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THE RELATIONSHIP OF DEATH ANXIETY TO DEVELOPMENTAL RESOURCES AND PERCEIVED DISTANCE TO PERSONAL DEATH IN LATER ADULTHOOD

by

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APPROVAL BY THESIS DIRECTION

This thesis has been approved on the date shown below:

Pamela G Reed — December 10, 1985

Pamela G. Reed — Date

Assistant Professor Nursing

DEDICATION

This study is dedicated posthumously to Florence B. Gallup.

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ABSTRACT

This study is based upon a life span developmental framework of aging and dying. A descriptive correlational study involving 41 healthy older adults was designed to study the relationships among three key variables represented in the conceptual framework: developmental resources, death anxiety and perceived distance to personal death. Three research questions were examined. The first question explored the relationsip between developmental resources and death anxiety. A significant negative relationship was demonstrated ($r = -.44$, $p < .01$). The second question examined the relationship between perceived distance to personal death and death anxiety. This relationship was not significant. The third question explored the relationship of developmental resources and perceived distance to personal death to death anxiety. Developmental resources alone explained 17% of the variance. The study findings lend support to the relationships suggested in the conceptual framework between developmental resources and death anxiety in the older adult.

CHAPTER 1

THE PROBLEM

> For a man is a creature without any fixed age who has the faculty of becoming in a few seconds many years younger and who surrounded by the walls of time throughout which he has lived floats within them as though in a basin the surface level of which is constantly changing so as to bring him into the range of now one epoch now of another (Proust, 1932).

The elderly are a rapidly growing segment of the population. The issue of successful aging versus unsuccessful aging is of central concern for both the theoretical and empirical realms of gerontological nursing. In the United States, approximately 25% of all deaths in 1900 occurred among people 65 years and older. The age at death has been extended so that in 1980, 30% of all deaths occurred over the age of 80. The greatest decline in age specific mortality occurred from 1920 to 1945 and since 1970 (Brody, 1984). Increasing cost and public demand has forced the health care delivery system to focus on this increasingly predominant segment of our society. Available resources must be marshalled and put to optimum use as this nation prepares for the year 2025 when 20% of the total population, an estimated 60 million Americans, will be over age 65 (Brody, 1984).

The continuing extension of our life span has demonstrated a need for better understanding of aging experiences that affect health and well being. This is especially true in view of the increased

susceptibility of aged people to chronic health problems and prolonged terminal illness experiences. These experiences, in addition to advances in medical technology, increase the numbers of elderly who will live for a relatively long time between that first distinct awareness of personal death and the point at which they actually enter the dying course (Buehler, 1975). As a result nurses will be confronted with the needs of those who are cognizant of having a limited life span, but who are not preoccupied with acute medical procedures or intense pain. This research will address death attitudes among older adults as they relate to developmental issues of later adulthood.

Resolving issues concerning personal mortality is a life span process that becomes particularly salient in later adulthood. Human development may play a significant role in impacting positively or negatively upon a person's relationship with death. Around age 60, middle adulthood normally comes to an end and late adulthood begins (Levinson, 1978). The character of one's life is altered in fundamental ways as a result of numerous physiological and social changes. It is thought that the prospect of personal death compels the older person to complete or reevaluate the developmental tasks of later adulthood and earlier periods. One central theme of adult development is the normative crises precipitated by the recognition and acceptance of the finiteness of time and the inevitability of personal death (Colarruso & Nemiroff, 1981).

As a person enters later adulthood he or she may feel that many of life's significant tasks have been completed. That person, increas-

ingly, is faced with endings to life work, the death of loved ones and the prospect of personal mortality. The primary developmental issue is appraising one's life and acquiring a sense of integrity and wholeness (Erikson, 1963; Schuster & Ashburn, 1980). Failure to achieve this state of integration may lead to magnified despair and fear of death in old age rather than to acceptance of the eventual loss of self (Colarruso & Nemiroff, 1981). Fear of death has been argued to be the central human anxiety (Troll, 1982).

Munnichs (1966) identified the importance of the recognition of human mortality and the inability to plan in terms of unlimited time. He postulated that this awareness of finitude may affect all general life experiences and the fundamental condition of the older adult. It cannot be assumed that, by virtue of one's age, a person is able to integrate the issue of personal mortality.

Awareness of finitude is a variable associated with the developmental process but may be independent of chronological age (Marshall, 1975). Moreover, findings by Lieberman (1970) in two separate studies support the premise that awareness of finitude is more accurate than chronological age in predicting changes in psychological functioning. It is also suggested that perceived distance to personal death is a significant variable to be considered when conducting studies involving older adults (Lieberman & Coplan, 1970). There is a dearth of available research addressing this topic.

Confrontation of death and dying can be understood from a developmental perspective of aging. Development at the end of the life

cycle implies that a person is coming to terms with personal death (Levinson, 1978). Development can be said to be occurring to the extent that new meaning is given to life and death. Dying can thus be conceptualized as a developmental phase that is influenced by the ability to address relevant developmental issues. Dying and development are not antithetic processes and knowledge in each area may in fact be complementary (Reed, 1983). However, there is a lack of developmental theory dealing with the later years and dying. Existing theories that do address this period of life are tentative and often contradictory. A need exists for continued examination within nursing of theoretical structures that explain and predict later adulthood developmental phenomena, such as confrontation with personal death.

In closing, very little research has been published which addresses older adults' relationship to their mortality (Feifel & Nagy, 1981). Most published reports on death and dying reflect either dying individuals' testimonies, clinicians' experiences with death, or results of informal studies (Hinton, 1971; Keller, 1983; Kennedy, 1985; Rovere, 1984). In general, available literature has focused on the relationhsip between death attitudes and age with conflicting results (Keller, Sherry & Piotrowski, 1984; Troll, 1982). As research continues in this area, more will be learned about the role of human development and other factors which impact positively or negatively in a person's relationship with personal death.

One goal of nursing is the facilitation of developmental resources across the lifespan which enhance the quality of life. A

nursing conceptual framework that incorporates life span developmental phenomena can be a useful base for research into resources available to the older adult as the dying phase of life is approached. Gaining understanding through research of the relationship between life span developmental tasks and the encounter with personal mortality in later adulthood may enable nurses to assist older clients in preparing for their final life phase.

Purpose

The purpose of this study was to examine the relationship between developmental resources and death anxiety in independent living older adults over 65 years of age. A secondary purpose was to examine the relationship between perceived distance to personal death and death anxiety. The long term goal was to contribute to knowledge of the relationship between developmental resources and death anxiety for application in gerontological nursing assessment and intervention.

Conceptual Framework

This study was based upon a lifespan developmental framework of aging and dying. Lifespan, as a developmental qualifier, is used to emphasize a broadened orientation to human development. The lifespan focus is not limited to theories designating a specific maturational state as a developmental outcome. Rather, this focus indicates that development occurs throughout the life cycle and includes dying (Reed, 1983). Moreover, development refers to a pattern of changes that are regarded as positive and functional for a living system.

The process of life span development at a given phase in life has been operationalized in terms of the existence of developmental resources (Reed, 1983). Developmental resources refer to abilities acquired as the individual meets challenges or "tasks" (Havighurst, 1972) that occur at certain periods across the lifespan.

Levinson (1978) conceptualized developmental change in terms of the confrontation with loss of one's youth, vitality and life itself. The resolution of conflict between youth and aging is a task encountered at each transition from one stage to the next. The developmental task is to overcome the dichotomy between youth and age and to find in each stage an appropriate balance of the two. Successful accomplishment of this developmental task may be used later as a resource to facilitate a sense of wholeness during disintegrating experiences such as the confrontation with personal death. Developmental resources then are considered to be indicative of effective living and as contributing to human health and functioning (Kurtz & Wolk, 1975; Reed, 1983).

Human understanding of personal death is a developmental issue central to aging. This understanding may take the form of death anxiety, sometimes referred to as death fear (Pollak, 1980). Death anxiety is a pervasive and paramount response to personal mortality (Kastenbaum & Aisenberg, 1976). It is conceptualized here as an expression of the type of relationship a person may have with death.

The concept of death anxiety can be multi-faceted. Four dimensions of death anxiety have been identified (Nelson & Nelson, 1975): death avoidance, death fear, death denial, and reluctance to

interact with the dying. The philosopher Choron delineates three types of death anxiety: fear of what comes after death, fear of ceasing to be, and fear of the event or process of dying (Pollak, 1980). It is also argued that the core of what constitutes death anxiety is the fear of annihilation or obliteration, simply ceasing to be. Other research findings suggest that death anxiety includes concerns about mutilation, abandonment, the dying process, pain, loss of dignity, hurting loved ones, and abandoning those for whom one feels responsible (Troll, 1982).

Death anxiety may be related to the developmental resources available when mortality is confronted. The potential for development exists even in the presence of the physiological deterioration associated with aging and approaching death (Reed, 1983). Death anxiety is conceptualized as one potential consequence of the failure to resolve developmental issues of later adulthood, such as resolution of the conflict between integrity and despair (Troll, 1982). Thus, death anxiety may be inversely related to the level of one's developmental resources.

One additional variable that is conceptualized by some as part of the developmental process is perceived distance to personal death. Perceived distance to personal death may be a better indicator of developmental maturity than is chronological age (Chellam, 1978; Worden, 1976). This sense of futurity is subjective and relative in that it differs between people of the same age group as well as between people of different ages (Chellam, 1978). Perceived distance to

personal death has been regarded as a significant developmental variable in the preparatory developmental crises of middle adulthood (Neugarten, 1976).

As part of the developmental process, the variable, perceived distance to personal death, may relate to a developmental crisis such as death anxiety in the older adult. Research has shown that there exists a positive relationship between perceived distance to personal death and developmental resources (Chappell, 1976), while other investigators have found no relationship to exist (Lieberman, 1970). Awareness of mortality may be a developmental phenomenon precipitating normative developmental crises and may ultimately facilitate acceptance of personal death (Colarusso & Nemiroff, 1981).

In summary, three key variables are represented in the conceptual framework of this study: developmental resources, death anxiety, and perceived distance to personal death. Figure 1 depicts these variables and the relationships among them. This study will examine the magnitude and significance of these relationships.

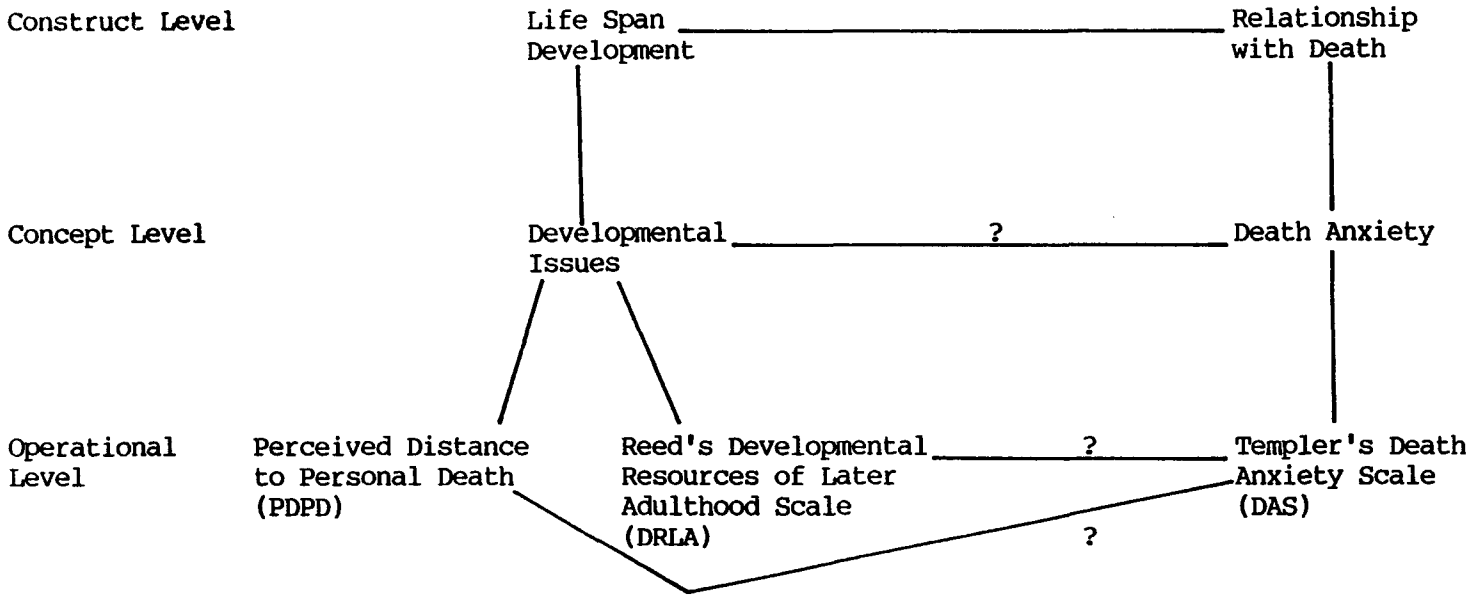

Figure 1. Conceptual Framework: The Relationship Between Developmental Issues and Death Anxiety

Research Questions

Three research questions, derived from the conceptual framework, were examined:

1. Is there a relationship between developmental resources and death anxiety in older adults?
2. Is there a relationship between perceived distance to personal death and death anxiety in older adults?
3. How do developmental resources and perceived distance to personal death together relate to death anxiety among older adults?

Operational Definitions

Developmental Resources

Those resources acquired as a result of successful resolution of the biological, psychological, and social challenges presented to the individual that are integral to the lifespan process.

Death Anxiety

Concern, worry or dread which contributes to a sense of uneasiness regarding impending or anticipated personal death.

Perceived Distance to Personal Death

A self assessment of time remaining to live: life expectancy.

CHAPTER II

REVIEW OF RELATED LITERATURE

This study is based upon a perspective which views dying as a developmental event. However, little research has been found which examines death anxiety or related concepts such as death fear or death concerns as phenomena related to the level of developmental resources present in the older adult. Related research exists which lends support to the idea that a relationship may exist between death anxiety and developmental issues in later adulthood. This research addressed correlates of life satisfaction as they relate to developmental issues and to death anxiety. In general, research supports a significant relationship between life satisfaction and developmental resources and between life satisfaction and death anxiety. It seems essential that developmental resources exist if key developmental tasks of aging are to be achieved. The significance of perceived distance to personal death as a developmental indicator and its possible relationships to death anxiety are also addressed in this literature review. In reviewing research related to the focus of this study, it was the investigator's intent to support the research questions postulated.

Developmental Issues and Life Satisfaction

Research focusing primarily on mentally healthy older adults has related life satisfaction and developmental task accomplishment.

The results of a study by Kurtz and Wolk (1975) demonstrated that a significant relationship existed between developmental task accomplishment and life satisfaction ($r = .522$, $p < .01$). The sample consisted of 92 respondents 60 years of age or older. This was one of the first studies which actually identified and attempted to quantify the developmental resources of the older adult.

The positive relationship established by Kurtz and Wolk (1975) between developmental task accomplishment and life satisfaction was further supported by Wolk and Telleen (1976). Ambulatory residents (N=129) living in a retirement village or Lutheran Retirement home were surveyed in settings of high and low environmental constraints. Life satisfaction was measured using Neugarten's (1961) Life Satisfaction Index as modified by Adams (1969). Developmental task accomplishment was measured using a minor revision of a developmental adjustment index developed by Kurtz and Wolk (1975). In both high and low constraint settings, developmental task accomplishment was found to explain a significant proportion of the variance in life satisfaction (9.2% and 20.4% respectively). It was concluded that developmental task accomplishment was important for life satisfaction among older adults living in various settings.

Other researchers have found correlates and predictors of emotional well being in older adults which can be interpreted as developmental issues of later adulthood, i.e., viewing one's life as worthwhile (Jensen & Polloi, 1985), having a sense of financial security and satisfaction with one's lifestyle (Medley, 1976; Spreitzer & Snyder,

1974), acquiring a positive perception about one's body and health (Baur & Okun, 1983; Larson, 1978), engaging in self expression achieving a satisfying use of one's time (Lawton, Kleban & diCarlo, 1984), and informal participation with cohorts (Edwards & Kemmack, 1973).

Although most research has been conducted with healthy older adults, the few studies which address less healthy adults also support the likelihood of a relationship between developmental issues and the mental health of the older adult. Reed (1983) established an empirical link between mental health and developmental resources in the elderly. The population consisted of 50 adults over age 60 with a primary diagnosis of depression and 50 mentally healthy adults over 60 years of age. A significant negative relationship ($r = -.47$, $p < .001$) was found to exist between developmental resources and mental illness.

Death Anxiety and Life Satisfaction

Only one study by Gamble and Brown (1981) was found which addressed the relationship between death anxiety and developmental resources. All other studies focused on death anxiety and other correlates. Gamble and Brown (1981) utilized a sample of mentally healthy (actualized) and mentally ill (nonactualized) adults. The study was designed to test the relationship between self actualization, a developmental resource, and the ability to confront personal death without fear. The sample consisted of 10 actualized adults employed in the helping professions and 10 nonactualized adults confined to a state mental institution. Participants were confronted with personal death

via a procedure involving relaxation, visualization, and fantasized dying to completion at age 65 or older. A significant difference, using a chi-square computed with Yate's correction for age-corrected groups, was demonstrated between the actualized and nonactualized groups (X^2=9.87, $p < .01$). Successful dying to completion was accomplished by 7.6% of the actualized subjects but only by 1.7% of the nonactualized subjects. This study, then, supports the relationship between the ability to face death and developmental resources.

Several studies have addressed the relationship between life satisfaction correlates and death anxiety. These variables were investigated by Tate (1982) in 60 women over the age of 65 through multiple regression techniques. The women were administered Templer's (1970) Death Anxiety Scale and the Life Satisfaction Index of Neugarten, Havighurst and Tobin (1961), as well as other measures. The Pearson product moment correlation coefficient between life satisfaction and death anxiety was ($r = -.43$, $p < .001$). Similarly, Reed (1982) found a significant relationship between sense of well being and positive death perspectives in a study of 57 health adults ($r = .23$, $p<.01$). Tate's (1982) findings also indicated that both life satisfaction and death anxiety are a function of past and present life experiences and conditions, some of which are developmentally based, e.g., health problems and change in living conditions.

Further support for the relationship between death anxiety and correlates of well being was found in Pollak's (1980) review of the literature. As a result of this review it was concluded that death

anxiety is consistently related to measures of well being. Death anxiety was found to be greater in persons lacking a personal sense of self-effectiveness, mastery and power and markedly diminished in persons who possess high self esteem and a high degree of meaning and purpose in their lives (Blazer, 1980; Schwartz & Gaines, 1974; Schwartz, Reynolds, Stout & Spilka, 1976).

Wagner and Lorion (1984) however, found little consistency among potential predictors of death anxiety in different groups of elderly. Variables found to be related to death anxiety were studied in 122 elderly persons who resided in the community and in nursing homes or rest homes. Among the questionnaires administered to the subjects were the Templer (1970) Death Anxiety Scale, Life Satisfaction Index A (Neugarten et al., 1961) as modified by Adams (1969), the Revised Philadelphia Geriatric Morale Scale (Lawton, 1975), the Geriatric Social Readjustment Rating Scale (Amster & Krauss, 1974), and the Health Symptom checklist (Wagner & Lorion, 1984).

Demographics, support systems, health, life events and personality variables served as predictors in a stepwise multiple regression analysis in which death anxiety was the criterion. The results indicated that morale and religiousness significantly accounted for 60% of the variance ($p < .05$) among the institutionalized elderly whereas depression and life events were the significant predictors among the community elderly ($R^2 = .33$, $p < .01$). Despite reports previously cited in the literature, physical health, social supports and demographics were not shown to be predictive of death anxiety in elderly persons.

Wagner and Lorion (1984) concluded that death anxiety response patterns may not exist as general characteristics of the elderly and cannot be generalized to other subsamples of elderly individuals. Correlates of death anxiety may vary according to individualized life factors.

One interesting finding in this study was the relationship between marital status and death anxiety in which married persons indicated higher death anxiety than those who were unmarried. These findings are consistent with results of an earlier study in which six women over 75 were interviewed concerning major life concerns (Gallup, 1984). As a result of the grounded theory approach used in this study, a major anxiety elicited from married subjects was death. This death anxiety, however, was related to a concern for the spouse left behind. This concern was not present among those who were widowed or never married. Thus, death anxiety may also be related to marital status, and/or number of significant others for whom one is responsible.

Death Anxiety and Age

Studies indicate conflicting findings on the relationship between death anxiety and age. Keller, et al. (1984) examined various dimensions of death attitudes among 874 subjects ranging in age from 18 to 87. A 112-item death questionnaire (DQ) was administered to the subjects. Responses on the DQ were submitted to factor analysis. Three factors emerged: Factor I, Evaluation of Death in General; Factor II, Belief in the Hereafter; and Factor III, Death Anxiety Related to Self. A two-way analysis of variance on each of the factor scores was

performed for the variables of sex and age. Results indicated that the older age group exhibited significantly less Death Anxiety Related to Self (Factor III) than their younger counterparts ($F = 2.78$, $p < 05$). Although less anxious about their personal mortality, the older age group was also among the most anxious about Death in General (Factor I) ($F = 6.61$, $p < .01$). Keller et al. (1984) concluded that it was paradoxical that the oldest group who were most concerned with Death in General were the least concerned about Death Anxiety Relating to Self. Gallup's (1984) study results, however, suggest that older adults' death anxiety may be normally related to concern over the effects of their death on other persons rather than their own personal death.

Ethnographic and survey research conducted by Bengston, Cuellar and Ragan (1977) found that relatively little variation in death perspectives existed across the four social strata of race, age, social class, and sex if taken together. A probability sample of 1,269 residents of Los Angeles was obtained. The response rate of this sample was over 80%. Survey data were gathered using a 150-item questionnaire. Ethnographic data were collected from 87 Mexican Americans. In-depth interviews and life histories were obtained. Of the four strata indicators, only age when taken alone was found to significantly predict death anxiety. The results indicated that increasing age is significantly associated with decreasing death fear. Four themes emerged from the data: the crises occur in middle age with sudden confrontation of personal mortality and are resolved in older adulthood, there is heterogeneity within and between groups when confronting death,

historical and biographical events shape orientations toward death, and age is a leveler of prior social distinctions (Bengston, et al., 1977).

Smith, Nehemkis and Charter (1984) conducted research on death fear among 20 terminal oncology patients aged 41 to 91 years. One of their findings was consistent with Benston et al. (1977) research. It was found that increased age is associated with decreasing death anxiety independent of life expectancy.

Mullen and Lopez (1982) used Templer's (1970) DAS to study conscious death anxiety in the young-old, 60 to 75, and the old-old, over 75, living in a nursing home. A discriminant analysis indicated that among the 103 young-old subjects, poor subjective health, poor functional ability, poor social support, and extended facility stays were indicative of higher death anxiety. Among the 125 old-old subjects, poor subjective health, poor functional ability and higher educational level predicted high death anxiety. It was also found that 39% of the younger residents demonstrated high death anxiety compared to 59% of the older residents. The old-old subjects were significantly more likely to have high death anxiety than were the young-old subjects in the study ($z = 3.43$, $p < .001$). These findings conflict with previous findings which indicate decreasing death anxiety as one ages.

Correlational investigations of death anxiety, death fear and death attitudes over the last decade were reviewed by Pollak (1980). This review addresses, among others, the variables of sex, age, occupation, socioeconomic status and an array of personality variables as potentially significant in death anxiety. Pollak (1980), as have

others, indicated that recent research results consistently suggest that on a conscious level, death anxiety does not increase with age (Conte, Weiner & Plutchik, 1982; Kastenbaum & Costa, 1977; Pollak, 1977; Ruff & Frank, 1971; Wass & Christian, 1979). Some of these studies also indicate that no relationship existed between age and death anxiety based on data from samples with an age range of 17 to 85 years.

Death Anxiety and Awareness of Finitude

According to developmental theory, awareness of finitude is postulated to provide impetus to developmental progress (Kalish, 1975). The perception of time left before personal death has been shown to be a significant predictor of death anxiety (Feifel & Branscomb, 1973; Keith, 1982; Smith, et al., 1984). Investigators often assume that age is uniformly related to awareness of finitude. Research, however, has not substantiated that age and perception of finitude are interchangeable measures. Marshall (1975) cited evidence to suggest that awareness of finitude rather than age may initiate some of the processes whereby life is reconceptualized and reevaluated in old age.

Keith (1982) examined life changes, demographics, death perspectives and futurity relative to quantification of perceived distance to personal death (PDPD). The population consisted of 568 older adults ranging in age from 72 to 99. Attitudes toward death were examined using a Likert-type scale with four possible responses. To quantify the future by number of years remaining to live subjects were asked how old

they thought they would get to be. The results indicated that a substantial portion, 49%, did not quantify PDPD which may indicate that many older persons do not conceptualize their life in terms of time remaining to live and are in a sense denying their finitude. Persons who quantified years remaining were more likely to indicate less death fear and more favorable death perspectives. In this study, age, however, was not linked with quantification of time remaining.

Lieberman and Coplan (1970) studied 80 subjects 65 to 91 years of age. All subjects were ambulatory and free of major incapacitating illnesses. Twenty-three variables tapping five realms were measured: emotional state, orientation to emotional life, body imagery, self concept, and time perspective. All statistical analyses were reported based on matched pairs. Forty individuals who died within 12 months of the study (Death Near, DN) were paired with forty subjects surviving an average of three years after testing (Death Far, DF). The findings supported distance from personal death as a more useful variable than chronological age in understanding changes in certain psychological phenomena among the aged. However, death anxiety was not found to directly relate to perceived distance to personal death. Rather, fear of death or death anxiety was related to stability of environemnt. DN subjects who were in an unstable environment expressed anxiety about death while DN subjects in a stable environment showed no evidence of fear of preoccupation with death as reflected by TAT death symbols data (Dana, 1955). Thus, while those close to death and under crises reacted with anxiety to stimuli associated with death, those close to death but

not in crises reacted to the same death stimuli with highly integrated responses. These results led Lieberman (1970) to conclude that fear of death depended primarily on specific life circumstances and not on the approach of death itself.

A study based on a nursing conceptualization of adult development and dying was conducted by Reed (1982). This study postulated that as people became aware of their own mortality they perceived death less negatively and were able to maintain positive healthful attributes. The population for this study consisted of 57 terminally ill adults and 57 non-terminally ill adults matched on four variables: age, sex, years of education, and religious affiliation. Respondents' views about death were measured by a Death Persepctive Scale. The results failed to support a relationship between perceived distance to personal death and death perspective in that both the terminally ill and healthy groups demonstrated similar death perspectives.

Marshall (1975) examined awareness of finitude as a developmental variable in a review of existing research and theory. This review concluded that developmental processes postulated by numerous gerontologists can be investigated in relation to awareness of finitude without using chronological age as the measure which triggers the developmental changes. Results of the research reviewed here indicate the need for further study of perceived distance to personal death as it relates to death anxiety.

This review of related literature demonstrates significant relationships between life satisfaction correlates and developmental

issues and between life satisfaction and death anxiety. There is a dearth of literature, however, which addresses the relationship between death anxiety and developmental issues. In addition, the relationship between death anxiety and age was not consistent. Awareness of finitude was suggested as a variable that may be more significant than age in influencing death attitudes in the older adult. Awareness of finitude represents a developmental experience which may act as a catalyst in influencing resolution of anxiety over personal death. Thus, this study will examine the relationships among death anxiety, developmental resources, and perceived distance to personal death in later adulthood.

CHAPTER III

THE METHOD

A descriptive correlational study was designed to investigate the relationships between the variables developmental resources, death anxiety, and preceived distance to personal death. The study was conducted in the residential community of Green Valley, Arizona, and involved the voluntary participation of healthy older adults.

Sample

The non-probability sample consisted of 41 older adults who met the criteria of being 65 years or older, relatively healthy with no known dementia or acute health problems, and living independently. Most participants rated their health as good, with a mean score of 4 out of a range of 1 to 5 on a Perceived Subjective Health estimate. Participants lived in Green Valley, a retirement community in southern Arizona.

The mean age of the participants was 73.36 (SD = 5.9) with ages ranging from 65 to 87. Fifty-nine percent of this sample were 65 to 74 and 41% were over 74. These percentages aproximate those in the total population according to the 1982 United States Bureau of Census. There were 27 (66%) women and 14 (34%) men who participated in the study. All participants were Caucasian and most were well educated ($\bar{X}$ = 13.8 years, S.D. = 2.74) with a range from 6 to 20 years of education.

Ninety percent of the sample professed affiliation with a religious denomination. Of the 41 participants, 26 (63%) were married, 11 (27%) were widowed, three (7.7%) had never married, and one (2.7%) was divorced. All but one participant were retired.

Procedure

Participants were obtained through referrals from family and friends. The principal investigator conducted all interviews in the homes of the participants in Green Valley. Subjects were contacted by phone to arrange for a convenient time for the interviews. All subjects participated on a voluntary basis. A written explanation of the study was presented to each subject and reviewed with them orally. A disclaimer format was used (Appendix A). Informed consent was obtained from each subject before proceeding. The interviews conducted were approximately 45 minutes in length. Participants were asked to complete the Developmental Resources of Later Adulthood Scale (Reed, 1984), the Death Anxiety Scale (Templer, 1970), the Perceived Distance to Personal Death measure (Chappell, 1976) (Appendix B), and to provide descriptive information on age, sex, years of education, religious affiliation, employment, race, marital status, and health (Appendix C). The instruments were presented to the participants in the order stated to minimize the influence of potentially anxiety producing items.

Instruments

Developmental Resources of Later Adulthood Scale

The instrument used to measure the level of developmental resources was Reed's (1984) Developmental Resources of Later Adulthood Scale (DRLA). This 36 item scale was constructed to measure the level of developmental resources that existed among older adults (Appendix B). The DRLA was derived from a life span developmental framework on later adulthood and emphasizes developmental change rather than the limitations of aging. Four key developmental issues of later adulthood are respresented in the DRLA. These issues comprise the subscales of the DRLA and are labeled: Transcendence, Temporal Awareness, Physical Integrity, and Plasticity (Reed, 1984).

Participants are asked to rate the extent to which they view each developmental resource (each item) as existing in their present life. A four point Likert-type format is used for the responses to the items. Response ranged from "not at all", with a value of 1, to "very much", with a value of 4. The DRLA is used as a unidimensional measure which generates one overall score. The instrument is scored by summing across items and dividing by the number of items, with total scores ranging from 1, indicating a low level of developmental resources, to 4, indicating a high level.

Reliability of the DRLA has been examined in healthy and clinically depressed older adults (Reed, 1985). The overall reliability of the instrument, based on Cronbach's alpha as a conservative measure

of internal consistency, was .95. Content validity was examined using a panel of experts and using subjects' mean score on DRLA - Importance, a scale designed to measure the relevance of the DRLA items in the subjects' present lives. Good content validity was demonstrated (Reed, 1984).

Construct validity of the DRLA was demonstrated in part by factor analytic techniques (using Varimax rotation). Four factors (subscales) were extracted which accounted for 64.0% of the variance. These factors are consistent with the literature on major developmental issues of later adulthood. Internal consistency of these factors ranged from .85 to .93. Item factor correlations ranged from .49 to .78. Factor-total scale correlations were all above .64. Consruct validity has also been supported through a correlational study on depression and developmental resources of later adulthood, and a comparison study using depressed and mentally healthy adult groups (Known-Group Technique). Significant findings from these studies indicate adequate construct validity (Reed, 1985). In summary, the DRLA has demonstrated adequate reliability and validity for cautious use. Testing of the instrument is continuing.

Death Anxiety Scale

The Death Anxiety Scale (DAS) was developed by Templer (1969) to measure death anxiety among adults (Appendix B). The DAS is widely used in research and reflects a wider range of death-related life experiences than another commonly used scale, Boyar's (1964) Fear of

Death Scale (FODS). The BODS addresses primarily the act of dying, the finality of death, corpses and their burial. The DAS, consisting of 15 items, is a unidimensional scale which measures conscious death anxiety. Each item is rated as either true or false, indicating agreement or disagreement with the item. Six items are reverse scored to minimize response bias.

The DAS scale scores range from 0 to 15 with zero indicating no death anxiety and 15 high death anxiety. The total scale score is obtained by summing across the items. Average scores generally range from 4.5 to 7.0 units with a standard deviation slightly above 3.0 (Templer & Ruff, 1971).

A significant amount of data has been collected to support the reliability and validity of the DAS (Handel, Pool, Napoli, & Austin, 1984-85; Mullen & Lopez, 1982; Templer, 1969, 1970; Templer, Ruff, & Franks, 1973; Wagner & Lorion, 1984). Reliability of the DAS was examined by Templer (1970) using the Kuder-Richardson Formula 20. A correlation coefficient of .76 indicated fairly good internal consistency. Test-retest reliability was also found to be good with a correlation of .83. In addition, responses to the DAS were examined for response set and social desirability. The correlation coefficients were not significant for either potential effect ($r = .23$ and $r = .03$, respectively). Thus, neither response set or social desirability were found to significantly influence participants' responses on the DAS (Templer, 1970).

Construct validity of the DAS was supported in part through its moderately high correlation with subject scores on the Boyar's Fear of

Death Scale (r = .74) (Templer, 1970). Significant correlations between DAS scores and responses on projective tests (r = .25) and on the MMPI (e.g., r = .49) also indicate validity for the construct of death anxiety (Templer, 1970). Low but significant relationships between the depression scale of the MMPI and DAS score were found.

Perceived Distance to Personal Death

The measure utilized to assess perceived distance to personal death (PDPD) was a fixed choice self-estimate of life expectancy (Chappell, 1976). The fixed choice indicator has been found to be superior to the direct question or other means of measuring an individual's perceived distance from personal death (Marshall, 1975). It is a one-item subjective measurement which allows the subject to choose one of four possible responses which range from "I will be around for some time yet, more than 10 years" (scored a 1) to "The end may be any time now" (scored a 4) (Appendix B).

CHAPTER IV

RESULTS

The data and results of data analysis are presented in this chapter. A presentation of scores on the study variables is followed by the results of the findings obtained by the examination of the three research questions. The level of significance set for this study was p=.05. The mean scores, standard deviations, and range of scores on the study variables provide an initial profile of the participants in the study (Table 1). A high level of developmental resources was evident among the participants ($\bar{x}$ = 3.4). The mean score on death anxiety was moderately low ($\bar{x}$ = 4.6). The mean on the perceived distance to personal death was 1.8.

Research Question 1

The first research question examined the relationship between developmental resources and death anxiety in older adults. The Pearson product moment correlation coefficient was used to determine the magnitude and significance of this relationship. A significant relationship was found to exist between the level of developmental resources and death anxiety ($r = -.44$, $p < .01$) (Table 2). The negative correlation indicates that there is an inverse relationship between the level of developmental resources and death anxiety in the older adult. As the level of developmental resources increases, the level of death anxiety

Table 1. Participants' Mean Scores and Standard Deviations on Death Anxiety (DAS), Developmental Resources (DRLA), and Perceived Distance to Personal Death (PDPD) (N = 41)

Variable	$\bar{x}$	S.D.	Range
DAS[a]	4.6	2.74	0 - 12
DRLA[b]	3.4	.25	2.8 - 4.0
PDPD[c]	1.7	.80	1 - 4

[a] Range possible = 0 - 15

[b] Range possible = 1 - 4

[c] Range possible = 1 - 36

Table 2. Pearson Correlations on Study Variables: Developmental Resources (DRLA), Death Anxiety (DAS), and Perceived Distance to Personal Death (PDPD) (N = 41)

	DRLA	DAS	PDPD
DRLA	1.00		
DAS	-.44*	1.00	
PDPD	-.23	.22	1.00

* $p < .01$

decreases or, alternatively, as the level of developmental resources decreases the level of death anxiety increases.

Research Question 2

The second research question examined the relationship between perceived distance to personal death and death anxiety in older adults. The Pearson product moment correlation between these two variables was not significant ($r = .22$, $p = .16$) (Table 2). Perceived distance to personal death was not related to the level of death anxiety in the study sample of older adults. The direction of the relationship indicates, however, that as one's estimate of the distance to personal death decreases, death anxiety decreases.

Research Question 3

The third research question, regarding the relationship of developmental resources and perceived distance to personal death combined to death anxiety, was examined using stepwise multiple regression technqiues. Perceived distance to personal death alone was not significantly related to death anxiety. However, research question three was examined to determine if perceived distance to personal death together with developmental resources would account for a greater proportion of the variance in death anxiety than would developmental resources alone. It was found that developmental resources alone accounted for a significant proportion of the variance in death anxiety ($R^2 = .17$, $p < .01$). Perceived distance to personal death did not enter the equation as a significant predictor.

Additional Findings

Pearson correlations between the study variables and demographic variables among all ages indicated significance in six relationships (Table 3). Age and years of education ($r = -.32$, $p < .05$), perceived distance to personal death and age ($r = .58$, $p < .001$), death anxiety and years of education ($r = -.38$, $p < .05$), perceived health and perceived distance to personal death ($r = -.33$, $p < .05$), developmental resources and death anxiety ($r = -.44$, $p < .01$), and perceived health and death anxiety ($r = -.39$, $p < .05$).

Death anxiety was negatively related to years of education, perceived health and developmental resources. This indicated that as health was rated higher and as years of education and developmental resources increased, death anxiety decreased.

The correlations of variables among all ages combined also suggested that the older participants had fewer years of education and perceived their distance to personal death to be less than their younger counterparts. Those participants who perceived their health as good or excellent indicated a longer perceived distance to personal death. In view of the significant correlations between age and several variables, Pearson correlations were examined in the two different age groups represented in this sample.

The sample was divided into two groups: the Young-Old including those aged 65 to 74 years ($n = 24$), and the Old-Old for those 75 years and above ($n = 17$) (Neugarten, 1976). Demographic variables were correlated with the study variables (Table 4). Two significant statistical

Table 3. Pearson Correlations on Developmental Resources (DRLA), Death Anxiety (DAS), Perceived Distance to Personal Death (PDPD), and Descriptive Variables (N = 41)

	DRLA	DAS	PDPD	EDUCATION	HEALTH	SEX	AGE
DRLA	1.00						
DAS	-.44**	1.00					
PDPD	-.23	.22	1.00				
Education	-.01	-.34*	-.19	1.00			
Health	.19	-.39*	-.33*	.14	1.00		
Sex	.12	.12	.20	.03	0.0	1.00	
Age	-.01	.13	.58***	-.32*	-.14	.12	1.00

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

Table 4. Pearson Correlations on Developmental Resources (DRLA), Death Anxiety (DAS), Perceived Distance to Personal Death (PDPD), and Descriptive Variables in Young-Old (n = 24)

	DRLA	DAS	PDPD	EDUCATION	HEALTH	SEX
DRLA	1.00					
DAS	-.44*	1.00				
PDPD	-.03	.1	1.00			
Education	.26	-.18	-.08	1.00		
Health	.19	-.39	-.67**	.04	1.00	
Sex	-.04	.18	.13	.07	-.09	1.00

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

relationships were demonstrated in the analysis of the Young-Old. First, developmental resources significantly related negatively to death anxiety ($r = -.44$, $p < .05$). Second, perceived distance to personal death significantly related negatively to perceived health ($r=-.67$, $p < .001$). This finding indicated that perceived poorer health was associated with perceived closeness of death.

One significant relationship was demonstrated in the Old-Old. Years of education related negatively to death anxiety ($r = -.55$, $p<.05$) (Table 5). The relationship between developmental resources and death anxiety was negatively correlated but only approached significance ($r = -.44$, $p < .07$). A significant relationship between perceived health and perceived distance to personal death was not demonstrated in the Old-Old, but was demonstrated in the younger sample.

A final analysis involved the comparison of the two age groups for significant differences on the DAS, DRLA, and PDPD (Table 6). The two groups differed significantly on PDPD ($t(39) = -3.32$, $p < .01$). The Old-Old perceived themselves to be significantly closer to death than did the Young-Old. The two groups did not differ significantly on DAS or DRLA.

Table 5. Pearson Correlations on Developmental Resources (DRLA), Death Anxiety (DAS), Perceived Distance to Personal Death (PDPD), and Descriptive Variables in Old-Old (n = 17)

Group II	DRLA	DAS	PDPD	EDUCATION	HEALTH	SEX
DRLA	1.00					
DAS	-.44	1.00				
PDPD	-.38	.35	1.00			
Education	-.04	-.55*	-.11	1.00		
Health	.20	-.37	.05	.19	1.00	
Sex	.35	.00	.26	.02	.23	1.00

* $p < .05$

Table 6. Means and Standard Deviations on DAS, DRLA, and PDPD of Young-Old and Old-Old

Variable	Young-Old (n = 24) Mean	S.D.	Old-Old (n = 17) Mean	S.D.
DAS	4.46	2.95	4.82	2.5
DRLA	3.49	.25	3.47	.28
PDPD*	1.42	.50	2.18	.95

* $t(39) = -3.32$, $p < .01$

CHAPTER V

DISCUSSION

This was a descriptive correlational study designed to examine the relationship between developmental resources and death anxiety in older adults. A secondary objective was to examine the relationship between perceived distance to personal death and death anxiety in older adults. The relationship of developmental resources and perceived distance to personal death to death anxiety among older adults was also examined.

The conceptual framework of this study posits that development occurs throughout the life span and includes dying (Reed, 1983). Human understanding of personal death is postulated to be a developmental issue central to aging. As such, death anxiety may relate to developmental resources. Initial awareness of finitude is part of the developmental process and potentially an experience which precipitates the normative developmental crisis and eventual acceptance of personal death. Thus, perceived distance to personal death was also viewed as a variable that may relate to death anxiety in the older adult.

Research Questions

The findings obtained by the examination of research question one, "Is there a relationship between developmental resources and death anxiety?", supported the conceptual framework of this study. The level

of developmental resources was found to significantly relate negatively to death anxiety in the older adult ($r = -.44$, $p < .01$). A higher level of developmental resources was associated with a lower level of death anxiety.

Although a paucity of research has been conducted examining the relationship of developmental resources to death anxiety, the available findings support the results demonstrated in this study. Research by Gamble and Brown (1981) demonstrated a significant positive relationship between successful dying to completion and self actualization, a developmental resource ($X^2 = 9.3$, $df = 1$, $p < .01$). These findings support the premise that an actualized authentic existence may be possible only when one has come to terms with personal mortality (Durlak, 1972).

The negative relationship between the existentially relevant variables of life satisfaction and death anxiety demonstrated by Tate (1982), supports previous literature findings which indicate that death anxiety is inversely related to psychological adjustment (Templer, Ruff & Simpson, 1974), and to purpose in life (Brown, 1975). Tate's findings also support the negative relationship demonstrated in this study between developmental resources and death anxiety.

The results obtained by the examination of research question two, "Is there a relationship between perceived distance to personal death and death anxiety in older adults?" was not significant. Perceived distance to personal death did not appear to relate to the level of death anxiety in the older adult. This finding was not

consistent with other studies which indicated perceived distance to personal death was a significant predictor of death anxiety when perceived distance to personal death is correlated with life satisfaction indicators (Feifel & Branscomb, 1973; Keith, 1982; Smith et al., 1984). Other researchers, however, indicate that death anxiety depends primarily on specific life circumstances not on the approach of death (Lieberman & Copland, 1970; Keith, 1981). A study by Reed (1982) also failed to support a relationship between perceived distance to personal death and negative death perspective.

The mean scores obtained for death anxiety and developmental resources indicated a high level of developmental resources and low death anxiety. These findings together with the low refusal rate for answering the perceived distance to personal death question may be indicative of the lack of emotional threat posed by quantifying distance to personal death among the participants. Most may have already faced their futurity, come to terms with it and integrated death into their perspective of life. This idea is consistent with results of a study on 40 seriously ill elderly which indicated that perceived closeness to personal death was not related to death anxiety (Chapell, 1976).

The low level of death anxiety ($\bar{x}$ = 4.6 out of a possible 0 to 15) in the sample was consistent with other research on 3600 mentally healthy adults whose mean scores ranged from 4.5 to 7.0 (Templer, et al., 1971). The low death anxiety score in this study was expected given the late adulthood stage of the sample and the conceptual frame-

work which generally posits that death anxiety decreases over development.

In addition, the mean score on the Developmental Resources of later Adulthood scale ($\bar{X}$ = 3.4) indicated a high level of developmental resources. This finding was as expected, given that the sample was in general good health and participants were living independently. Moreover, this result was comparable with earlier research by Reed (1982) on healthy older adults.

The findings obtained by the examination of research questions one and two were further supported by the analysis of research question three, "How do developmental resources and perceived distance to personal death together relate to death anxiety in the older adult?" Stepwise multiple regression analysis revealed that perceived distance to personal death failed to contribute significantly to the variance predicting death anxiety. Developmental resources alone was found to explain a significant 17% of the variance in death anxiety in the older adult, whereas perceived distance to personal death did not enter the equation. These findings further support the idea that perceived distance to personal death was not a relevant factor within this developmentally mature sample. The lack of significance of perceived distance to personal death may be clarified in future research on persons in different strata of the population and with lower levels of developmental resources.

Additional Findings

Correlations among the descriptive variables and death anxiety were examined first among the total sample. The sample was then divided into two groups, the Young-Old (aged 65 to 74) and the Old-Old (aged 75 and above) and the data analyzed.

Research addressing the personal and situational variables related to death anxiety has not yet produced consistent findings (Wagner & Lorian, 1984). A significant negative relationship was noted between perceived health and death anxiety among the total sample. This finding is consistent with other research results (Bell & Betterson, 1979; Trent et al., 1981; Tate, 1982). The relationship between death anxiety and perceived health closely approached significance in the Young-Old and that this age group (65 - 74) may be the most consistenty tested.

Perceived health status significantly related negatively to perceived distance to personal death among the Young-Old ($p < .001$). Previous research has supported the correlation between perceived health and perceived distance to personal death (Feifel & Branscomb, 1973; Leiberman & Coplan, 1970). For the Young-Old, the perception of health may be a more integral factor in their personal relationship to death than it is in the Old-Old. The Old-Old have lived with declining health for a longer period of time than the Young-Old. As a result, perceived health may lose some of its significance in a personal relationship to death.

The significant inverse relationship between death anxiety and years of education in the Old-Old contradict results of studies by Tate (1981) and Mullen and Lopez (1982). Several other research findings, however, support the negative relationship demonstrated in this study (Cole, 1979; Templer, Barthlow, Halcomb, Ruff, & Ayers, 1979).

That this relationship between education and death anxiety was significant in the Old-Old but not the Young-Old may be explained in terms of the diversity of the older group. The Young-Old were a more educationally homogeneous group ($x = 14.3$, S.D. = 2.3) with years of education ranging from 12 to 20. In the Old-Old, years of education ranged from 6 to 17 years with a mean score of 13.1 (S.D. = 3.1). The greater degree of variability in years of education among the Old-Old, may have contributed to the significant relationship between education and death anxiety in this group. A higher educational level may facilitate the acquisition of developmental resources as one ages, e.g., purpose in life, giving up the past, feeling worthwhile. Years of education is a variable that deserves further study as it may contribute to explaining death anxiety.

Significant correlations were not found to exist in this study among marital status, sex, age or religion and death anxiety. Some researchers have determined significant correlations when examining the relationship of these variables to death anxiety (Feifel & Branscomb, 1973; Keller et al., 1984; Tate, 1982). This study's findings, however, supported a large body of research indicating these personal and descriptive variables did not significantly predict death anxiety in

the older adult (Wagner & Lorion, 1984; Lieberman & Coplan, 1970; Templer et al., 1979).

Descriptive variables as consistent predictors of death anxiety have been shown to be unreliable. This may be due to the fact that these variables relate significantly to death anxiety at different developmental stages. One variable such as age or religion may be a significant predictor of death anxiety at one developmental stage and not necessarily at another.

Developmental resources related negatively to death anxiety in the Young-Old but not in the Old-Old. The small sample size of the Old-Old (n = 17) may have rendered it more difficult to achieve significance. In addition, because of the diversity among the Old-Old, it is possible that factors which relate to death anxiety in the Young-Old may not necessarily apply to the Old-Old. It has been noted that the elderly are not a homogeneous group (Neugarten, 1976)

The level of developmental resources present in each individual is a function of past and present life conditions (Wagner & Lorion, 1984). It has been theorized that increasing diversity occurs over development, that is, that the number of differences among individuals of the same age group increases with age (Rogers, 1980). It is therefore possible that the current form of the "Developmental Resources of Later Adulthood" scale, typically used to measure developmental resources among the Young-Old, may not tap all relevant developmental issues of the Old-Old. The developmental resources salient to the Old-Old may be only partially accounted for in the

Developmental Resources of Later Adulthood scale. However, the relationship between death anxiety and developmental resources approached significance ($p < .07$), in spite of the small sample size. Thus, developmental resources should not yet be discounted when studying death anxiety in the Old-Old.

Persons with a high level of "ego integrity" (Erikson, 1963) have reached the highest stage of developmental maturity. To reach this stage a high level of developmental resources is essential. Although this study does not support a causal relationship, future research may be directed toward examining the premise that a high level of developmental resources enable the older adult to face the ultimate life has to offer, death, without fear or anxiety. Death becomes the expected end to an actualized existence. Thus, the level of developmental resources present at each stage in the life span may be found to be the one constant predictor of death anxiety.

Implications for Nursing

Developmental phenomena in health promotion is a major theme in nursing (King, 1981; Peplau, 1979). Knowledge of developmental resources is becoming recognized as essential for psychological intervention with older adults (Reed, 1983; Danish, 1981). The positive correlation in the level of developmental resources and mental health determined by Reed (1983), and the negative correlation betwen mental health and death anxiety found by Gamble and Brown (1981), is supported by the results in this study. Knowledge of this correlation along with

an understanding of developmental issues salient to the older adult is essential if effective nursing interventions addressing death anxiety are to be initated.

Death as a topic for open discussion is becoming more acceptable. However, discussion of death with the elderly continues to be avoided by most caregivers. Among the multitude of educational and social programs for the elderly, few deal directly with death and dying. This is so despite accumulating evidence that older people express the need to think and talk about death (Matse, 1975; Wass, 1977). It becomes nursing's responsibility to educate the health care professionals and laypersons regarding the need for open discussion of death and dying among the elderly. This age group has demonstrated a receptiveness to opportunities for voicing their views and opinions.

Armed with an understanding of developmental phenomena, the nurse can assist the older individual to resolve old developmental issues, prepare for future developmental events such as dying, and aid progression to higher levels of developmental maturity. The importance of programs in continuing education as well as programs for the elderly which address developmental issues such as death anxiety and dying are apparant. Trent et al. (1981) found that death anxiety was reduced and death attitude changed over a short six week educational experience for older adults. These results reinforce the appropriateness of educational intervention. The implications of relating developmental resources to death anxiety and incorporating these concepts into the

educational process is profound. The ultimate relationship with death could be positively affected by this learning experience.

In view of the relatively small convenience sample in this study, the results cannot be generalized to the population at large. The results however are significant and are supported by the literature review. The findings can serve as a basis for continued research in this area of nursing knowledge.

Recommendations for further study include: 1) Replication of this study using different sample populations of older adults,i.e., various ethnic groups, differing residential situations, and members of various economic strata. 2) Further exploration of the variables developmental resources, perceived health, and years of education in contributing to the explained variance in death anxiety among different age groups of adults. 3) Examination of the Developmental Resources of Later Adulthood scale items to determine reliability and validity when measuring developmental resources among different age groups in later adulthood. 5) Research on the influence of educational programs addressing the relationship of developmental resources to the anxiety associated with death and dying and the ramifications of this education on the psychosocial well being of the older adult.

APPENDIX A

ORAL EXPLANATION AND DISCLAIMER

Oral Explanation and Disclaimer for the Study

My name is Julie Gallup. I am a registered nurse and graduate student at the University of Arizona. I am conducting a study on adults' attitudes about death related to development over one's life span. This research project is required as part of my work toward a master's degree in gerontology at the University of Arizona.

Your participation in this study is on a voluntary basis. Any information given during the study is confidential and your identity will not be revealed. Your name will not be on the forms/questionnaires. Only I will see your responses.

If you agree to participate, you will be required to:

1. Answer questions about your general background.

2. Fill out two questionnaires concerning your views about your current life and your attitude about death.

It will take approximately 60 minutes to answer all questions. They may be answered in one or two sessions as you desire. There are no right or wrong answers. The questions are designed only to get your opinions and are not under any circumstances intended to make value judgments concerning your views. You may withdraw from the study at any time with no explanation.

I expect that the information I receive will help nurses better understand older adults and their opinions about life and death. I will be happy to answer any questions you have at any time.

If you are willing to participate, you indicate this by allowing me to interview you. You do not sign your name on anything. By responding to the questions, you will be giving your consent to participate in this study. Thank you very much.

APPENDIX B

INSTRUMENTS

Developmental Resources of Later Adulthood (DRLA)
Death Anxiety Scale (DAS)
Perceived Distance to Personal Death (PDPD)

Code_____

Developmental Resources of Later Adulthood

Directions: Read each item in terms of how much the participants view the item as existing in their present life. Circle the response indicated by the participants.

AT THIS TIME OF YOUR LIFE, HOW MUCH DO YOU SEE YOURSELF AS:

		Not at All	Very Little	Somewhat	Very Much
1.	Able to adapt to changes in in my life.	1	2	3	4
2.	Making use of my physical energy.	1	2	3	4
3.	Finding meaning in my religious or spiritual beliefs.	1	2	3	4
4.	Adjusting to the changes in my physical abilities.	1	2	3	4
5.	Accepting myself as I grow older.	1	2	3	4
6.	Letting others help me when I may need it.	1	2	3	4
7.	Enjoying my pace of life.	1	2	3	4
8.	Being involved in my community in some way.	1	2	3	4
9.	Adjusting well to retirement or to my current work.	1	2	3	4
10.	Valuing my past experience.	1	2	3	4
11.	Adjusting to the changes in my income or lifestyle.	1	2	3	4
12.	Able to find meaning in life's misfortunes and crises.	1	2	3	4

Developmental Resources of Later Adulthood - Page 2

AT THIS POINT IN YOUR LIFE, HOW MUCH DO YOU SEE YOURSELF AS:

		Not at All	Very Little	Somewhat	Very Much
13.	Helping younger people or others in some way.	1	2	3	4
14.	Developing new relationships.	1	2	3	4
15.	Having a purpose in life.	1	2	3	4
16.	Enjoying the present.	1	2	3	4
17.	Relaxing more and being less competitive.	1	2	3	4
18.	Trying to keep myself in good physical health.	1	2	3	4
19.	Being as active as I can be.	1	2	3	4
20.	Finding new interests.	1	2	3	4
21.	Sharing my wisdom and experience with others.	1	2	3	4
22.	Able to accept that some day I will die.	1	2	3	4
23.	Sharing my thoughts and opinions with others.	1	2	3	4
24.	Letting go of things I used to think were so important.	1	2	3	4

Developmental Resources of Later Adulthood - Page 3

AT THIS TIME OF YOUR LIFE, HOW MUCH DO YOU SEE YOURSELF AS:

		Not at All	Very Little	Somewhat	Very Much
25.	Accepting the changes in my physical appearance.	1	2	3	4
26.	Able to adapt to changes in society.	1	2	3	4
27.	Able to accept the fact that people I love will or have died.	1	2	3	4
28.	Being a productive person.	1	2	3	4
29.	Letting go of past unfulfilled dreams and goals.	1	2	3	4
30.	Adapting to the needs of my body.	1	2	3	4
31.	Able to move around as much as is possible for me.	1	2	3	4
32.	Increasing my knowledge of things.	1	2	3	4
33.	Finding new outlooks on life.	1	2	3	4
34.	Sharing some of my tasks with others.	1	2	3	4
35.	Feeling positive about the future.	1	2	3	4
36.	Having hobbies or interests I can enjoy.	1	2	3	4

Death Anxiety Scale

Directions: The fifteen items listed are statements which describe thoughts and feelings about death and dying. They are true - false items. Please circle the answer that you think best describes how you feel about death and dying. T = True. F = False.

1.	I am very much afraid to die.	T or F
2.	The thought of death seldom enters my mind.	T or F
3.	It doesn't make me nervous when people talk about death.	T or F
4.	I dread to think about having an operation.	T or F
5.	I am not at all afraid to die.	T or F
6.	I am not particularly afraid of getting cancer.	T or F
7.	The thought of death never bothers me.	T or F
8.	I am often distressed by the way time flies so rapidly.	T or F
9.	I fear dying a painful death.	T or F
10.	The subject of life after death troubles me greatly.	T or F
11.	I am really scared of having a heart attack.	T or F
12.	I often think about how short life really is.	T or F
13.	I shudder when I hear people talking about a WW III.	T or F
14.	The sight of a dead body is horrifying to me.	T or F
15.	I feel that the future holds nothing to fear.	T or F

Perceived Distance to Personal Death

Directions: Please circle the item which best describes your own point of view.

1. Which one of these would you say about your own future?

   1 = I will be around for some time yet; more than ten years.

   2 = I have a little while longer; oh, at least five to ten years.

   3 = Not too much longer; less than five years.

   4 = The end may be any time now.

APPENDIX C

DESCRIPTIVE INFORMATION

Descriptive Information

Age: _____

Sex: 1 = Male 2 = Female _____

Number of years education: _____

Religious Affiliation: _____

1 = Catholic
2 = Protestant
3 = Jewish
4 = None
5 = Other

Race: _____

1 = White
2 = Black
3 = Hispanic
4 = Asian
5 = American Indian

Marital Status: _____

1 = Married
2 = Widowed
3 = Divorced
4 = Never Married

Employment Status: _____

1 = Employed Full Time
2 = Employed Part Time
3 = Unemployed
4 = Retired

How would you describe your health? _____

1 = Poor
2 = Fair
3 = Average
4 = Good
5 = Excellent

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