implications of the study were discussed.

I. INTRODUCTION

Many theories on life span identity and personality development (e.g., Erikson, 1982, Levinson, 1978) emphasise the importance of attaining a sense of integrity and serenity as well as a sense of life satisfaction at the end of one's life. More recently, however, the ability of medical science to extend individuals' realistic life expectancy into their eighties and beyond (J. Erikson, 1997) have caused some theorists such as J. Erikson (1997) and Tornstam (1989, 1994, 1997, 1999) to suggest that one's personality and identity continues to evolve and develop even in the very advantaged stages of life (80+ years of age). Tornstam (1989) labelled this period as being one of 'gerotranscendence' in which an individual is thought to be motivated to resolve and overcome one's past difficulties and prepare for death. Individuals are presumed to be motivated to deal with such issues because resolution of these difficulties will result in a feeling of worth regarding one's life as well as a sense of peace and harmony. J. Erikson (1997) considered this to be such an important developmental challenge that she revised her husband's theory of identity development to include gerotranscendence as the ninth stage of development. Briefly stated, J. Erikson believes that the strengths a person achieves during her / his lifetime will be challenged by the decline in physical and mental abilities encountered in later years. A successful outcome of this challenge will make it possible to live one's final years to the fullest; in harmony with one's past life and without fear of death.

Unfortunately, there has been little empirical research on the psychological components of gerotranscendence because Tornstam's perspective is one of a

sociologist-gerontologist and J. Erikson is a theoretical psychologist who concentrates on the development of theoretical issues rather than empirical research. Accordingly, this thesis was designed to make an initial evaluation of some of the hypothesised psychological components of gerotranscendence. It was thought that by making both a quantitative and qualitative evaluation of individuals who display gerotranscendent qualities it might be possible to make a determination of the general validity of the concept for psychology and gerontology.

This thesis will initially present a literature review of the theories of life-span personality development with specific emphasis on the theories of gerotranscendence as proposed by Tornstam and J. Erikson. Following this review I will concentrate on some of the specific components thought to contribute to the attainment of gerotranscendence (e.g., life satisfaction, and wisdom). Lastly, I shall propose a study that seeks to expand the work of Tornstam by presenting a study designed to examine the characters of gerotranscendent individuals. It is important to determine this information not only in order to provide confirmation of the psychological validity of gerotranscendence as proposed by Tornstam (1987) and J. Erikson (1997), but also to identify those aspects of personality that may be fostered to induce the development of gerotranscendence in the elderly.

1. Personality Development in Ageing

In general, theories of life span development (Buhler, 1968; Cumming & Newell, 1960; Peck, 1965,) have been based on the assumption that 'successful ageing' equals continuity and preservation of ideals, activities, and definitions of reality that are characteristic of values developed in midlife rather than in senescence. Traditionally developmental theories have presumed that the performance of skills and psychological and physical health are curvilinearly related to age and that an individual's personality will, for the most part, mature to fruition during adolescence (Langer, Chanowitz, Palmerino, Jacobs, Rhodes & Thayer, 1990). Thereafter, individuals are thought to live out their adult years adjusting their personality to accommodate the changes brought upon by diminishing physical and mental capacities. The best an elderly person can do would be to hold onto those achievements that were valued highly in terms of middle age ideals and perceptions. E. Erikson (1982) characterised the last developmental challenge of his theory as being one of 'Integrity' that could only be reached if an ageing person would reflect upon and accept, or come to terms with, the life she / he had lived.

In contrast to traditional theories of development (e.g., Piaget's theory of cognitive development, and Freud's theory of psychosexual development), that focus on the initial stages of development, Erik Erikson (1982) formulated a theory of personality development that characterised an individual's development of an identity as a lifelong process. That is, E. Erikson (1982) argued that everyone must master eight developmental challenges, or 'crises', in order to develop a identity in senescence that is based on wisdom and maturity. E. Erikson (1982) characterised

his theory as being ‘psychosocial’ in nature because he believed that people are driven to overcome each developmental challenge by a combination of external societal forces as well as internal psychological drives. That is, Erikson (1982) suggested that at each stage of identity development individuals were driven by innate characteristics to develop a specific aspect of their personality (e.g., basic trust, autonomy, etc.). In addition, societal forces encourage the development of such characteristics by providing tasks that would give an individual the opportunity to practice and to learn each characteristic as well as providing arenas that permitted personality development in safe and secure venues.

It should be noted that each stage of identity development is characterised by a unique combination of biological drives and societal demands. This means that when an individual’s environmental context (i.e., her or his society, history, and culture, etc.) makes new demands, a new developmental crisis will arise. E. Erikson (1982), however, saw a connection between the outcome of earlier challenges of personality development and the developmental challenges of one’s current stage of life. E. Erikson argued that only when each developmental crisis is resolved, and one’s personality has accommodated to the newly -met challenge, will the individual have enough strength to deal with subsequent stages of development (Schulz & Schulz, 1987). Therefore, if a person is unable to resolve a conflict at a particular stage, she / he will continue to confront and struggle with the challenge in later life.

As an example, the first stage, which occurs during an individual first year of life, produces the crises of ‘trust versus mistrust’ regarding a baby’s caregivers. An achieved healthy balance between the positive and negative components is thought to result in ‘hope’ for the future. This feeling of hope will form a cornerstone for all

trusting relationships in the rest of the individual's life. E. Erikson reasoned that a negative outcome of this crisis might mean that a child never develops the basic trust needed to relate to other individuals. Further, the outcomes of each stage of development are considered never to be lost but are instead absorbed in an individual's personality and influence each successive stage of personal growth (J.Erikson, 1997; Gardner, Phelps & Wolf, 1990).

The final challenge of E. Erikson's (1982) theory, which is of primary importance to this paper, is one of 'integrity versus despair' in which individuals are thought to review their past in an effort to attain a sense of integrity about the lives they have led. In contrast, failure to attain a sense of integrity about one's life will result in an individual developing a sense of despair about her/his past. A balanced resolution of this crisis is thought to result in the attainment of wisdom about the meanings of one's life.

A key element in the attainment of wisdom is the life review, or life reminiscence, in which individuals will recall various episodes from their past in an attempt to integrate these events into a coherent and integrous whole (J. Erikson, 1997). One could say that life review is also done in order to allow one to see her/his life as having been meaningful, to increase self-esteem and life-satisfaction (Wong and Watt, 1991). As a consequence elderly individuals will thus be able to accept their lives as they have been and not regret unrealised possibilities that might have been (Birren, 1964; Lieberman & Tobin, 1983)

E. Erikson's (1982) theory would imply that once a sense of integrity is attained elderly individuals spend the additional years of their lives in a stagnant period of identity development. Life expectancy has risen appreciably since the original

formulation of E. Erikson's theory (Myers, 1985), therefore, this would presumably mean that an individual must have more time to reflect upon the meaning of their lives and what the future holds for them. The implication of this position is that the development of both one's sense of identity as well as one's personality may continue until the very last days of one's life. E. Erikson (1982) concedes that identity development is a continuous and on-going process, unfortunately, E. Erikson did not examine the logical consequences of this position.

More recently however, J. Erikson (1997), observing her own ongoing personality development and growth in her 80s and 90s, argued a new stage of identity development was needed to describe the challenges faced by very old individuals in the later stages of life. Expanding on E. Erikson's theory of identity development, J. Erikson described a ninth developmental stage to characterise the change and development in the very old. Labelling this stage as one of 'gerotranscendence' (Tornstam, 1994), J. Erikson theorised that very old individuals wish to transcend beyond the everyday limitations of human knowledge and experience and concentrate on a more universal understanding of life as well as focus on the upcoming aspects of their own death.

Further, J. Erikson argued that this new stage is not characterised by a single developmental challenge as is typically of the first eight stages of E. Erikson's theory. Rather, J. Erikson posits gerotranscendent individuals must revisit all of the previous eight developmental stages in an effort to resolve any remaining unfinished developmental challenges. It is thought that only by resolving completely these previous unaddressed challenges can an individual prepare herself or himself to face the new challenges of gerotranscendence (J. Erikson, 1997).

2. What is gerotranscendence?

If one accepts the idea of continued identity development in the last stages of life through a process of gerotranscendence, the question then becomes what is gerotranscendence?

Specifically, Tornstam (1989) defined gerotranscendence as:

“ . . . a shift in meta-perspective, from a material and rational vision to a more cosmic and transcendent one, normally followed by an increase in life satisfaction.” (p. 60)

The most important part of this definition of gerotranscendence is the phrase ‘shift in meta-perspective’. This phrase implies a radical change of one’s outlook on life from a concern with mundane issues to a concern with universal values (Tornstam, 1989). The shift towards universal understanding is thought to involve three levels of age-related ontological change (Tornstam, 1994). First, there is the level of the cosmic dimension of life, or the feeling of being part of and at one with the universe. This feeling would result in the redefinition of one’s perspective of their place in both the physical world and the more global universe. Thus, while a gerotranscendent person would begin to feel part of the larger universe, her or his concept of personal space would decrease to, perhaps, the size of their hospital room (J. Erikson, 1997). Further, an increased understanding of the spirit of the universe would result in a redefinition of the perception of time and would therefore, lessen

one's concerns regarding the future (Tornstam, 1989). Thus, this shift in perspective would presumably result in a lessening of concerns with one's impending physical death because of a sense of continuity with the universe (Tornstam, 1989).

The second level of ontological change in gerotranscendence is concerned with the perception of one's self. That is, gerotranscendence is thought to cause a new understanding of fundamental questions regarding one's existence and a radical change in the way one perceives one's self and the world. While the cosmic dimension of life concerns the wider perspective of life and the world and consequently a person's place in it, the dimension of perception of one's self concerns a person; how she/he perceives her/himself and the world around her/him. As J. Erikson (1997) stated:

“One becomes less self-centred and the sense of oneself expands to include a wider range of interrelated others.” (p. 124).

According to Tornstam (1999) many elderly people look at their body with disgust, regarding it an indication of overall decline and conclude that both their mind and their sense of self-worth have degraded in the same way as their body. The gerotranscendent person, however, is able to separate spiritual growth and development apart from physical deterioration. This ability to separate physical and spiritual concerns is thought to result in a new feeling of freedom which might result in finding the courage to be oneself, and to no longer fear to ignore both social rules and expected roles. The gerotranscendent person tends not to cling to outmoded ideals but defines self-worth in new and unusual ways. This may result in

discovering new facets of one's personality or discovering one's self in possession of new talents and abilities (J. Erikson, 1997; Tornstam, 1993). Gerotranscendent individuals may also show an increase in time spent alone in meditation or contemplation.

The third level of ontological change experienced in gerotranscendence is concerned with an increase in a sense of interrelatedness with others. This means a gerotranscendent person will begin to have greater need to view her/him self as a social being. That is, a gerotranscendent person will re-evaluate the meaning behind the ties she/he has established with her/his family, friends, and other relationships. In other words, the gerotranscendent person has a stronger sense of needing to feel part of the human race. This is thought to result in an increased feeling of connections with past and future generations, and a decrease in the interest in superfluous social interactions. A gerotranscendent individual, therefore, may become more open and responsive to other people while at the same time becoming more selective in their use of such openness.

In summary, a gerotranscendent person seems to be in a transition period between a productive life and impending death. Because she/he is oriented towards facing death there is no longer a need or the time to pretend, or impress the outside world. Thus, a gerotranscendent person is thought to be in a position to focus on the fundamental questions regarding her or his life. Specifically, questions regarding one's place in the universe, one's perception of one's self and one's relationship with the rest of society.

3. J. Erikson's incorporation of gerotranscendence as a developmental challenge.

Incorporating the ideas of Tornstam (1994) J. Erikson also designated the new developmental challenge of senescence as being a challenge of gerotranscendence. In contrast to Tornstam (1994) who sees gerotranscendence as a re-ordering of one's external relationship with one's place in both society and the universe, J. Erikson sees gerotranscendence as being an internal developmental challenge involving a final restructuring of one's personality.

In her formulation of a ninth developmental stage, J. Erikson suggested the dystonic (or negative) elements of the eight other stages as being the most important facet of each developmental challenge to resolve. She explains this is done in accordance with mainstream belief that negative elements in old age are dominating an individual's personality (J. Erikson, 1997). While in earlier life stages the syntonic (or positive) elements were the source of strength, in this last stage of life strength comes from overcoming the dystonic or negative elements (J. Erikson, 1997).

4. Re-visitation and re-resolution of E. Erikson's stages of development

The first developmental challenge for a gerotranscendent individual is one of basic mistrust versus trust with a positive outcome of hope. Decline in abilities forces the elderly to mistrust their own physical and mental capabilities, thereby resulting in despair and depression. One of the characteristics of a gerotranscendent

person is lessening of a preoccupation with physical decline. This makes it possible to keep or restore the balance of trust in oneself and the continuity of one's abilities.

The second challenge concerns shame and doubt versus autonomy with a positive outcome of will. In most Western societies senescence is seen as synonymous with a decline in personal autonomy and freedom. An earlier acquired sense of independence and free will might make way to doubt about the ability to control one's life. A gerotranscendent person, however, will make the effort to discover new ways to exert control over her/his life in an effort to maintain a sense of autonomy.

The third challenge for the very old is one of guilt versus initiative with the development of purpose. This challenge is related to the second one as again elderly individuals might hesitate to initiate efforts to direct their own behaviour. Rather, elderly individuals might develop feelings of guilt over their incompetence because they may be influenced by society's negative perceptions about the elderly. As a gerotranscendent individual's view on life, and her/his place in it, expands beyond these cultural and social limited perceptions of ageing, she/he will not feel guilt in initiating an exploration of her/his expanding world.

Competence is the positive outcome of the fourth developmental challenge between inferiority versus industry. Because people in western society are often judged on their competence, the elderly, who are no longer part of a larger productive force, might develop feelings of incompetence and inferiority. In contrast, a gerotranscendent person is no longer interested in productive competence (e.g., maintaining one's competence at her/his occupation). Instead, their feelings of

industry are based on the quality of their relationships, and in their feelings of peacefulness, happiness and contentment with life.

The notion of the adolescent 'identity-crises' is perhaps the best-known concept of E. Erikson's theory. The developmental challenge at this stage is one of role confusion versus identity achievement with the positive outcome being one of fidelity to one's adult identity. With the onset of senescence, many individuals may feel uncertain as to the true nature of their adult identity because of their changes in physical and mental abilities as well as their retirement from being a productive member of society. This may result in individuals feeling uncertain about their role and status with long-established personal values might suddenly be vague and no longer useful. In contrast, as a gerotranscendent person's feelings of identity are expanded beyond mundane cares of everyday society she/he is no longer interested in playing a social role and will thus not experience uncertainty about matters such as identity status and role.

Overcoming the sixth developmental challenge of isolation versus intimacy may result in feelings of love. As many elderly face the reality of losing personal relationships through mental decline and death, they come to rely less on shallow relations with others and more on achieving intense intimate relationships. Although a gerotranscendence person may experience fewer relationships, these relationships will also become less superfluous, thus resulting in higher degrees of satisfaction

The seventh developmental crises of stagnation versus generativity is usually not paramount in senescence because active caring for coming generations is no longer expected from the elderly (J. Erikson, 1997). J. Erikson suggests the onset of release

from caregiving responsibilities may result a feeling of renewed freedom necessary for gerotranscendence.

The eight, and final, stage in E. Erikson's developmental theory is the crisis of despair versus integrity with a positive outcome of wisdom. The task in this stage is to come to terms with one's past, to resolve any remaining uncertainties, and to integrate one's whole life into a coherent blended picture. Despair results with the realisation that one has lived one's life in an incorrect or maladaptive fashion and that time is too short to change. The conflict often starts with the recognition that death is nearing and with regret about unrealised possibilities and unfinished business. J. Erikson (1997) argues that gerotranscendent people have the strength to cope with this last challenge because they have attained hope from the positive resolution of the challenge of mistrust versus trust. J. Erikson (1997) argues that once obtained people will never really lose the strength of hope. In old age, hope for good things ahead, will give gerotranscendent individuals a reason to look towards the future. One could say that for J. Erikson gerotranscendence is the reward for not just having worked through all the challenges when they presented themselves during one's life. Rather, it is the reward for coming to a final and coherent closure of the life cycle, leaving the final years open for spiritual growth and fulfilment.

5. Differences between Tornstam's and J. Erikson's concepts of gerotranscendence

Although J. Erikson has integrated the theory of gerotranscendence as formulated by Tornstam into her own theory, it should be noted that there are some critical differences between the two positions. J. Erikson argues that to develop

gerotranscendence a person must have achieved a balance in life by working through their life challenges. Tornstam, however, does not mention a certain state of identity development is necessary for a person to achieve gerotranscendence, nor is it required that one must re-examine every aspect of one's past life in order to come to terms with one's present life and one's future. Tornstam (1989) states that gerotranscendence might be an intrinsic, or natural, result of normal living that may, or may not involve a revisitation of one's past. This means that J. Erikson regards old age a stage where some people are rechallenged by all earlier life crises. Tornstam regards gerotranscendence as a natural last phase in life that occurs if one lives long enough and has attained the necessary and sufficient personal qualities to make a positive examination of one's past.

6. Characteristics of gerotranscendence

i. Gerotranscendence and wisdom

As gerotranscendence is a relatively unstudied concept in psychology, linking gerotranscendence with well-studied concepts may help for a better understanding of its basic tenets. For Tornstam (1989) the development of gerotranscendence is closely linked to wisdom, as gerotranscendence and wisdom both involve a transcendence beyond the boundary between right and wrong, accompanied by an increased broadmindedness, and tolerance an usually followed by an increase in life-satisfaction (Tornstam, 1997). Thus, for Tornstam, an understanding of the means by which elderly are thought to acquire wisdom is essential to the understanding of the means by which gerotranscendence is acquired.

Tornstam (1999) finds support for wisdom in old age accompanied by a gerotranscendent change in perspective from a study where elderly individuals reported a change in themselves towards refraining from advice or helping others to make decisions. In this study, elderly individuals who recognised characteristics of gerotranscendence in themselves were asked about changes in their attitudes towards life, towards themselves and their relationship with others. These aspects cover the three main dimensions thought by Tornstam to comprise cosmic, or spiritual gerotranscendental change. The change in 'everyday' wisdom reported by these individuals is explained by Tornstam (1999) as a transcendence of the boundary between the perception of 'right' and 'wrong', between 'wise' and 'unwise' that are accompanied by an increased broadmindedness and tolerance. It is important that note that those who display gerotranscendental characteristics also manifest changes in wisdom that are consistent with the theory of gerotranscendence.

As expected from E. Erikson's (1982) model of identity development, an individual comes to full state of development as a result of the challenges mastered in the earlier stages of development. Thus, for E. Erikson, the final crisis of 'Integrity versus Despair' and its resultant virtue of 'Wisdom' is the ultimate goal of an individual's life. Attainment of wisdom is thus, for E. Erikson, considered to result in life satisfaction and integrity.

For E. Erikson wisdom would also include reminiscence and acceptance of one's life as it has been lived, a positive adaptation to physical deterioration and impending death and surrender to the future while maintaining continuity with the past. This means that for E. Erikson wisdom is primarily about being able to formulate a coherent sense of unity and understanding regarding one's life.

One could argue that E. Erikson considers the development of integrity and wisdom to be the result of a lifelong development towards coping with maturation because wisdom, as the highest stage of development, gives the strength to be able to face the losses in old age and fear of death. Loss of fear is a characteristic of both E. Erikson's and Tornstam's theories and one could state that because of the occurrence in the final years of life, ultimately, J. & E. Erikson's wisdom and Tornstam's gerotranscendence are an individual's way to deal with one's finiteness.

This statement would question whether wisdom is the product of life factors such as ageing, experience, personality or culture which prepares a person for death, or whether it is the reality of death, as a crisis, which exposes strength to cope with life and accept death. One could argue for both statements. Kubler-Ross (1975) argues that if a person can face and understand their ultimate death, one can face and deal productively with every change and crisis in life. For her, the meaning of death is that:

"All that you are and all that you have done and been is culminated in your death"

(1975, p. x).

If wisdom is related to death, it would mean, as suggested by Kubler-Ross (1975), that people are wise only because they realise their finiteness. As the expectancy of death increases with age, one would expect to find more wise people among the elderly. As the development of gerotranscendence is thought to be similar to wisdom (Tornstam, 1989) this would suggest that the awareness of death, not ageing as argued by Tornstam (1989) is the catalyst of gerotranscendence.

Another view on wisdom is expressed by Baltes & Smith (1990) who regard wisdom as an ability to manage one's life. They define wisdom as expertise in the domain of fundamental life pragmatics, such as life planning, management, and review. These aspects involve a sense of understanding, or coherence, a person has over their life. This study will use the sense of coherence as defined by Baltes and Smith (1990) in stipulating a person's sense of wisdom because one could argue that the ability to understand and manage one's life is an example of the most important use of wisdom.

Although the development of wisdom and gerotranscendence could be influenced by life events (E. Erikson, 1982; Kubler-Ross, 1975; Tornstam, 1997), it is not clear whether wisdom prepares a person to be able to cope with death, or whether wisdom is the result of awareness of death. This question embodies the difference in reasoning between E. Erikson's developmental process toward integrity and Tornstam's natural process into gerotranscendence.

ii. Gerotranscendence and life satisfaction

One of the areas of interest in this study is the relation between gerotranscendence and life-satisfaction, or well-being, because Tornstam (1989) argues that gerotranscendence is the highest level of human development therefore its attainment will result in high levels of life satisfaction. J. Erikson (1997), for example, reported being privileged to develop a feeling of gerotranscendence regarding her life. Further, studies by Tornstam (1997, 1999) show self-reports of satisfaction with life associated with a new feeling of freedom and gerotranscendence.

Although many researchers (e.g., Hoyt, Kaiser, Peters, & Babchuk, 1980; Liang, & Warfel, 1983; Markides, & Martin, 1979; Usui, Keil, & Durig, 1985, etc.) suggest that factors such as physical health and financial situation contribute to a perception of life-satisfaction, an emphasis on such factors is thought to ignore the idiosyncratic personal histories of older people. That is, Ardel (1997) argues that as people enter old age with their own individual accumulation of experiences and acquired life skills, they will not react in identical ways to the same objective situation. Thus, for Ardel (1997) the accumulation of a lifetime of developmental experiences is much more critical to attaining life satisfaction than any one factor. Ardel's argument is consistent with the positions of both Tornstam and J. Erikson who consider a life-span of developmental influences to be necessary, but not sufficient, in order to grow into gerotranscendence.

The development of gerotranscendence is also thought to require both a shift in one's perspective regarding what are the important things in one's life as well as a redefinition of the essential nature of life satisfaction itself (Tornstam, 1989). Nilsson, Ekman, Ericsson and Winblad (1996) provide some support for Tornstam's position by showing that elderly individuals exhibit a decrease in the desire for material possessions that is associated with an increase in a desire for independence, contentment, and personal integrity. Thus, consistent with Tornstam, the findings of Nilsson et al. strongly suggests a reorientation in their participants' perspectives in their personal meaning of life satisfaction.

One could characterise gerotranscendence as resembling disengagement, being closely related to wisdom, and resulting in life-satisfaction. This study will address

all three characterisations, while adding a study in the relation between gerotranscendence and personality characteristics.

iii. Gerotranscendence and personality characteristics

Little, if any, research has been done concerning the personality characteristics that influence the development of gerotranscendence. This study seeks to make an assessment of the psychosocial validity of Tornstam' s and J. Erikson' s position by examining the personality characteristics that might be associated with the development of gerotranscendence. While Levinson (1986) argues that there is still not much knowledge about the topic of adult development, trait psychology is a mature science (Costa & McCrae, 1992). Current research in personality characteristics have identified five characteristics, termed 'The Big Five'. Extensive studies by Costa and McCrae (1977, 1980, 1982, 1992) have shown these five components to be enduring dispositions and essential for understanding the course of life.

These personality characteristics as formulated in the NEO Personality Inventory (Costa and McCrae, 1991) are: 1. Neuroticism which measures the proneness of an individual to experience unpleasant and disturbing emotions corresponding with disturbances in thoughts and actions, 2. Extraversion, or the preference for social interaction and lively activity, 3. Openness, or the receptiveness for new ideas, approaches and experiences, 4. Agreeableness, deals with the selfless concern for others as well as trusting and generous sentiments, and 5. Conscientiousness, or the

concern with the organization, discipline, and achievement individuals bring to the task of their lives.

Findings by Costa and McCrae (1980) have shown personality traits to be reasonably constant over the course of life, and thus it is not to be expected to find significant differences between individuals based on age, or environment alone. However, several personality traits could clarify the relation between gerotranscendence and life-satisfaction. Staudinger, Freund, Linden & Maas (1999) argue that aging satisfaction seems hardly influenced by age associated physical and socioeconomic changes. Especially lower scores on the dimension of neuroticism and higher scores on extraversion are significantly correlated with well-being (Staudinger et al. 1999; Costa & Zonderman, McCrae, Cornoni-Huntley, Locke & Barbano, 1987). Costa and McCrae (1985) reason that people with a high score on neuroticism are less able to deal with stressful situations and thus have a decreased life-satisfaction, while individuals with a high score on extraversion have more confidence, deal easier with aging and have a higher life-satisfaction. However, Staudinger et al. (1999) argue that neuroticism might become a protective regarding somatic risks, as neurotic people are more used to negative emotions. Furthermore, with increasing age, adults become better in coping with emotional situations, and should score higher on Erikson' s Integrity measure (Staudinger et al. 1999). The dimension of openness to new experiences appears to define adaptive strategies, this means that a high score might indicate a person using new information to find the best solution to a problem, while a low score would indicate minimizing new information to reduce disturbance of the existing order (Costa & McCrae, 1980). In summary, Costa and McCrae (1980) found that the effects of Extraversion and

Neuroticism are so enduring that they could predict well-being scores from personality data of these two dimensions collected ten years previously. As mentioned, research linking gerotranscendence with personality traits has not been done. In an attempt to clarify which individuals are likely to develop gerotranscendence and based on studies on the Costa and McCrae' s inventory it is to be expected a relationship would show between the ' stronger' three NEO personality traits of Neuroticism, Extraversion, and Openness and gerotranscendence.

7. Description of the Proposed Method

Although there has been some previous empirical work conducted assessing the validity of the components of gerotranscendence, most of these studies were done from the sociology-gerontology perspective of Tornstam (1994, 1997a, 1997b, 1997c). Little, if any, work has been done that attempts to investigate the psychological validity of the concept and the relation of J. Erikson's ninth stage of gerotranscendent development to the eight stages of psychosocial development proposed by E. Erikson.

Accordingly, this study sought to make an initial investigation of the relationship of disengagement, wisdom, life satisfaction and personality characteristics to both E. Erikson's psychosocial theory of identity development and to Tornstam's theory of gerotranscendence. In this way it was hoped to be able to integrate empirical findings from these two aspects of development in elderly individuals to form an assessment of their validity to the work of J. Erikson.

Specifically, a questionnaire / survey was used to assess the presence or absence of factors thought by Tornstam and J. Erikson to be characteristic of gerotranscendence. A subset of participants identified as manifesting a sense of gerotranscendence will be selected for a follow-up interview. These individuals will be further surveyed using an informal, semi-structured, interview to determine their attitudes and opinions regarding the concept of gerotranscendence (Tornstam, 1989).

It was hoped that the results of this study would allow for not only an assessment of the theoretical validity of the concept of gerotranscendence. It was further hoped that the results of this study might permit an identification of factors that could be used to encourage the development of the ninth stage of psychosocial identity growth proposed by J. Erikson.

II. METHOD

Participants

One hundred individuals ranging in age from 50 - 93 years were recruited for this study. Forty-seven of these individuals were Community Dwelling older adults, these are elderly of 70 years and over who lived independently, either in retirement villages or in the larger community. Additionally, there were 24 Rest Home Dwelling older adults who lived on the premises of rest homes or nursing homes either in partial or full care situations. Older individuals from these two types of situations were examined in this study because it was thought that these individuals' living situation might influence their ability to develop gerotranscendence. That is, an environment that is more controlled and regulated by others might have a

diminishing influence on a person's sense of control and life satisfaction (Langer, 1990).

Twenty-nine middle-aged individuals between 50-69 years old were also included in this study to serve as a control group in order to examine the validity of Tornstam's theory. That is, if gerotranscendence is thought to be the last stage of development for the very old, then there should be little evidence of its existence in a group of middle-aged individuals.

Materials and Procedures

Participants in this study were asked to complete a questionnaire (see Appendix 1) not only to assess their state of gerotranscendence but also other aspects of their personality. This questionnaire contained the following measures:

1. Tornstam's (1994) Gerotranscendence Rating Scales

This measure, developed by Tornstam (1994), was designed to measure the three perspectives of gerotranscendence considered to comprise its core values: 1. The Cosmic Dimension, which include an increased feeling of an understanding and oneness with the spirit of the universe; 2. The Social and Personal Dimension, or an increase in the sense of interrelatedness with others; and 3. The Self Dimension, or the idea that the very process of ageing causes a new understanding of fundamental existential questions and a radical change in the way one perceives one's self and the world. These three perspectives have been measured in two dimensions of gerotranscendence: 1. Cosmic Gerotranscendence, which is connected with changes in perception of time, space, life, and death; and 2. Ego Gerotranscendence, which

is connected with changes in the perception of the self and relations with others (Tornstam, 1994).

2. Antonovsky' s (1979) Sense of Coherence Measure

This test is designed to measure three aspects of an individual's sense of understanding, or coherence, about her/his life. This measure consists of three scales: 1. Comprehensibility, which involves the perception individuals have of their environment as predictable and understandable; 2. Manageability, or the perception that life is controllable because life events make sense and is organised and orderly; and 3. Meaningfulness, or the perception that life events are related to an individual's life and concerns. Although originally designed to assess aspect of Antonovsky's salutogenic model, subsequent research (Antonovsky, 1994; Baro, Haepers, Wagenfeld, & Galligher, 1996; McCubbin, Thompson, Thompson, & Fromer, 1998) has shown these scales capable of providing a means to assess an individual's ability to control her/his life in general. The Sense of Coherence measure was included in this study because it was thought it would be able to provide a means to assess an individual's capability of managing her/his own life. Arguably, an understanding of one's life is the ultimate test of an individual's wisdom is the degree of understanding and control she/he possesses about her/his life.

3. Liang' s (1984) Life Satisfaction Index

This measure was designed to assess elderly individual's degree of perceived happiness or contentment regarding their lives. Unlike other measures that theorise life satisfaction as consisting of one factor, this scale includes measures of Mood, or state of happiness, Zest, or the desire for life, and Congruence, or the harmony

between desired and achieved goals. Previous research (Tornstam, 1994) has shown that life satisfaction is a key end product of gerotranscendence. Tornstam however, did not specify which aspect of life satisfaction is most associated with a sense of gerotranscendence. This measure was included to provide a means by which a more sophisticated assessment of the relationship between life satisfaction and gerotranscendence might be conducted.

4. Costa and McCrea's (1992) NEO Personality Inventory

This is a general personality inventory designed to assess the ' Big 5' dimensions of personality currently thought to be central to an individual's character (Costa & McCrea, 1992; Smith & Baltes, 1999; Staudinger, Freund, Linden, & Maas, 1999). The personality dimensions assessed by this test are: 1. Neuroticism, or the proneness of the individual to experience anxiety corresponding with disturbances in thoughts and actions;

2. Extraversion, or the preference for social interaction and lively activity; 3. Openness, or the perceptiveness to new ideas, approaches and experiences; 4. Agreeableness deals with the selfless concern for others as well as trusting and generous sentiments; and 5. Conscientiousness, or the concern with the organisation, discipline, and achievement individuals bring to the tasks of their lives.

This personality inventory was included in order to determine if there is anything inherent in an individual's personal traits that predisposes her / him towards the development of gerotranscendence. Although there has been little previous research on the effects of personality in the production of gerotranscendent individuals, it is easy to see that high levels of personality factors such as openness to new experiences or low levels of neurotic anxiety might produce individuals who are

more likely to be willing to transcend to a new level of identity in the last stages of senescence. The use of Costa and Mcree's NEO personality inventory will allow the relationship of an individual's personality characteristics to gerotranscendence to be assessed.

5. Eriksonian Measures of Psychosocial Development (Hawley, 1988)

The Measure of Psychosocial Development formulated by Hawley was designed to provide an objective measure of the eight stages of E. Erikson's theory of psychosocial development. This measure was included in the present study in order to assess the relationship between E. Erikson's theory of identity development and J. Erikson's extension of the theory to include the development of gerotranscendence. Presumably, if gerotranscendence is a progressive development from E. Erikson's theory, there should be a strong pattern of relationship between the two. Although the test consisted of a number of questions regarding each of E. Erikson's eight developmental stages, only questions pertaining to the last stage, Integrity versus Despair, or the outcome of one's retrospective account of life, were used in this study. Questions from the earlier stages of identity were excluded because the focus of this study was concerned with the final stage of E. Erikson's theory.

Taken together these five tests provide the means to make an assessment of both the existence of a feeling of gerotranscendence and a determination of the factors that are associated with its presence within existing and accepted methods of measurements. Moreover, the use of both middle-aged and elderly participants will allow for a determination of the existence of feelings of gerotranscendence in stages other than those postulated by J. Erikson and Tornstam, thus permitting an

examination of the validity of the idea that gerotranscendence characterises a unique and final stage of senescence.

In the second part of the study 25 of the 100 participants surveyed in the initial stage were examined by means of a semi-structured interview (see Appendix 2). This interview was conducted with those participants who displayed the highest levels of gerotranscendence to gain further information about the relevance of the concept of gerotranscendence to their lives. In accord with procedures outlined by Tornstam (1997), participants were read a description of a gerotranscendent individual and were asked to indicate which aspects related to their own life. The three dimensions of gerotranscendence were questioned in separate questions. The Cosmic dimension was the focus of questions about different perceptions of 'time', and 'the relation with ancestors', the Self dimension was the subject of the question about 'discovering new sides in myself', and the dimension of Social and Personal relations in a question about 'changes in relationships'. After the brief description was read participants were asked: "Do you recognise this aspect in yourself?" "Does this description make sense to you?" The participants were then asked to elaborate on their answer. If the person answered that they indeed recognised the characteristic as being descriptive of their life, they were then asked to describe an episode in their life they believed marked the onset of such a feeling.

Lastly, the participants were asked whether they could divide their life in gerotranscendent-enhancing episodes, such as: "Losing my parents made me see my own life differently", "Having to sell my house when I made the decision to go into the rest home made me less materialistic". This was done out of interest in the as gerotranscendent recognised individuals' personal report of development.

Furthermore being able to integrate life events in a continuity relates to an individuals' insight in life, as described in integrative and instrumental reminiscence that are thought to be associated with successful ageing (Tornstam, 1999; Wong & Watt, 1991). The information also provided for a better understanding of the influence of life events on the development of gerotranscendence that might not have been covered by earlier questions.

III RESULTS

The results from each of these data sets were analysed with a series of one-factor (participant group) analysis of variance (Kirk, 1968). The results of these analyses are also presented in Table 1. Post-hoc testing of statistically significant results was conducted using Tukey's method ($p < .05$).

Analysis of the demographic data showed that although the two groups of older adults were both significantly older than the groups of middle aged, there was not a significant age difference between the community dwelling and rest home dwelling groups of older participants. Analysis of the SES levels showed the same pattern. That is, the SES levels of the two groups of older adults were significantly lower than those of the middle aged participants, but there were no differences between the SES levels of older participants.

The participants' scores on the NEO personality inventory were similarly analysed with significant differences being found only on the Extraversion and Openness factors. In each case the two groups of older adults showed lower levels of these two factors than did their middle aged counterparts. There were no differences between either group of older participants.

The same trend was also evidenced in the analysis of the participants' responses on the Eriksonian Measures of Psychosocial Development. The two groups of older participants were found to have significantly lower levels of Integrity regarding their lives than did the middle aged participants. In contrast, the two groups of older participants were found to have significantly higher levels of Despair than did the

middle aged group. The two groups of older adults did not differ significantly from each other in terms of either Integrity or Despair.

Analyses of the participants' responses on the Life Satisfaction Index showed a different pattern of results, however. The rest home dwelling group of older participants showed significantly lower levels of both Mood and Zest about their lives than did either the community dwelling older adults or the middle aged adults. There were no significant differences between these two groups in terms of Mood or Zest. There were no significant differences between the participants on the Congruence scale.

Lastly, analyses of the data from both the Sense of Coherence Measure and the Gerotranscendence Measures found no significant differences between the scores of the three groups of participants.

A series of correlational analyses was performed on the data from each of the three groups of participants. Separate analyses were conducted for the different participant groups in an effort to identify possible patterns of association in the gerotranscendence data that were unique to each age group. The results of these correlational analyses are presented in Tables 2, 3, and 4.

Correlational analyses of the middle aged participants' gerotranscendence data showed significant patterns of negative association between Cosmic gerotranscendence and both SES and openness. Moreover, there was a positive association between Cosmic gerotranscendence and Integrity. In contrast, correlational analyses of the community dwelling older adults showed positive associations between Cosmic gerotranscendence and age, Integrity, Mood, and Congruence. Lastly, the Cosmic gerotranscendence scores of the rest home dwelling

older adults showed positive relationships with Integrity, Zest, and Congruence, as well as a negative relationship with Manageability. In addition, the Ego gerotranscendence scores of the rest home dwelling older adults showed a positive relationship with Neuroticism.

In accord with procedures outlined by Tornstam (1994) participants who were identified as exhibiting the most gerotranscendent-like scores (i.e., those who displayed the highest scores in Cosmic gerotranscendence, the Eriksonian measures and Zest) were selected for a semi-structured interview. This interview was designed not only to test the validity of the theory of gerotranscendence, but also to get information from the participants about the experience and recognition of aspects of gerotranscendence. Eight individuals from the Community Dwelling group, seven individuals from the Rest-home group, and ten middle-aged people made up the group of twenty-five participants in this section of the study.

The participants' responses to the question regarding aspects of gerotranscendence that they considered to be characteristic of themselves are presented in Table 5. These data represent the number of the group of 25 gerotranscendent individuals who agreed that the trait identified by Tornstam(1994) was represented one of their own personality characteristics. Consistent with the position of Tornstam (1994) the participants' responses focus on such aspects as positive solitude and redefinitions of both life and death. Participants' description of their feelings regarding a redefinition of time, as presented in Table 6, also seem to be consistent with previous finding reported by Tornstam (1994). That is, the gerotranscendent participants primarily consider both an increased connection with the past and a universal feeling of time as being characteristics of themselves.

Lastly, the gerotranscendence participants' expressions of statements concerning an increase in affinity with their ancestors, as presented in Table 7, again provide confirmation of Tornstam's (1994) theoretical position by showing these individuals to have feelings of connection with both their ancestors in particular and the human race in general.

In addition to the semi-structured interview questions suggested by Tornstam (1994) an additional question concerning periods in the participants' lives that may have preceded a shift towards gerotranscendence was posed. This question was included both to have information about the participants' own inside in their development towards gerotranscendence and to check the self reported important periods with the ones answered in the structured questions. The participants' responses towards this question are presented in Table 8. These data represent the number of participants who mentioned the event had preceded a noticeable shift towards a gerotranscendent perspective regarding their lives. As the data show major turning points in the participants' lives (i.e., death of a loved one, immigration, etc.) seemed to provide an occasion for the development of gerotranscendence.

IV DISCUSSION

The major point of investigation of this study was to make an examination of the psychological factors used to characterize the concept of gerotranscendence as proposed by Tornstam (1989) and J. Erikson's (1997) proposed ninth stage extension of E. Erikson's theory of psychosocial development. Unfortunately, the finding of no significant differences between the three groups of participants in terms of either Cosmic or Ego gerotranscendence fails to provide direct support for existence of an unique sense of gerotranscendence in older individuals. It may be the case that the descriptions of gerotranscendence as provided by Tornstam (1989) may be ambiguous enough to appeal to any group, but such descriptions may mean different things to different groups. That is, all groups might have recognized gerotranscendence in themselves, but each group might have done so for entirely different reasons.

Correlational analyses between the two measures of gerotranscendence and the other measures examined in this study seemed to provide confirmation of this idea by showing different patterns of relationships for each of the three groups of participants. That is, the middle-aged participants showed negative relationships between Cosmic gerotranscendence and both Socioeconomic Status and Openness as well as a positive relationship between Cosmic gerotranscendence and Integrity. Community-dwelling older adults, however, showed positive relationships between Cosmic gerotranscendence and Age, Integrity, Life Satisfaction-Mood, and Life Satisfaction-Congruence. Lastly, the rest home dwelling group of older adults showed positive relationships between Cosmic gerotranscendence and Integrity, Life Satisfaction-Mood, and Life Satisfaction-Zest. There was also a negative

relationship observed in this group between Cosmic gerotranscendence and Manageability. Moreover, the rest home dwellers also displayed positive relationships between Ego gerotranscendence and both Neuroticism and Cosmic gerotranscendence.

Although the design of this study does not permit a precise determination of the cause of these differences in patterns of association, some clear inferences may be drawn about the meaning of gerotranscendence for each group of participants. For example, it appears that middle-age adults who have high levels of Socioeconomic Status and are open to new experiences seem to be at a stage in their lives with other interests than Cosmic gerotranscendence. This was taken to indicate that these individuals were more open to the concerns of their present state of existence, presumably this was related with having the means to explore the various aspects of their lives. Thus, although there were some individuals who did manifest Cosmic gerotranscendence, this concept did not seem to be a concern for most middle-aged individuals. Speculations about the reasons behind the interest in Cosmic gerotranscendence in some middle-aged individuals will be addressed in a later section of this paper.

Community dwelling older adults, however, displayed a pattern of relationship quite different from their middle-aged counterparts. For these individuals, both Life Satisfaction Mood and Congruence as well as age seemed to be related to the attainment of Cosmic gerotranscendence. The relationship between Cosmic gerotranscendence and life satisfaction provides confirmation of previous findings by Tornstam (1996) who found life satisfaction to be an end product of the development of gerotranscendent feelings. Taken together, these two sets of findings

would indicate that as one increases in age a satisfaction in one's mood as well as a satisfaction in the congruence between how one perceives one's self and how one wants to be is an associative condition in the development of Cosmic Gerotranscendence.

Rest home dwelling older adults similarly showed strong positive relationships between life satisfaction and Cosmic gerotranscendence. For these individuals, however, the relationship was between Life Satisfaction-Mood and Life Satisfaction-Zest. Thus, for rest home dwelling individuals, it seems that Cosmic gerotranscendence is related to satisfaction about different aspects of life than those displayed by community dwelling older adults. Taken together with the positive relationship of Cosmic gerotranscendence and Manageability, it would seem that those rest home dwelling older adults who still have the zest (enthusiasm) for life and who still think themselves capable of attending to their own affairs may develop feeling of Cosmic gerotranscendence.

Although these findings provide confirmation of the relationship between Cosmic gerotranscendence and life satisfaction noted by Tornstam (1996), these findings also suggest that life satisfaction might be a precursor to the development of Cosmic gerotranscendence rather than an end product. That is, the shift in relationship between different aspects of life satisfaction and Cosmic Gerotranscendence in the two groups of older adults might be indicative of an age-related difference in the importance of life satisfaction to the development of Cosmic gerotranscendence. Although the present study does not permit a resolution of this issue, the precise nature of the relationship of life satisfaction to Cosmic gerotranscendence is one that should be explored in future studies of the issue.

It should also be noted that only the rest home dwelling group of older adults displayed an association between Ego gerotranscendence and any of the other measures used in this study. Of particular interest was the positive relationship between both Cosmic and Ego gerotranscendence that was manifested by the rest home dwellers. Although it was not possible to determine the reason for this relationship, or the reason for the absence of this relationship in the other two groups of participants, it might be the case that the occurrence of this relationship is a manifestation of the developmental progression of gerotranscendence. That is, as one develops more of a feeling of Cosmic gerotranscendence this may trigger the onset of the development of Ego gerotranscendence. Again, it is not possible to determine the validity of this position from the findings of the present study but the question of a developmental progression in the relationship of both life satisfaction and Ego gerotranscendence to Cosmic gerotranscendence remains to be addressed by future studies.

Lastly, the finding of a positive association between feelings of Integrity and Cosmic gerotranscendence in all three participant groups is also seen as providing confirmation for the positions of Tornstam and J. Erikson. If the development of gerotranscendence were a developmental progression from the eighth stage of E. Erikson's theory, then it would seem to be logical that there should be evidence of some relationship between the two theories. Therefore, it was thought that the finding of a positive relationship between Integrity (the positive outcome of the final stage of E. Erikson's theory) and the development of Cosmic gerotranscendence (the positive outcome of J. Erikson's proposed extension of E. Erikson's theory) should be taken as evidence that the one is an outgrowth of the other.

In sum, although there were no significant differences between the Cosmic and Ego transcendence scores of the three groups of participants, the findings of the relationship of Integrity and Cosmic gerotranscendence, the finding of the different patterns of relationship regarding gerotranscendence between the three groups of participants, and the evidence of a developmental progression in the influence of life satisfaction and the relationship of the two types of gerotranscendence was taken to provide confirmation of the psychological validity of gerotranscendence.

Moreover, the results of the semi-structured interview again provided confirmation for the Tornstam's position by showing those individuals identified as being gerotranscendent by means of a questionnaire spontaneously described themselves as having gerotranscendent characteristics (e.g., positive solitude, cosmic communication, redefinitions of life and death, and decreased interest in material things). It was thus concluded the gerotranscendent participants in this study provided results that, in general, coincided with the results provided by participants in studies of gerotranscendence conducted in both Sweden (Tornstam, 1994, 1997) and the Netherlands (Braam, Deeg, van Tilburg, Beekman & van Tilburg, 1998). This was taken as being indicative of the generalizeability of the concept of gerotranscendence to some other western cultures.

V INFLUENCES ON THE DEVELOPMENT OF GEROTRASCENDENCE.

Although Tornstam (1989) argues gerotranscendence is to be the product of the natural aging process, he acknowledges that this process can be obstructed or accelerated. Factors that may obstruct the development of gerotranscendence are

mostly social and cultural factors. One such factor could be the social bias against aging that results in society, relatives, care-givers, and the elderly person failing to recognize certain behaviors as gerotranscendent, but labels them as being maladaptive or “unsuccessful” aging. On the positive side, both Erikson (1982) and Tornstam (1997) state that some life-crises may be of positive influence on personal development, such as an individual who re-evaluates her/his life after suffering a personal trauma. The next section of this paper will discuss in greater depth some of the factors that are thought to influence the development of gerotranscendence in an effort to identify those characteristics that might be used to accelerate feelings of gerotranscendence.

1. GEROTRASCENDENCE AND LIFE-CRISES.

Tornstam (1989, 1997) reasons that after a life-crisis people might totally reconstruct their perspective on life and have a different view on what is important in life. The realization that people are vulnerable as human beings regarding health, life, relationships, and work, might make people understand how important these aspects of life are for them. The revaluation of one's life might result in reconstructing one's priorities in life. This reconstruction of what is important in life might include elements that are thought to be characteristic of gerotranscendence, such as a sense of spirituality as being part of the larger universe, one might be less interested in the purchase of material possessions and become more interested in family and in good friendships, and one might find oneself spending more time on matters of fulfilling enjoyment (Tornstam, 1997).

The mitigating influence of life-crises on the development of gerotranscendence was, however, highest in middle-aged people (Tornstam, 1997). Presumably, the trauma of life-crises causes middle-aged individuals to recognize that the materialistic concerns of career, financial accomplishments, etc. might be of little concern in helping them cope with the difficulties of life-crises. The development of gerotranscendence in older adults, however, is presumably less affected by the onset of life-crises because the trauma of aging makes other events seem of lesser importance than the difficulties of ill-health and impending death (Tornstam, 1997). Furthermore, an aging person might understand that a crisis like a death in the family might be more traumatic when one is young, but when one is old it is to be expected that family and friends die. Because such events are to be perceived to be an expected part of senescence, they might be a less traumatic experience. The current study supports Tornstam's argument concerning the onset of gerotranscendence as a function of the experience of life-crises as it showed that 24 of the 25 as people identified as related their change in perspective on life matters to a traumatic or major event in their life.

Although the present study showed that the individuals identified as gerotranscendent could report major events in their lives to be the turning point towards a different outlook and appreciation of their lives, there is yet little research about the specific influence of trauma on the development of gerotranscendence. This would suggest that future research efforts investigating the development of gerotranscendence might focus on individual's abilities to cope with their life-crises.

2. THE INFLUENCE OF PERCEPTIONS OF AGING ON GEROTRASCENDENCE.

Factors that might negatively affect the development of gerotranscendence are thought to be secondary, and not related to an individual's personality or life-crises. That is, negative cultural perceptions of the elderly might determine whether individuals are able to recognize the presence of gerotranscendence in others or in ourselves. In Western society there seems to be an ambiguity towards aging and the elderly. That is, the perception of elderly individuals by young and middle-aged adults showed the reality of aging as it is experienced by the elderly to be in conflict with the negative assumptions about aging by other age groups (Tornstam, 1997). Tornstam found young adults are especially prone to overestimate the degree of negative experiences and crises faced by the elderly.

Although Bianchi (1990) agrees that aging is often perceived in a negative way, he argues that this is not the major problem facing the elderly. It is the idea that the process of aging results in a 'loss of self', or a 'narcissistic injury' that is the basic problem of senescence. That is, Bianchi considers that aging represents a loss of everything by which an individual can define her/him self. Bianchi argues that the elderly should face their 'loss of self' instead of distracting themselves from their hurt for instance by reminiscing too much about 'the good old days'. If the elderly are to find peacefulness in their later years, Bianchi argues, they need to develop their own spirituality of aging while coming to terms with the 'loss of self'.

Although Bianchi (1990) emphasizes negative perceptions of aging as a part of senescence, his idea that elderly people have the resources to come to terms with these perceptions and his recognition of the necessity of spiritual reorganization mimic the aspects of the changing self and a changing perspective on life that are the

primary components of gerotranscendence. Thus, for Bianchi, society's negative perceptions of senescence may become either a final burden or, if one has the spiritual strength, a final challenge that may result in a feeling of satisfaction and peace similar to those proposed by Tornstam.

In disagreement with Bianchi who states a 'loss of self' as the main problem of old age, other studies such as those by Baltes (1992), suggest that a powerful system of coping and maintaining integrity developed over the course of one's life will result in a constant and integrous state of one's self. Baltes (1992) argues that older adults on the average, despite losses, do not show a reduction in self-hood related indicators such as self-esteem or the sense of personal control. Rather, Baltes argues, older adults have attained a state of personal development that allows them to come to terms with the negative perceptions of senescence and to overcome them.

These seemingly opposite arguments by Bianchi (1990), who argues the loss of the self, and Baltes (1992), who argues the strength of the self in old age, are in Tornstam's (1989) reasoning are both valid perspectives on the challenges of elderly individuals when attempting to develop feelings of gerotranscendence. That is, Tornstam argues, the negative perceptions of old age may come to be accepted by an individual unless she/he has developed a sense of personal strength and integrity to use her/his repertoire of coping strategies to transcend to stage final stage of identity development - gerotranscendence.

3. GEROTRASCENDENCE AND DISENGAGEMENT.

One of the positive aspects of gerotranscendence that has a great deal of similarity with a well-known negative aspect of senescence is the desire for 'positive solitude'. Because of similar behavioral patterns, this concept might be easily interpreted as being 'disengagement', or a withdrawal from society by the elderly.

Despite social and psychological disengagement, an individual continues to experience a high degree of life satisfaction, happiness and contentment. At the same time, disengagement indirectly implies a decrease in satisfaction if the natural process of withdrawal is violated and old people are stimulated in some way. Thus, the assumption that continued activity by senescent individuals would lead to satisfaction and contentment was questioned by the disengagement theory.

Because of the similarity with 'positive solitude' in gerotranscendence, which also questions the inappropriate use of activities when people are happy to have time by themselves, one could argue that gerotranscendence indeed might be mistaken for disengagement. It is important to recognize that the critical difference between the two positions is that a disengaged person is considered to have attained her/his final state of development. A gerotranscendent person, however, is thought to be in the process of refining her/his identity development in order to attain a new state of existence. Thus, although appearing to manifest similar overt characteristics, disengaged and gerotranscendent individuals are undergoing different developmental challenges and are in need of quite different forms of assistance.

In agreement with activity theory, Havens (1968) states that the main cause of life satisfaction in the elderly is the continuity of life patterns of physical and social activity. In contrast, Tissue (1971) argues that the cause of dissatisfaction is the

discrepancy between the social network the individual has and the one they would like to have. The arguments held by Havens and Tissue suggests that it is continued activity within one's social environment that results in life satisfaction. Kuypers and Bengtson (1973) posit that a decline in continued social activity combined with a poor social environment will result in a social breakdown where the person withdraws from social activity. This position is in direct contrast with Cumming and Henry (1961) who regard disengagement to be a natural and satisfying process for the elderly.

Although this theory argues activity being beneficial for the elderly, Tornstam (1989) showed the loss of social roles and relations do not result in feelings of loneliness for the elderly. The discrepancies between these two positions is of critical importance because one might encounter a gerotranscendent person who appears inactive and may, with the best of intentions, attempt to encourage social and physical activity in the individual. In reality, such a seemingly disengaged individual may actually be engaged in activity of an internal nature and such well-meaning actions may be intrusive and disruptive to the individual's development.

This contradiction between activity and positive solitude is, according to Tornstam (1989), due to the discrepancy between the essential definitions and parameters of the theories. He argues that theories, such as activity theory, are part of a narrow framework and cannot define what is outside of their frame. That is, for Tornstam, activity theory focuses on a narrow subset of an individual's existence and does not take into account those who may develop beyond the confines of the theory's interests.

3. CULTURE AND GEROTRASCENDENCE

According to Tornstam (1992) general ideas about aging and the elderly are relative to conditions of culture and time. He argues that most social theories carry the stamps of the mid-life values of productivity, effectiveness, and independence. Consequently, it is assumed that successful aging implies the continuity of these mid-life values and the elderly might find themselves being forced into social activities, while they might rather keep to themselves.

Tornstam (1992) argues, in accordance with Bianchi's (1990) suggestion, that it has to be the elderly themselves who will define concepts and theories about aging, not researchers or society. Instead, Tornstam (1992) supports the idea that aging should be viewed from a resource perspective that would result in constructive theories instead of a traditional 'misery perspective' that regards older people as a problem. I would like to add that the resources of wisdom and experience in the elderly could not only be used as their contribution to society but could shape and redefine its culture.

I would argue that the negative attitude towards aging that generally prevails in society, must successively have its effect on the way the elderly perceive themselves. Some elderly individuals, however, seem to distance themselves from this negativity and arise beyond social perceptions and expectations regarding aging. These people seem to develop serenity, spirituality, wisdom and a feeling of renewed freedom and happiness in this stage of their life. These positive developments while aging are important components of the theory of gerotranscendence. I agree with Tornstam's viewpoint that it is important to include the life-perspective of the aging, not only in theorizing about aging, but also in its

practical consequences. Limitations in the perspective of the Western culture and its perceptions about aging have prevented a state of optimality for old age, and consequently limited the opportunity for aging people to display characteristics of wisdom (Baltes & Smith, 1990).

VI. INFLUENCES ON THE DEVELOPMENT OF THE THEORY OF GEROTRASCENDENCE.

Tornstam (1989) argues that to be able to understand gerotranscendental behavior, for instance the need of some elderly for ‘positive solitude’, it is necessary to make a shift in perspective from a traditional positivist theoretical view to a view where disengagement is phenomenologically understood. Tornstam (1989) states when the observation paradigm is changed the picture of the reality under observation also changes. To achieve a new theoretical paradigm Tornstam challenges social scientists to go beyond the boundaries of positivist reasoning and turn to the seemingly unscientific frame of reference offered by Eastern philosophy.

Tornstam (1989) is not the first to turn towards Eastern philosophy to explain developments of wisdom, maturation, and conscience. For instance, Jung (1940, cited in Phelps, 1958) described a transcendent development of the individual not unsimilar to the transcendence of the self in gerotranscendence:

“The development of a new center for the personality, the transcendent function where conflicts are overcome and man [sic] develops his [sic] individuality to the full. Because he [sic] has come into relationship with the

collective unconsciousness the process is social as well as personal, for it is only the truly individualized person who is naturally and genuinely social.” (p. 180, in: Philips, 1958).

Moreover, Tornstam (1989) argues his position on Cosmic gerotranscendence to be similar to the principles of Zen Buddhism that people are not separate objects, but part of the same entirety and the notion that past, present, and future exist simultaneously, are components of gerotranscendence. This same reasoning would never call a wise person who chooses to meditate disengaged, but gerotranscendent. Gerotranscendent people are less dependent on social activities and thus have the freedom to be more selective. This reasoning would acknowledge although disengagement implies turning inwards, gerotranscendence involves a new definition and expansion of the reality. E. Erikson (quoted by J. Erikson, 1997) described the desire for solitude as a desire to find a safe haven in the time of transition between middle aged and death, and called this state “Deeply involved disinvolvement” (p. 125).

Acknowledgement of ‘involved disinvolvement’ and ‘positive solitude’ would not just give elderly the respect they deserve, but would also necessitate a redefinition of the prevalent middle-age values that are imposed on the elderly. At the moment, the economically active part of society imposes its values on the economically inactive part. This is hardly an inspiring and beneficial two-way relationship or exchange of findings, values, achievement or wisdom.

VII. LIMITATIONS OF THIS STUDY.

Several general methodological issues warrant consideration and may serve to limit the findings of this study. The participants were not chosen at random. Rather, managers of the rest homes were instructed about the purposes of the study and were asked to find people who would be suitable for this study. Therefore, the representativeness of these participants to the general population of older adults must be questioned. Because the focus of this study was concerned with an investigation of gerotranscendence, it was considered of prime importance to identify and assess gerotranscendent individuals rather than compare them to the population from which they were drawn.

A further limitation of this study was resulted from the low number of participants identified as being gerotranscendent. Because of time limitations inherent in thesis research it was necessary to survey just a small number of participants. Nevertheless, the fact that this small group of participants did display some of the characteristics of gerotranscendence identified by Tornstam should be taken as an indication of the robustness of his theoretical position. Perhaps if a greater number of participants had been assessed it might have been possible to identify some personality characteristics that were associated with the onset of gerotranscendence.

Another problem that showed in the conversations were the wording of the questions. Elderly individuals seemed at unease with how to respond to negative statements (i.e., "I am not a very methodical person", or, "I am not a cheerful optimist") using a Likert-scale that required a negative response to be rated high and a positive response to be rated low. Furthermore, I noticed older individuals had

difficulties in comparing themselves to others, as in questions like "Some people think I am selfish and egotistical", and "Most people I know like me", and "Compared to other people my age, I make a good appearance". This might be due to generational difficulties in comparing one's self with others as the middle aged group did not seem to have problems in answering comparative questions.

Even the gerotranscendental questions could have had a more comprehensible wording. Questions such as "I feel that an individual life is unimportant when compared to humanity as a whole", were dual questions, were people tended to both agree regarding their own life, or to disagree, regarding every life on earth.

VIII. IMPLICATIONS OF THIS STUDY AND FURTHER STUDY.

A study by Tornstam (1996) among caretakers of the elderly, showed that when people were made aware of gerotranscendence they valued the behavior of some elderly differently. The desire for positive solitude was especially understood and respected. The fact that caretakers now had to deal with their own feelings of inadequacy regarding their designated task of caregiving and with worried relatives of the elderly who thought their loved ones were neglected show that there is a long way to go in understanding the practical importance of gerotranscendence. Not just in further research of the theory, but also in getting the phenomenon of gerotranscendence through to health organizations, caregivers, relatives, the community at large, and especially to make the elderly aware of the spiritual rewards that may be waiting for them.

IX. REFERENCES

- Achenbaum, W.A., & Modell, S.M. (1999). Joan Erikson and Erik Erikson and Sarah and Abraham: Parallel Awakenings in the Long Shadow of Wisdom and Faith. In: Thomas, L.E. & Eisenhandler, S.A. (Eds.) *Religion, Belief, and Spirituality in Late Life*. Springer Publishing Company, New York.
- Alexander, C.H. & Langer, E.J. (Eds.) (1990) *Higher Stages of Human Development Perspectives of Adult Growth*. New York, Oxford University Press. *t*
- Antonovsky, A. (1979). *Stress, and Coping*. San Francisco, Jossey-Bass Inc
- Antonovsky, H., & Sagy, S. (1986). The Development of a Sense of Coherence and its impact on Responses to Stress Situations. *The Journal of Social Psychology*, 126, 2, Pp. 213 - 225.
- Ardelt, M. (1997). Wisdom and Life Satisfaction in Old Age. *Journal of Gerontology*, 52b,1, Pp. 15 - 27.
- Baltes, P.B., & Smith, J. (1990). Toward a Psychology of Wisdom and its Ontogenesis. In: Sternberg, R.J. (Ed.) *Wisdom, its Nature, Origins, and Development*. Cambridge University Press.
- Baltes, P.B., Smith, J., & Staudinger, U. M. (1992). Wisdom and Successful Aging. In Sonderregger, T.B. (Ed.) *Psychology and Aging*. Nebraska Symposium on Motivation, 1991, University of Nebraska..

- Baro, F., Haepers, K., Wagenfeld, M., & Gallagher, T. (1996). Sense of Coherence in caregivers to demented elderly persons in Belgium. In: Stefanis, C., Hippus, H., & Muller-Spahn, I.F. (Eds.) *Neuropsychiatry in Old Age: an Update*,. Pp. 145 - 156, Toronto, Hogrefe & Huebr Publishers.
- Bianchi, C.E. (1990). *Aging as a Spiritual Journey*. New York, The Crossroad Publishing Company.
- Birren, J.E. (1964) *The Psychology of Aging*. Englewood Cliffs, N.J.; Prentice-Hall.
- Birren, J.E. & Fisher, L.M. (1990) The Elements of Wisdom: Overview and Integration. In: Sternberg, R.J. (Ed.). *Wisdom, it's Culture, Origins, and Developments*. Cambridge University Press, Cambridge.
- Braam, A.W., Deeg, D.J.H., van Tilburg, T.G., Beekman, A.T.F., & van Tilburg, W. (1998). Gerotranscendence as a Life Cycle Perspective: A First Empirical Approach Among Older Adults in the Netherlands. *Netherlands Journal of Gerontology and Geriatrics*. 29 (1), Pp. 24 - 32.
- Buhler, C. (1968). Introduction. In: Buhler, C. & Massarick, F. (Eds.) *The Course of Human Life: A Study of Goals in Humanistic Perspective*. New York, Springer.
- Butler, R.N. (1974) Successful Aging and the Role of the Life Review. *Journal of the American geriatrics Society*, 22, Pp. 529 - 535.

- Clayton, V.P. & Birren, J.E. (1980). The Development of Wisdom across the Life-span: A Reexamination of an Ancient Topic. In: Baltes, P.B. & Brim, Jr. O.G. (Eds.) *Life-span Development and Behaviour*. Vol. 3. New York, Academic Press.
- Costa, J.r., P.T. & Mc.Crae, R.R. (1977) Age Differences in Personality Structure Revisited: Studies in Validity, Stability, and Change. *International Journal of Aging and Human Development*, 8, Pp 261 - 275.
- Costa, J.r., P.T. & Mc.Crae, R.R. (1980) Still Stable after all these Years: Personality as a Key to some Issues in Adulthood and old Age. In: Baltes, P.B. & Brim, O.G. Jr. (Eds.) *Life-span Development and Behavior*. Vol. 3, Pp. 65 - 102, New York, Academic Press.
- Costa, J.r., P.T. & Mc.Crae, R.R. (1982) An Approach to the Attribution of Age, Period, and Cohort Effects. *Psychological Bulletin*, 92, Pp. 238 - 250.
- Costa, P.T. Jr., Zonderman, A.B., McCrae, R.R., Cornoni-Huntley, J., Locke, B.Z., & Barbano, H.E. (1987). Longitudinal Analyses of Psychological Well-being in a National Sample: Stability of Mean Levels. *Journal of Gerontology*, 42, Pp. 50 - 55.
- Costa, Jr., P.T. & Mc. Crae, R.R. (1992) Trait Psychology comes of Age. In Sonderegger, T.B. (Ed.) *Psychology and Aging*. Nebraska Symposium on Motivation, 1991, University of Nebraska.
- Creecy, R.F., Berg, W.E., & Wright, R.Jr. (1985). Loneliness among Elderly: a Causal Approach. *Journal of Gerontology*, Vol. 40, 4, Pp. 487 - 493.

- Cumming,E. and Newell, D.S. (1960) Disengagement- A Tentative Theory of Aging. *Sociometry*, 23,Pp. 23 - 24, 1960.
- Cumming, E., & Henry, W. (1961). *Growing Old: The Process of Disengagement*. Basic Books, New York.
- Erikson. E. (1982) *The Life Cycle Completed: A Review*. New York, Norton.
- Erikson, E.H. & Erikson, J.M. (1997) *The Life Cycle Completed*, extended version. New York, W.W. Norton & Company.
- Freund, A.M., & Smith, J. (1999). Content and Function of the Self-Definition in Old and Very Old Age. *Journal of Gerontology*. Vol. 54b, 1, Pp. 55 - 67.
- Gardner, H. Phelps, E., & Wolf, D. (1990). The Roots of Adult Creativity in Children' s Symbolic Products. In: Alexander, C.N. & Langer, E.J. (Eds.) *Higher Stages of Human Development*. New York, Oxford University Press.
- Havens,, B.J. (1968) An Investigation of Activity Patterns and Adjustment in an Aging Population. *The Gerontologist*, 8, Pp. 201 - 206.
- Holliday, S.G. & Chandler, M.J. (1986). *Wisdom: Explorations in Adult Competence, Contributions to Human Development* Vol. 17. Basel, Karger, S.
- Hoyt, D.R., & Creech, J.C. (1983). The Life Satisfaction Index: A Methodological and Theoretical Critique. *Journal of Gerontology*. Vol. 38, 1, Pp. 111 - 116.

- Hoyt, D.R., Kaiser, M.A., Peters, G.R. & Babchuk, N. (1980). Life Satisfaction and Activity Theory: A Multidimensional Approach. *Journal of Gerontology*. Vol. 35, 6, Pp. 935 - 941.
- Jacob, M., & Guarnaccia, V. (1997). Motivational and Behavioral Correlated of Life Satisfaction in an Elderly Sample. *Psychological Reports*, 80, Pp. 811 - 818.
- Kaufman, I. (1978) Marital Adaptation in the Aging. In: Zinberg, N.E. & Kaufman, I. (Eds.) *Normal Psychology of the Aging Process*. New York: International Universities Press.
- Knapp, M.R.J. (1976). Predicting the Dimensions of Life satisfaction. *Journal of Gerontology*. Vol. 31, Pp. 595 - 604.
- Kubler-Ross, E. (1975). *Death, the Final Stage of Growth*. Englewood Cliffs, N.J. Prentice-Hall, Inc.
- Kubler-Ross, E. & Warshaw, M. (1978) *To Live Until we say Goodbye*. Englewoods Cliffs, N.J., Prentice-Hall.
- Kuipers, J.A. & Bengtson, V.L. (1973) Social Breakdown and Competence. A Model of Normal Aging. *Human Development*, 16, Pp. 181 - 201.
- Langer, E.J., Chanowitz, B., Palmerino, S.J., Rhodes, M., & Thayer, P. (1990). Nonsequential Development and Aging. In: Alexander, C.N. & Langer, E.J. (Eds.) *Higher Stages of Human Development*. New York, Oxford University Press.

- Larson, R., Zuzanek, J., & Mannel, R. (1985). Being Alone versus Being with People: Disengagement in the Daily Experience of Older Adults. *Journal of Gerontology*. Vol. 40, 3, Pp. 375-318.
- Levinson, D.J. (1978). *The Seasons of a Man's Life*. New York: Ballantine.
- Liang, J., & Warfel, B.L. (1983). Urbanism and Life Satisfaction among the Aged. *Journal of Gerontology*, Vol. 38, 1, Pp. 97-106.
- Liang, J. (1984). Dimensions of the Life Satisfaction Index A: A Structural Formulation. *Journal of Gerontology*, Vol. 39, 5, Pp. 613-622.
- Liebermann, M.A. & Tobin, S.S. (1983) *The Experience of Old Age: Stress, Coping, and Survival*. New York: Basic Books.
- Markides, K.S. & Martin, H.W. (1979). A Causal Model of Life Satisfaction Among the Elderly. *Journal of Gerontology*. Vol. 34, 1, Pp. 86 - 93.
- Meachan, J.A. (1990). The Loss of Wisdom. In: Sternberg, R.J. (Ed.) *Wisdom, it's Nature, Origins, and Development*. Cambridge University Press.
- McCubbin, H.I., Thompson, E.A., Thompson, A.I. and Fromer J.E. (Eds.) (1998) *Stress, Coping, and Health in Families: Sense of Coherence and Resiliency....* Sage Publications, Incorporated.
- Myers, G.C. (1985). Aging and Worldwide Population Change. In: Binstock, R.H. & Shanas, E. (Eds.) *Handbook of Aging and the Social Sciences* (2nd ed.) Pp. 173 - 198. New York, Van Nostrand Reinhold.
- Neugarten, B.L., Havighurst, R.J. & Tobin, S.S. (1961). The Measurement of Life Satisfaction. *Journal of Gerontology*. 16, Pp. 134 - 143.

- Nilsson, M., Ekman, S.-L., Ericsson, K., & Winblad, B. (1996). Some Characteristics of the Quality of Life in Old Age Illustrated by Means of Allardt's Concept *Scandinavian Journal of Caring Sciences*, 10, (2) Pp 116 - 121.
- Oberg, P. & Tornstam, L. (1999). Body Images among Men and Women of Different Ages. *Aging and Society*. 19, Pp. 629 - 644.
- Orwoll, L., & Perlmutter, M. (1990). The Study of Wise Persons: Integrating a Personality Perspective. In: Sternberg, R.J. (Ed.). *Wisdom, it's Nature, Origin and Development*. Cambridge University Press.
- Peck, R. (1965). Psychological Developments in the Second Half of Life. In: Anderson, J.E. (Ed.) *Psychological Aspects of Aging*.
- Philp, H.L. (1958) *Jung and the Problem of Evil*. Rockliff, Salisbury Square, London.
- Richman, J. (1995). From despair to Integrity: an Eriksonian Approach to Psychotherapy for the Terminally Ill. *Psychotherapy*, Vol. 32, 2, Pp. 317 - 322.
- Schroots, J.J.F. (1996) Theoretical Developments in the Psychology of Aging. *The Gerontologist*. Vol. 36, 6, Pp. 742 - 748.
- Schulz, D.P., & Schulz, S.E. (1987). *A History of Modern Psychology*. Orlando, Fl: Harcourt-Bracc.

- Smit, J. & Baltes, P.B. (1999) Trends and Profiles of Psychological Functioning in Very Old Age. In: Baltes, P.B. & Mayer, K.U. (Eds.) *The Berlin Aging Study. Aging from 70 to 100*. Cambridge University Press.
- Staudinger, U.M., Freund, A.M., Linden, M., & Maas, I. (1999) Self, Personality, and Life Regulation: Facets of Psychological Resilience in Old Age. In: Baltes, P.B., & Mayer, K.U. (Eds.) *The Berlin Aging Study, Aging From 70 to 100*. Cambridge University Press.
- Sternberg, R.J. (1990) Understanding Wisdom. In: Sternberg, R.J. (Ed.) *Wisdom, its Nature, Origins, and Development*. Cambridge University Press, Cambridge.
- Thompson, R.A. (1992). Maturing the Study of Aging: Discussant's Commentary. In: Sonderegger, T.B. (Ed.) *Psychology and Aging*. Nebraska Symposium on Motivation, 1991. University of Nebraska Press.
- Tissue, T.L. (1971) Disengagement Potential: Replication and Use as an Explanatory Variable. *Journal of Gerontology*, 26, Pp. 76 - 80.
- Tornstam, L. (1989). Gerotranscendence; A Reformulation of the Disengagement Theory. *Aging: Clinical and Experimental Research*, Vol. 1, 1, Pp. 55 - 63.
- Tornstam, L. (1992). The Quo Vadis of Gerontology: on the Gerontological Research Paradigm. *The Gerontologist*. 32 (3), Pp. 318 - 326.

- Tornstam, L. (1994). Gerotranscendence - A Theoretical and Empirical Exploration. In: Thomas, L.E., & Eisenhandler, S.A. (Eds.). *Aging and the Religious Dimension*. Greenwood Publishing Group, Westport.
- Tornstam, L. (1996). Gerotranscendence - A Theory about Maturing in Old Age. *Journal of Aging and Identity*. Vol. 1, Pp. 37 - 50.
- Tornstam, L. (1996). Caring for the Elderly. Introducing the Theory of Gerotranscendence as a Supplementary Frame of Reference for the Care of Elderly. *Scandinavian Journal of Caring Sciences*. Vol. 1, Pp. 144 - 150.
- Tornstam, L. (1997a). Gerotranscendence: The Contemplative Dimension of Aging. *Journal of Aging Studies*. Vol. 11, 2, Pp. 143 - 154.
- Tornstam, L. (1997b). Gerotranscendence in a Broad Cross Sectional Perspective. *Journal of Aging and Identity*, 2,1, Pp. 17 - 36.
- Tornstam, L. (1997c). Life Crises and Gerotranscendence. *Journal of Aging and Identity*, Vol. 2, Pp. 117 - 131.
- Tornstam L. (1999). Late-Life Transcendence: a New Developmental Perspective on Aging. In: Thomas, L.E., & Eisenhandler, S.A. (Eds.). *Religion, Belief, and Spirituality in Late Life*. Springer Publishing Company, New York.
- Tornstam, L. (1999). Gerotranscendence and the Functions of Reminiscence. *Journal of Aging and Identity*. 4 (3), Pp. 155 - 166.
- Tornstam, L. (1999) Body Images among Men and Women in Different Ages, *Aging and Society*, 19: Pp. 629 - 644.

Usui, W.M., Keil, T.J., & Durig, K.R. (1985) Socioeconomic Comparisons and Life Satisfaction of Elderly Adults. *Journal of Gerontology*. Vol. 40, 1, Pp. 110 - 114.

Wong, P.T.P. & Watt, L.M. (1991). What Types of Reminiscence are Associated with Successful Aging? *Psychology and Aging*, Vol. 6, 2, Pp. 272 - 279.

X. TABLES

Table 1.

Mean scores on demographic measures, NEO personality factors, measures of Eriksonian Psychosocial Development, Life Satisfaction, Sense of Coherence and Gerotranscendence measures ¹

	Participant Group			
	Middle-Aged Adults (n=29)	Community Dwelling Older Adults (n=47)	Rest Home Dwelling Older Adults (n=24)	
Age	56.6	76.1 _a	83.5 _a	127.75 ^{**}
<u>SES</u> ²	3.1	4.0 _a	4.6 _a	6.16 ^{**}
<u>NEO Personality Factors</u> ³				
Neuroticism	15.4	17.2	18.9	ns
Extraversion	30.3	25.9 _a	26.2 _a	4.04 [*]
Openness	31.4	25.4 _a	22.9 _a	13.46 ^{**}
Agreeableness	33.6	32.0	31.2	ns
Conscientiousness	36.0	33.9	33.5	ns
<u>Eriksonian Measures of Psychosocial Development</u> ⁴				
Integrity	28.6	26.9 _a	26.2 _a	5.15 ^{**}
Despair	11.4	15.3 _a	16.0 _a	11.00 ^{**}
<u>Life Satisfaction Measures</u> ⁵				
Mood	20.8 _a	20.4 _a	19.1	2.78 [*]
Zest	23.3 _a	21.3 _a	19.6	10.10 ^{**}
Congruence	18.0	17.4	17.3	ns
<u>Sense of Coherence Measures</u>				
Comprehensibility ⁶	47.6	47.5	46.5	ns
Manageability ⁷	39.0	39.2	38.5	ns
Meaningfulness ⁸	32.2	36.7	30.7	ns
<u>Gerotranscendence Measures</u>				
Cosmic ⁹	19.5	19.8	20.6	ns
Ego ¹⁰	15.0	15.4	14.9	ns

¹ Means in each row sharing the same subscript do not differ significantly from one another.

² These scores range from 1-7 with lower numbers indicating higher socioeconomic status.

³ These scores range 12-60 with higher numbers indicating greater levels of each personality factor present in the individual.

⁴ These scores range from 7-35 with higher numbers indicating greater levels each psychosocial development characteristic.

⁵ These scores range from 6-30 with higher numbers indicating greater levels each life satisfaction component.

⁶ These scores ranged from 11-77 with high numbers indicating greater degrees of comprehensibility.

⁷ These scores ranged from 10-70 with higher numbers indicating greater degrees of manageability.

⁸ These scores ranged from 8-56 with higher numbers indicating greater degrees of meaningfulness.

⁹ These scores ranged from 6-30 with higher numbers indicating greater levels of cosmic gerotranscendence.

¹⁰ These scores ranged from 4-20 with higher numbers indicating greater levels of ego gerotranscendence.

* p<.05, F(2,97) ** p<.01, F(2,97)

Table 2

Zero-order correlations between demographic measures, NEO personality factors, Eriksonian Measures of Psychosocial Development, Life Satisfaction measures, Sense of coherence measures and Gerotranscendence measures in the scores of the middle-aged group of participants.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age																	
2. SES																	
<u>NEO-Personality Measures</u>																	
3. Neuroticism																	
4. Extraversion																	
5. Openness																	
6. Agreeableness																	
7. Conscientiousness																	
<u>Eriksonian Measures of Psychological Development</u>																	
8. Integrity																	
9. Despair																	
<u>Life Satisfaction Measures</u>																	
10. Mood																	
11. Zest																	
12. Congruence																	
<u>Sense of Coherence</u>																	
13. Comprehensibility																	
14. Manageability																	
15. Meaningfulness																	
<u>Gerotranscendence Measures</u>																	
16. Cosmic																	
17. Ego																	

Non-significant correlations are omitted for clarity of presentation.

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

Table 3

Zero-order correlations between demographic measures, NEO personality factors, Eriksonian Measures of Psychosocial Development, Life Satisfaction measures, Sense of coherence measures and Gerotranscendence measures in scores of the community dwelling older adult group of participants.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age																	
2. SES																	
<u>NEO-Personality Measures</u>																	
3. Neuroticism		.37**															
4. Extraversion			-.40**														
5. Openness																	
6. Agreeableness			-.34*														
7. Conscientiousness				.67**													
<u>Eriksonian Measures of Psychological Development</u>																	
8. Integrity			-.34*	.52**			.33*										
9. Despair		.29*	.70**	-.38**				-.46**									
<u>Life Satisfaction Measures</u>																	
10. Mood			-.46**	.47**		.31*		.33*	-.44**								
11. Zest			-.43**	.56**	.31*		.41**	.35*	-.41**	.40**							
12. Congruence			-.44**	.31*				.54**	-.42**	.53**	.46**						
<u>Sense of Coherence</u>																	
13. Comprehensibility			-.61**	.33*			.36**		-.38**	.37**	.31*	.34*					
14. Manageability		.36**	-.52**			.29*			-.34*								
15. Meaningfulness		-.28**															
<u>Gerotranscendence Measures</u>																	
16. Cosmic		.38**						.32**		.33*		.29*					
17. Ego																	

Non-significant correlations are omitted for clarity of presentation.

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

Table 4

Zero-order correlations between demographic measures, NEO personality factors, Eriksonian Measures of Psychosocial Development, Life Satisfaction measures, Sense of coherence measures and Gerotranscendence measures in the scores of the rest home dwelling older adult group of participants.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age																	
2. SES																	
<u>NEO-Personality Measures</u>																	
3. Neuroticism																	
4. Extraversion																	
5. Openness																	
6. Agreeableness																	
7. Conscientiousness																	
<u>Eriksonian Measures of Psychological Development</u>																	
8. Integrity																	
9. Despair																	
<u>Life Satisfaction Measures</u>																	
10. Mood																	
11. Zest																	
12. Congruence																	
<u>Sense of Coherence</u>																	
13. Comprehensibility																	
14. Manageability																	
15. Meaningfulness																	
<u>Gerotranscendence Measures</u>																	
16. Cosmic																	
17. Ego																	

Non-significant correlations are omitted for clarity of presentation.

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

Table 5

Elements of Tornstam's (1997) description of gerotranscendent recognised by participants identified as being gerotranscendent.

Aspect of Gerotranscendence	Number of participants recognising the aspect as being characteristic of themselves
Positive solitude	18
Cosmic communication	18
Redefinition of death	17
Decreased interest in material things	16
Redefinition of life	15
Increase in selectivity regarding social activities	13
Less self-occupied	11
Decreased interest in superfluous social interaction	11
Increased affinity with past generations	10
Increase in solitary meditation	10
Redefinition of 'time'	10
New understanding of fundamental questions of existence	9
Redefinition of self	8
Redefinition of space	8
Redefinition of relationships with others	6

Note: Some participants mentioned more than one aspect.

Table 6

Elements of Tornstam's (1997) description of redefinition of time trait recognised by participants identified as being gerotranscendent.

Type of Time Redefinition	Number of participants recognising the redefinition as being characteristic of themselves.
Increased connection with the past	13
Cosmic universal feeling of time	9
Past becoming clearer / understandable	6
Unfinished business from the past	3
Time means more than just the past, present, and future	2
Feeling connected with two periods at the same time	1
Time and age differences have become unimportant	1
Time does not change	1

Note: Some participants mentioned more than one time redefinition

Table 7

Elements of Tornstam's (1997) description of increased affinity with ancestors trait recognised by participants identified as being gerotranscendent.

Type of Affinity	Number of participants recognising the affinity as being characteristic of themselves
More appreciation of ancestors	16
Development of a link with future generations	15
Becoming a universal part of the human race	13
Interest in past memories of family members	4

Note: Some participants mentioned more than one type of affinity

Table 8

Life events mentioned by the participants as having preceded a shift towards a gerotranscendent perspective.

Event	Number of participants recognising the event as having preceded the development of gerotranscendence
Death of a spouse	10
Immigration	10
Personal development	9
Death of a parent	6
Marriage problem	6
Family matters	5
Leaving parental home	5
Middle age	3
Death of a child	2

Note: Some participants mentioned more than one event

XI. APPENDICES

1. Questionnaire used in the initial part of the study

This section of the questionnaire will ask you some questions about what type of person you are. Please read each statement and indicate your agreement or disagreement with it. Do not deliberate too long on any one statement. First impressions are best.

I am not a worrier.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I believe in the basic dignity of all people.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I like to have a lot of people around me.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

Life has passed me by.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I don't like to waste my time daydreaming.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I believe in the overall wholeness of life.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I try to be courteous to everyone I meet.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I am full of regret about life.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I try to keep my belongings clean and neat.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

Life worked out to be what it should have been.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I often feel inferior to others.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I wish I'd lived my life differently.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I laugh easily.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

Life has meaning.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

Once I find the right way to do something, I stick to it.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I feel I'm a 'has-been'.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I often get into arguments with my family and co-workers.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

I feel akin to all humankind – past, present, and future				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I'm pretty good about pacing myself so as to get things done on time.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Life is a thousand little disgusts.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would not change my life if I could live it over.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I don't consider myself especially 'light-hearted'.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is no hope for the world's problems.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am intrigued by the patterns I find in art and nature.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with my life, work, and accomplishments.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Some people think I'm selfish and egotistical.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Humankind is hopeless.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am not a very methodical person.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This is the dreariest time of my life.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I rarely feel lonely or blue.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
As I grow older, things seem better than I thought they would be.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I really enjoy talking to people.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
As I look on my life, I am fairly well satisfied.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe letting people hear controversial speakers can only confuse and mislead them.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am just as happy as when I was younger.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would rather cooperate with others than compete with them.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

I expect some interesting and pleasant things to happen to me in the future.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I try to perform all the tasks of my life conscientiously.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I would not change my past life even if I could.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I often feel tense and jittery.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
My life could be happier than it is now.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I like to be where the action is.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
The things I do are as interesting to me as they ever were.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Poetry has little or no effect on me.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I have gotten pretty much what I expected out of life.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I tend to be cynical and skeptical of others' intentions.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
These are the best years of my life.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I have a clear set of goals and work toward them in an orderly fashion.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I feel old and sometimes tired.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Sometimes I feel completely worthless.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I have gotten more of the breaks in life than most people I know.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I usually prefer to do things alone.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Most of the things I do are boring or monotonous.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I often try new and foreign foods.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Compared to other people my age, I make a good appearance.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I believe that most people will take advantage of you if you let them.					
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	

When I think back over my life, I didn't get most of the important things I wanted.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I waste a lot of time before settling down to work.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Compared to other people, I get down in the dumps too often.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I rarely feel fearful or anxious.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have made plans for things I'll be doing a month or a year from now.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I often feel as if I'm bursting with energy.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Today I feel the difference between life and death is less distinct than when I was a young adult.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I seldom notice the moods or feeling that different environments produce.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Nowadays I take myself less seriously than when I was younger.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Most people I know like me.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel that an individual life is unimportant when compared to humanity as a whole.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I work hard to accomplish my goals.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Today material possessions mean less to me compared to when I was a young adult.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I often get angry at the way people treat me.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Today I feel a greater connection with the universe than when I was a young adult.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am a cheerful, high-spirited person.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Today I am less interested in superficial friendships and social contacts than when I was younger.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe we should look to our religious authorities for decisions on moral issues.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I often experience the feeling of a close presence with someone even when they are far away.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Some people think of me as cold and calculating.				
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

I find myself thinking and pondering about things more than when I was a young adult.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
When I make a commitment, I can always be counted on to follow through.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Too often, when things go wrong, I get discouraged and feel like giving up.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel the differences between past, present, and future to be indistinguishable.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am not a cheerful optimist.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel a great sense of 'belonging' and 'connection' with both earlier and future generations.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Sometimes when I am reading poetry or looking at art, I feel a chill or wave of excitement.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I'm hard-headed and tough-minded in my attitudes.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Sometimes I'm not as dependable or reliable as I should be.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am seldom sad or depressed.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My life is fast-paced.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have little interest in speculating on the nature of the universe or the human condition.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I generally try to be thoughtful and considerate.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am a productive person who always gets the job done.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I often feel helpless and want someone else to solve my problems.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am a very active person.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have a lot of intellectual curiosity.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
If I don't like people, I let them know it.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I never seem to be able to get organized.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
At times I have been so ashamed I just wanted to hide.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

I would rather go my own way than be a leader of others.

Strongly Disagree Disagree Neutral Agree Strongly Agree

I often enjoy playing with theories or abstract ideas.

Strongly Disagree Disagree Neutral Agree Strongly Agree

If necessary, I am willing to manipulate people to get what I want.

Strongly Disagree Disagree Neutral Agree Strongly Agree

I strive for excellence in everything I do.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. Questions of Semi-structured Interview

HERE IS A SERIES OF PHRASES OR STATEMENTS THAT ARE COMPLETED BY ANCHORS LOCATED AT THE END-POINTS OF A SEVEN POINT SCALE. EACH OF THE ANCHORS EXPRESSES ONE EXTREME OR THE OTHER. IN EACH CASE, CIRCLE THE NUMBER THAT BEST EXPRESSES HOW YOU FEEL. IF THE WORDS UNDER 1 ARE CORRECT FOR YOU, CIRCLE 1; IF THOSE AT THE OPPOSITE EXTREME UNDER 7 ARE RIGHT FOR YOU, CIRCLE 7. IF YOU ARE LEANING TOWARDS ONE EXTREME OR THE OTHER, CIRCLE 2 OR 3, 5 OR 6. IF YOU ARE UNDECIDED, CIRCLE 4.

DO NOT TAKE TOO LONG TO DELIBERATE YOUR ANSWERS, THERE ARE NO RIGHT OR WRONG ANSWERS, FIRST IMPRESSIONS ARE WHAT'S IMPORTANT.

When you talk to people, do you have the feeling that they don't understand you?

1	2	3	4	5	6	7
Never have this feeling						Always have this feeling

In the past, when you had to do something that depended upon cooperation with others did you have the feeling that:

1	2	3	4	5	6	7
There was almost no chance of getting it done						It surely would get done

Think of people with whom you come into contact daily. Aside from the ones with whom you feel closest, how well do you know most of them?

1	2	3	4	5	6	7
I feel they are strangers						I feel I know them very well

How often has it happened in the past that you were surprised by the behaviour of someone whom you thought you knew very well?

1	2	3	4	5	6	7
Never happened						Always happened

Has it happened that people upon whom you counted disappointed you?

1	2	3	4	5	6	7
Always happened						Never happened

Life is:

1	2	3	4	5	6	7
Full of interest						Completely routine

Until now my life has had:

1	2	3	4	5	6	7
No clear goals or purpose						Very clear goals and purpose

In the past my life has been:

1	2	3	4	5	6	7
Full of changes and uncertainty						Completely consistent and predictable

Most of the things I will do in the future will be:

1	2	3	4	5	6	7
Completely						Deadly
fascinating						boring

What describes best how you see life?

1	2	3	4	5	6	7
One can always find a						There is no solution
solution to life's problems						to life's problems

When I think about my life I very often:

1	2	3	4	5	6	7
Think how good						Ask myself what is
it is to be alive						the purpose of life

When I face a difficult problem, the solution is:

1	2	3	4	5	6	7
Always confusing						Always completely
and hard to find						clear

Doing the routine chores of life is:

1	2	3	4	5	6	7
A source of pleasure						A source of pain
and satisfaction						and boredom

My life in the future will probably be:

1	2	3	4	5	6	7
Full of changes						Completely consistent
and uncertainty						and predicatble

When something unpleasant happens to me I:

1	2	3	4	5	6	7
Am filled with regret						Forget about it and
and sorrow						get on with life

When something gives me a good feeling I am certain that:

1	2	3	4	5	6	7
The feeling will last						Something will happen
for a long time						to spoil the feeling

I anticipate that my life in the future will be:

1	2	3	4	5	6	7
Without meaning						Full of meaning
or purpose						and purpose

I know that my current friends:

1	2	3	4	5	6	7
Will be there for me						Will go their own way
in the future						in the future

Many people, even those with a strong character, sometimes feel confused about life. In the past:

1	2	3	4	5	6	7
I've always felt this way						I've never felt this way

In the past I've always:

1	2	3	4	5	6	7
Under- or Over- estimated						Saw things in the
the importance of life's events						right proportion

When I think of the difficulties I am likely to face in the future, I'm:

1	2	3	4	5	6	7
Sure I will overcome						Uncertain I will overcome
the difficulties						the difficulties

THE NEXT SERIES OF QUESTIONS RELATES TO DIFFERENT FEELINGS THAT ALL OF US SHARE NOW AND THEN. FOR EACH ITEM, PLEASE INDICATE HOW OFTEN YOU HAVE SUCH FEELINGS.

The feeling that you are in an unfamiliar situation and don't know what to do.

1	2	3	4	5	6	7
Always						Never

The feeling that you don't really care about what goes on around you.

1	2	3	4	5	6	7
Always						Never

Very mixed-up feelings and ideas.

1	2	3	4	5	6	7
Always						Never

Feelings that you're not sure you can keep under control.

1	2	3	4	5	6	7
Always						Never

The feeling that you don't have a completely clear idea of what's about to happen.

1	2	3	4	5	6	7
Always						Never

The feeling that there's little meaning in the things that you do in your daily life.

1	2	3	4	5	6	7
Always						Never

Feelings inside that are incompatible with each other.

1	2	3	4	5	6	7
Always						Never

A feeling that you're being treated unfairly.

1	2	3	4	5	6	7
Always						Never

APPENDIX – 2 Questionnaire used in the Semi-structured Interview

Lastly, I'd like to ask you about a feeling you may, or may not, have experienced. As you know, this study sought to identify the personality characteristics associated with a newly-hypothesized stage of development known as 'gerotranscendence'. Please listen to the following description of a gerotranscendent individual and I'll ask you some questions about how much this concept applies to your life.

The gerotranscendent individual typically experiences a redefinition of Self and of relationships to others and a new understanding of fundamental existential questions. The individual becomes, for example, less self-occupied and at the same time more selective in the choice of social and other activities. There is an increased feeling of affinity with past generations and a decrease in interest in superfluous social interaction. The individual might also experience a decrease in interest in material things and a greater need for solitary 'meditation'. Positive solitude becomes more important. There is also often a feeling of cosmic communication with the spirit of the universe, and a redefinition of time, space. Life. and death.

**Does this description of life make any sense to you? Do you understand it?
Do you think this theory has any basis in reality?
Do you think this theory has any relevance in your life?**

Some people say that they have gradually come to a concept of time that is different from the one they had before. They say that, in early life and adulthood, they had a very clear idea of what is today and what belongs to yesterday, but that it has changed and they feel like they are able to be in two time periods at once. Their past may be present so strongly that they almost live in it, at the same time as they live in the present. Is this something that you recognize?

(If the participant answers in the affirmative, then they will be asked to describe an episode from their life that they believe marked the onset of such a feeling. If they cannot describe a single episode then they will be asked to elaborate on their general feelings about the question and their answer).

Some people say, that, during the course of life, they experience a change in how they feel in relation to their ancestors. It's a kind of increasing kinship with those who lived earlier, a feeling that you are a link in the chain of generations. Have you experienced and this?

(If the participant answers in the affirmative, then they will be asked to describe an episode from their life that they believe marked the onset of such a feeling. If they cannot describe a single episode then they will be asked to elaborate on their general feelings about the question their answer).

Some people say that, during the course of life, they have begun to discover sides of themselves that they had n't known before, both positive and negative. Do you recognize this ?

(If the participant answers in the affirmative, then they will be asked to describe an episode from their life that they believe marked the onset of such a feeling. If they cannot describe a single episode then they will be asked to elaborate on their general feelings about the question their answer).

Some people say that their interest in other people changes character during the course of life. One becomes more selective and prefers deeper relationships with a few people rather than more superficial relationships with many people. Is this something that you recognize?

(If the participant answers in the affirmative, then they will be asked to describe an episode from their life that they believe marked the onset of such a feeling. If they cannot describe a single episode then they will be asked to elaborate on their general feelings about the question their answer).

Can you divide your life in episodes that have been important for you?