

The Death Attitude Profile-Revised (DAP-R):

A multidimensional measure of attitudes towards death¹

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Abstract

Three hundred subjects, evenly divided into young, middle-aged and older adults, completed the Death Attitude Profile-Revised (DAP-R), semantic differential ratings of life and death, and measures of well-being. Subsamples also completed Templer's Death Anxiety Scale and Hooper and Spilka's Death Perspective Scale. Principal components factor analysis confirmed our five theoretical scales, namely: Approach Acceptance (AA), Escape Acceptance (EA), Neutral Acceptance (NA), Fear of Death (FD), and Death Avoidance (DA). A subsample from each age group did a retest four weeks later. All scales were internally consistent, stable and valid. Generally, older adults were more accepting and less afraid of death, and females were more accepting (AA and EA) and less avoidant of death. Of the three measures of death acceptance, only NA correlated positively with perceived physical and psychological well-being and negatively with depression. Both FD and DA correlated negatively with psychological well-being; FD correlated positively with depression. These findings demonstrate the importance of measuring a broad spectrum of death attitudes and their different relations to perceived well-being.

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In the mid-1960s, when Templer began research on the concept of death anxiety, death was a taboo topic with behavioral scientists and mental health professionals (Templer, 1970). Much has changed since. Kubler-Ross' (1969) book on death and dying played a pivotal role in the growing popularity of death awareness. According to Feifel (1990), events of World War II, and the impact of humanistic/existential psychology all have helped thrust death research to the forefront.

The study of death is now a fertile ground for research. A variety of instruments have been developed to assess death attitudes (e.g., Collett & Lester, 1969; Gesser, Wong, & Reker, 1987; Hooper & Spilka, 1970; Marshall, 1981; Neimeyer, Dingemans, & Epting, 1977). In the applied field, the emphasis has been on death education for health and hospice professionals (Amenta, 1984; Kalish, 1976; Wass, Corr, Pacholski, & Forfar, 1985).

Death anxiety has been by far the most dominant theme in empirical studies. The inadequacy of research on other types of death attitudes becomes conspicuous in contrast with the sheer number of instruments and studies on death anxiety (Marshall, 1981). Moreover, empirical studies have outstripped theoretical

developments in death research. Very few of the studies are theoretically motivated. There has been a lack of overarching theories, although an approach based on Kelly's (1955) personal construct theory and focusing on the cognitive structure of death anxiety holds promise (Neimeyer, 1988; Epting & Neimeyer, 1984).

The present paper attempts to address the above concerns in death attitude research. Firstly, we develop an existential view of death attitudes and argue that both death acceptance and death fear are related to the pursuit of personal meaning. Secondly, we examine the different ways whereby individuals come to terms with their mortality and propose a three-component model of death acceptance. Thirdly, we provide the rationale for developing the Death Attitude Profile-Revised (DAP-R) -- a multidimensional measure of death acceptance and death avoidance as well as fear of death. Fourthly, we review the literature on the relationships between death attitudes and well-being, and make predictions regarding the various dimensions of the DAP-R. Finally, we present new data relevant to the psychometric properties and psychological correlates of the DAP-R.

An existential view of death attitudes

Fear of death

Fear of death and death anxiety are used interchangeably in the literature; although it may be helpful to regard fear of death as specific and conscious, and death anxiety as more generalized and perhaps inaccessible to awareness. One needs to be cautious in

accepting at face value the degree of fear of death verbalized at a conscious level (Feifel & Branscomb, 1973).

It is commonly believed that fear of death is universal and that its absence may reflect denial of death (Bakan, 1971; Becker, 1973; Marshall, 1980). However, death fear is not a unitary construct (Collett & Lester, 1969; Littlefield & Fleming, 1984) and issues related to death and dying are complex (Kastenbaum & Costa, 1977; Wass, 1979).

There are different reasons why death is feared. Concerns about the loss of self and the unknown beyond death, fear of pain and suffering, realization of lost opportunity for atonement and salvation, and concerns about the surviving family members are just some of the sources of death fear (Feifel, 1977; Feifel & Nagy, 1981; Fry, 1990). Furthermore, in growing up we have been imbued with the importance of achievement and self-worth; but in growing old, we realize our own impotence in the face of death which threatens to terminate all that we hold dear in life (Wass, Berardo, & Neimeyer, 1988). Another pervasive source of death fear is not so much the awareness of our finitude as our failure to lead a meaningful life (Erikson, 1963; Butler, 1975).

Fear of death and personal meaning

Our research on death attitudes is derived from an existential perspective, which posits that individuals are motivated to pursue personal meaning (Frankl, 1965; Reker & Wong, 1988; Reker, Peacock, & Wong, 1987; Wong, 1989). A corollary from

this proposition is that death fear stems from failure to find personal meaning for one's life and death.

This existential emphasis is consistent with Erikson's (1963) view that individuals in their last stage of development have to come to terms with death through resolving the crisis of integrity versus despair. Integrity is a state of mind -- the conviction that we have lived a worthwhile and meaningful life, and that we have reconciled the discrepancy between reality and ideal. If we are able to achieve integrity, then we are ready to face death without fear. On the other hand, if we feel that life has been wasted and it is too late to start life anew, we would experience despair and fear death. Therefore, whether one fears or accepts death depends to a large extent on whether one has learned to accept one's only life cycle.

A similar view has been advocated by Butler (1963, 1975). He proposes that people are more afraid of a meaningless existence than death. Individuals who see their lives as fulfilling and meaningful should show less death anxiety and more death acceptance (Lewis & Butler, 1974).

Studies on the relationship between life review and death attitudes tend to support Butler's view. For example, Georgemiller & Maloney (1984) reported that life review participants showed a decrease in death denial as compared to the alternative-activity control group. Flint, Gayton, & Ozmon (1983) found a significant correlation between subjective satisfaction of

one's past life and death acceptance. More recently, Wong & Watt (1991) reported that seniors who revealed more integrity in their reminiscence were more likely to be healthier and happier. A number of investigators have also found a relationship between death anxiety and lack of meaning in life. Durlak (1972) reported that subjects who had purpose and meaning in their lives tended also to have less death fear and more positive and accepting attitudes toward death. Quinn & Reznikoff (1985) found that subjects lacking a sense of purpose and direction in their lives reported high levels of death anxiety. In sum, there is sufficient evidence supporting the existential view that whether one fears or accepts death depends on whether one has found meaning in life and achieved integrity.

It should now become clear to the reader that death anxiety and death acceptance are intimately related. We cannot fully understand death anxiety without studying death acceptance. We agree with Ray & Najman (1974) that death acceptance is not the categorical opposite of death fear. It is more likely that fear and acceptance co-exist in an uneasy truce (Feifel, 1990). Even if we cognitively accept the inevitability and "goodness" of our own mortality, we still may not be completely free from an uneasiness about personal death and its aftermath. Similarly, no matter how dreadful death may appear, we all have to learn to accept our own mortality in some fashion. The following section examines the various ways of preparing oneself psychologically

before the final exit.

A conceptual analysis of death acceptance

Death acceptance defined

Kubler-Ross (1969) considers acceptance as the last stage of of dying. For her, it is a passive resignation to the inevitability of death after denial, anger, bargaining and depression. Her conception of acceptance is primarily based on observation of the dying process of terminally ill patients. In the present paper, we are concerned with the psychological preparations of normal functioning individuals towards the prospect of personal demise. Therefore, death acceptance may be broadly defined as being psychologically prepared for the inevitable final exit. It is likely that those who have already come to terms with death prior to the diagnosis of terminal illness may short-circuit the stages of dying as described by Kubler-Ross.

Our insight into death acceptance came from our research on successful aging. Having worked with the elderly for many years, we could not help but be impressed by their willingness to talk about death, and their apparent lack of death anxiety. This observation corroborates the general finding that the majority of older adults are not afraid of death and like to talk about it (Kastenbaum & Aisenberg, 1972; Wass et al., 1988). In some cases, we even detected an eager anticipation to be finally freed from the bondage and burden of a frail body. Therefore, we became

convinced that low death anxiety does not necessarily reflect "denial mechanisms" and that acceptance seems to be the prominent death attitude among the elderly.

Klug & Sinha (1987) regard death acceptance as "being relatively at ease with one's awareness of personal mortality" (p.229). They define death acceptance as "the deliberate, intellectual acknowledgement of the prospect of one's own death and the positive emotional assimilation of the consequences" (p.230). Thus, death acceptance consists of two components: cognitive awareness of our own finitude and a positive (or at least a neutral) emotional reaction to this cognizance.

Measurements of death acceptance

Although death acceptance has received increasing attention, issues regarding conceptualization and measurement have not been adequately dealt with. Kurlychek (1976) made a preliminary proposal to measure death acceptance. Ray & Najman (1974) developed a 7-item Death Acceptance Scale, which consists of heterogenous items, including denial (Death is not something terrible), death as an escape (Death is merely relief from pain), and positive attitudes (Death is a friend). This may account for the low alpha coefficient (.58).

Klug & Sinha (1987) conceptualize death acceptance as consisting of two components: confrontation of death, and integration of death. Confrontation, the cognitive component, refers to facing up to one's own death; it suggests cognizance of

mortality as a fact of life (Weisman, 1974). Integration is the positive affective reaction to confrontation.

They developed a 16-item Death Acceptance Scale to measure the two components. Unfortunately, the items have questionable face validity. Most of the Confrontation items have to do with avoidance, such as "I avoid discussion of death when the occasion presents itself" and "If possible, I avoid friends who are grieving over the loss of someone". It is debatable whether negation of avoidance means positive acceptance. There is only one item stated in the positive: "I am willing to discuss death with a dying friend", but this item is about another person's death rather than personal death. Still another Confrontation item, "After discussing the subject of death, I feel depressed" measures affective reaction rather than cognition.

The Integration items are equally problematic. Most of them measure the consequence rather than affective reactions to death acceptance. Statements such as "I enjoy life more as a result of facing the fact of death", "Accepting death helps me to be more responsible for my life" and "My life has more meaning because I accept the fact of my own death", do not measure positive affective reactions per se, but rather assess the positive impact of death acceptance on one's present life.

Flint, Gayton, & Ozmon's (1983) death acceptance measure was primarily based on the death concern scale developed by Klug & Boss (1977). The psychometric properties of this new acceptance

scale are not reported. The result shows a positive relationship between life satisfaction and death acceptance in an elderly sample.

A three-component model of death acceptance

On the basis of our conceptual analysis of death attitudes, we have identified three distinct types of death acceptance:

Neutral Acceptance (NA). Death is considered as an integral part of life. To be alive is to live with death and dying (Armstrong, 1987; Kubler-Ross, 1981; Saunders & Baines, 1983; Morison, 1971). One neither fears death nor welcomes it; one simply accepts it as one of the unchangeable facts of life, and tries to make the best of a finite life. Therefore, it implies an ambivalent or indifference attitude, similar to Hooper & Spilka's (1970) Indifference towards Death Subscale.

A basic tenet of humanistic/existential psychology is that self-actualization is possible only when the individual has come to terms with the fact of personal mortality (Bugental, 1965; Feifel, 1990; Maslow, 1968; May, Angel, & Ellenberger, 1958). Therefore, an actualized adult is not threatened by personal death. Frankl (1965) also believes that finding a meaning in one's life removes fear of death, and increases one's well-being. Alexander & Adlerstein (1965) report that non-religious subjects who see death as the natural end of life may plunge themselves into the rewards of living. Bregman (1989) remarks that if death is natural, as Kubler-Ross insists that it is, then acceptance of

death is a moral good, and denial is a violation of this good. This ethical naturalism is independent of one's particular beliefs in the afterlife.

Approach Acceptance (AA). This attitude implies belief in a happy afterlife (Dixon and Kinlaw, 1983). It is similar to what is tapped by Hooper & Spilka's (1970) subscale of Death as Afterlife of Reward. It has been well documented that belief in an afterlife is related to religious beliefs and practices. Jeffers, Nichols, & Eisdorfer (1961) found that individuals with strong religious commitments were both more likely to believe in an afterlife and also more likely to show less fear of death. Berman (1974) observed that belief in an afterlife was closely tied to the degree of religious involvement. Aday (1984) found that belief in afterlife was primarily a function of religion and not directly a correlate of fear of death. Hertel (1980), in a discriminant analysis of belief in heaven and the afterlife, found that religious affiliation was the only significant predictor. Peterson & Greil (1990) found that belief in afterlife was significantly related to a variety of measures of religiosity. They also found that death experience was positively correlated with religiosity, suggesting that death experiences incline people towards greater religious involvement. Klenow & Bolin (1989) found that religion and church attendance were the only significant discriminating variables of belief in an afterlife. The results also indicate the majority of adults in the United

States believe in life after death.

In view of the evidence that belief in afterlife is rooted in religiosity, it seems logical to deduce that religious individuals should experience less death anxiety. However, the relationship between religious beliefs and fear of death remains inconclusive.

Some found no relationship between religious beliefs and fear of death (Feifel 1974; Kalish, 1963; Templer & Dodson, 1970). Others have even found a positive relationship (Templer & Ruff, 1975; Young & Daniels, 1981). However, most of the studies report a negative relationship (e.g., Feifel & Nagy, 1981; Gibbs & Achterbery-Lawlis, 1978; Hooper & Spilka, 1970; Jeffers, Nichols & Eisdorfer, 1961; Martin & Wrightsman, 1965; Stewart, 1975; Templer, 1972).

It has also been noted that the relationships between belief in afterlife and death anxiety tend to be small or nonsignificant, depending on the scale used to measure death anxiety (Berman & Hays, 1975). The disparity among the previously reported studies may be due to different conceptualizations and measures of religiosity and death anxiety (Schultz, 1978).

There is also some evidence that fear of death is lowest when people have either strong faith or no faith (e.g., McMordie, 1981; Smith, Nehemkis & Charter, 1983; Williams & Cole, 1968). It appears that those who are firm believers in either afterlife or non-existence beyond death have less fear than those who are uncertain. This raises the possibility that firm believers, in

contrast to those who are uncertain, may have acquired a sense of symbolic immortality (the ability to symbolize death and life continuity), that helps one cope with the fear of death (Drolet, 1990). Drolet (1990) reported a negative relationship between death anxiety and purpose in life, and a positive relation between purpose in life and a sense of symbolic immortality. Steinitz (1980) found that belief in afterlife is associated with optimism and meaningfulness. Therefore, considering all the findings on religiosity and belief in afterlife, it appears that firm believers tend to have less death anxiety and enjoy a higher level of personal meaning and well-being.

Escape Acceptance (EA). When life is full of pain and misery, death may appear to be a welcomed alternative. Vernon (1972) suggests that the fear of living under certain conditions may be stronger than the fear of death. When people are overwhelmed by suffering and pain, and there is little likelihood of relief, death seems to offer the only escape. Therefore, in EA the positive attitude towards death is not based on the inherent "goodness" of death, but on the "badness" of living. Typically, people exhibit EA because they can no longer effectively cope with the pain and problems of existence.

In sum, there are three different routes whereby individuals come to terms with personal death. Although various investigators have alluded to these three types of death acceptance, these concepts had never been clearly defined and measured until the

Death Attitude Profile was developed.

Rationale for the Death Attitude Profile-Revised

The DAP-R is a revision of the DAP, a multidimensional measure of attitudes toward death, developed by Gesser, Wong, and Reker (1987-88). In its original form, the DAP consisted of four factorially derived dimensions: (1) Fear of Death/Dying (negative thoughts and feelings about the state of death and process of dying), (2) Approach-Acceptance (view of death as a gateway to a happy afterlife); (3) Escape-Acceptance (view of death as escape from a painful existence); and (4) Neutral Acceptance (view of death as a reality that is neither to be feared nor welcomed).

In our subsequent research on the DAP with college students and middle-aged adults, we discovered that some of them would rather avoid the topic of death. Although a negative attitude is implied by both death fear and death avoidance, a distinction needs to be made. In death fear, a person confronts death and the feelings of fear it evokes. However, in death avoidance, a person avoids thinking or talking about death in order to reduce death anxiety. Thus, death avoidance implicates some sort of defense mechanism that keeps death away from one's consciousness. In other words, two persons may both share a negative attitude towards death, one shows a high degree of fear of death, while another a high level of avoidance of death. This consideration led to the inclusion of a 7-item Death Avoidance subscale.

Since we are interested in death attitudes, items related to

dying in the Fear of Death/Dying dimension of the DAP were eliminated and new Fear of Death items were added. Additional items were also added to the three acceptance scales. As a result, the original 21-item DAP was expanded to 36 items.

To empirically determine the face validity of five dimensions in the DAP-R, 10 young, 10 middle-aged, and 10 elderly subjects were asked to place each item into the most conceptually appropriate category. All 36 items reached our criterion of 70% agreement in classification. In fact, most of the items exceeded the 90% agreement level.

Although the original DAP is adequate psychometrically, the DAP-R is more comprehensive and conceptually purer. The data we have collected thus far convince us that the DAP-R is indeed superior to the original DAP. Some of these data will be presented later. A clear advantage of this DAP-R is that it represents a broad spectrum of death attitudes ranging from avoidance, neutral to approach acceptance. We are pleased that some nursing schools have already employed the DAP-R to educate students about the varieties of death attitudes and their implications for well-being.

Correlates of death attitudes

We have shown that how we view life affects our attitudes towards death. The converse is also true: how we view death affects how we conduct our present lives. Feifel (1959) wrote: "We are mistaken to consider death as a purely biological event. The

attitudes concerning it, and its meaning for the individual can serve as an important organizing principle in determining how he conducts himself in life" (p.128). Basically, there are two different views about death -- either it is the end of one's identity or it is a doorway to another life (Epting & Neimeyer, 1984). If death is viewed as the end of existence, then one must live for the here and now. On the other hand, if death is viewed as a passage to another life, then one must live this life with the next life in mind. Kalish (1981) also proposes that these different conceptions about death have impact on our present lives: "Many individual derive both comfort and strength from a deeply held belief that some form of personal self-aware existence will follow death. Others appear to find equivalent satisfaction from believing death leads to total extinction" (p.231).

Now that five different death attitudes are measured by the DAP-R, it is possible to test the predictions regarding their relationships with well-being. It is hypothesized that fear of death and death avoidance should be negatively related to psychological well-being and positively related to depression, while neutral and approach acceptance should be positive related to psychological well-being and negatively related to depression.

Since neutral acceptance reflects a mature outlook on life and death, and may motivate individuals to lead a full life, it should be positively related to perceived physical well-being. Escape Acceptance is predicted to be negatively correlated with

perceived physical and psychological well-being, because it is viewed as an attempt to escape from physical and psychological pain.

Differential predictions can be made for the five dimensions of the DAP-R. It is predicted Fear of Death (FD) will be positively related to Templer's (1970) Death Anxiety but negatively related to SD ratings of life and death. Avoidance to think of death reflects a negative attitude towards death; but individuals may maintain positive attitude towards life by not thinking about death. Therefore, it is predicted that Death Avoidance (DA) is unrelated to SD ratings of life, but negatively related to SD ratings of death. Neutral Acceptance (NA) is expected to be positively related to Spilka's Indifference subscale. Approach Acceptance (AA) is predicted to be positively related to Hooper & Spilka's Belief in Afterlife subscale, and SD ratings of life and death. Since Escape Acceptance (EA) reflects a negative view towards life but a positive view towards death, it is predicted that EA should be negatively related to Templer's Death Anxiety and SD ratings of life, but positively related to SD ratings of death. This complex pattern of predictions permits us to determine the convergent and discriminant validity of the DAP-R.

To test the above predictions, all subjects were given Reker & Wong's (1984) Perceived Well-Being Scale (which measures both perceived physical and psychological well-being) and Zung's (1965) Depression Scale. They were also given semantic differential (SD)

ratings designed to measure attitudes towards life and death; a high score always reflects a positive attitude. In addition, a subset of the subjects were also given Templer's (1970) Death Anxiety Scale, as well as Hooper & Spilka's (1970) Belief in Reward of Afterlife and Indifference towards Death subscales. Another subset of the subjects were given a retest in order to determine the temporal stability of the DAP-R.

In addition to investigating the correlates of the DAP-R, we are also interested in age and gender differences in death attitudes. Since we administered the DAP-R to young, middle-aged and older adults, we were able to investigate how different death attitudes were related to these demographical variables.

Age differences

Life-span psychologists (Levinson, 1977; Neugarten, 1968; Kastenbaum, 1979) have postulated that different age groups vary in their attitudes towards death, partly because of their differential proximity and exposure to death. Past research has focused mainly on age differences in fear of death. Although Templer, Ruff & Franks (1971) found no relationships between age and death anxiety, most of the studies showed that older adults had less fear of death (Feifel & Brancomb 1973; Immarinao, 1975; Wass & Myers, 1982).

With a multidimensional approach to death attitudes, the picture is more complex. Keller et al (1984) measured three separate dimensions of death attitudes: Factor 1, Evaluation of

Death in General; Factor II, Belief in the Hereafter and Factor III, Death Anxiety Related to Self. With respect to Factor 1, the middle-aged adults were less anxious than their older and younger counterparts. For Factor II, the oldest group had greater belief in the afterlife than the middle-aged, but were not significantly different from the young adults. For Factor III, the oldest group showed significantly less anxiety towards death of self than all the younger groups.

Reduction of death anxiety in old age should be accompanied by an increase in death acceptance as one grows older. Erikson (1963) suggests the major developmental task in old age is to accept one's past life and the reality of death. Thus, older adults should show greater neutral acceptance. Indeed, Gesser et al. (1987) found NA to increase with age.

It has been reported that the elderly tend to be more religious and have stronger beliefs in the afterlife than either the middle-aged or young adults (Bengtson, Cuellar, & Ragan, 1977). While it is questionable whether this difference reflects true developmental stages or simply cohort effects, it seems reasonable to predict that AA will be higher among the elderly. Keller et al (1984) have provided some support for this hypothesis.

Older people are more likely to be beset by personal losses and physical illness. Their inability to carry on with many of the activities and roles that used to give them meaning and

fulfilment, coupled with social isolation and loneliness, will further increase their longing to be delivered from a painful existence. Therefore, it is predicted that EA should be higher for the elderly, a prediction that has received some support (Gesser et al., 1987).

Gender differences

In his review of the correlates of death anxiety, Pollak (1979) found that most of the studies reported a higher level of death fear in women. Some studies failed to find gender differences (Aronow, Rauchway, Peller, & DeVito, 1980; Conte, Weiner, & Plutchik, 1982; Mullins & Lopez, 1982; Viney, 1984). Still others found that men had higher anxiety than women (Robinson & Wood, 1984; Cole, 1978). But most of the recent work has confirmed Pollak's observation (McMordie, 1978; Neimeyer, Bagley, & Moore, 1986; Neimeyer, Dingemans, & Epting, 1977; Lonetto, Mercer, Fleming, Bunting, & Clare, 1980; Wass & Myers, 1982). In fact, this difference has been found in other cultures (Lonetto et al, 1980; McMordie & Kumar, 1984).

Again, the picture becomes more complicated when one employs a multidimensional approach. For example, Neimeyer et al (1986) found that women scored higher on Dying of Self, but not on the Death of Self, Death or Dying of others. Dattel & Neimeyer (1990) gave a racially heterogeneous group of adults the DAS, Threat Index (TI), Jourard Self-Disclosure Questionnaire (JSDQ) and a measure of social desirability. Results show that women display

greater death anxiety than men on DAS but not on TI. The greater death anxiety of women remained on DAS even when the effects of self-disclosure and social desirability were statistically controlled. The results discredit the suggestion that greater death anxiety reported by women was due to their tendency to disclose their fears and anxiety (Stillion, 1985). Dattel & Neimeyer (1990) conclude that the weight of evidence suggests that women do have a higher tendency to report more death anxiety, especially about their own dying.

With respect to belief in afterlife, most of the findings again show that females tend to score higher. Klenow & Bolin (1989) found that females are more likely to be believers in life after death. Berman & Hays (1975) found that females tended to have higher belief in afterlife and lower scores in death anxiety.

In view of the above literature, it is predicted that older adults will show less death fear and more death acceptance than younger groups. It is also predicted that females will score higher than males in fear of death and approach acceptance.

An empirical study of the DAP-R

Method

Subjects

One hundred young adults (males = 55, females = 45; mean age = 23.3, age range 18-29 years), 100 middle-aged (males = 47, females = 53; mean age = 41.8, age range 30-59 years), and 100

older adults (males = 35, females = 65; mean age = 72.9, age range 60-90 years) served as subjects. Subjects were recruited from the community through various means, such as poster notices, newspaper advertising, contacts with community agencies, and word of mouth.

Subjects comprised a cross-section of volunteers living in a mid-sized city of 65,000.

Instruments

In addition to the DAP-R, the following instruments were employed in the study:-

Death Anxiety Scale (DAS). The DAS (Templer, 1970) is a 15-item true-false measure of verbalized death anxiety that addresses death, thoughts of death, disease, and time perspective. Templer (1970) reports a three week stability coefficient of .83 for a group of college students. The DAS correlates .74 with the Boyar (1964) Fear of Death Scale; moderate correlations with a number of relevant MMPI subscales have also been reported (Templer, 1970).

Death Perspective Scale (DPS). The DPS (Hooper & Spilka, 1970) is a 60-item multidimensional measure of perspectives toward death. Eight scales are based on items in a 6-point Likert-type format from strongly disagree (1) to strongly agree (6). Two subscales, Death as an Afterlife of Reward (6 items), and Indifference toward Death (5 items), were used in this study. Coefficient alpha is reported to be .92 for Death as Afterlife of Reward, and .71 for Indifference toward Death. Construct validity has been supported by moderate intercorrelations of the scales

with measures of religiosity (Spilka, Stout, Minton, & Sizemore, 1976).

Semantic Differential (SD). Two measures consisting of 12 7-point bipolar adjectives (e.g., pleasant-unpleasant, meaningful-meaningless, satisfying-dissatisfying) were constructed to assess attitudes toward Life and Death. A high score on each concept is indicative of a positive attitude. Alpha coefficients were found to be .93 and .95 for Life and Death, respectively.

Perceived Well-Being Scale (PWB). The PWB is a 14-item 7-point Likert scale of psychological and physical well-being (Reker & Wong, 1984). Psychological well-being is a 6-item index of the presence of positive emotions such as happiness, joy, and peace of mind and the absence of negative emotions such as fear, anxiety, and depression. The alpha coefficient was found to be .82 in a sample of 238 older adults. Test-retest correlation over a 2 year period was .79. Psychological well-being is correlated positively with happiness and negatively with depression.

Physical well-being is an 8-item measure of self-rated physical health and vitality coupled with perceived absence of physical discomforts. Internal consistency and 2-year stability estimates are .78 and .65, respectively. Physical well-being is correlated positively with happiness and negatively with depression and physical symptoms.

Zung Depression Scale. The Zung Depression Scale is a 20-item 4-point measure of self-reported depression "during the past

week" (Zung, 1965). Response options range from "a little of the time" to "most of the time". The scale measures the presence of pathological disturbances or changes in four areas: somatic, psychological, psychomotor, and mood. Knight, Waal-Manning, & Spears (1983) report an alpha coefficient of .79. The scale has been shown to discriminate depressed from non-depressed psychiatric patients and normal subjects (Zung & Wonnacott, 1970) unaffected by a variety of demographic factors including age, sex, marital status, financial status, and educational level (Zung, 1967).

Procedure

The DAP-R, the SD ratings of Life and Death, the PWB, and the Zung Depression Scale were administered in counterbalanced order to all subjects. In addition, Templer's Death Anxiety Scale and Hooper & Spilka's subscales of Death as an Afterlife of Reward and Indifference toward Death were also administered to a subsample of 83 respondents. Four weeks later, a random sample of 30 subjects were drawn from each of the 3 age groups and retested on the DAP-R.

Results and Discussion

Factor Structure

The responses to the 36-item DAP-R were subjected to principal component factor analysis. Consistent with our theoretical formulation, 5 components were extracted and rotated to an orthogonal (varimax) solution. The 5 components accounted

for 63.1 % of the variance.

All 36 items loaded .40 or greater on at least one component. Only one item, "Death is the worst thing that could possibly happen to me" was factorially complex, loading .40 or greater on two components. The 5 components clearly represent the Approach Acceptance (AA), Fear of Death (FD), Death Avoidance (DA), Escape Acceptance (EA), and Neutral Acceptance (NA) theoretical scales. The first component contained all 10 of the 10 items from the Approach Acceptance scale (29.5% of the variance). The second component contained all 8 of the 8 items from the Fear of Death scale plus two negatively loading items from the Neutral Acceptance scale (13.8% of the variance). Component three is represented by 5 of the 5 Death Avoidance items plus one from the Fear of Death scale (8.5% of the variance). The fourth component contained 5 of the 6 Escape Acceptance items (6.0% of the variance) and the fifth component contained 5 of the 7 Neutral Acceptance items plus one Escape Acceptance item (5.3% of the variance).

Final DAP-R Scales. Given the extremely good empirical fit to the theoretically derived DAP-R scales, we eliminated the factorially complex item and the three "intrusion" items and refactored the remaining 32 items. The factor structure is presented in Table 1. The final DAP-R consists of 10 Approach

<Table 1 about here>

Acceptance items (33.3% of the variance); 7 Fear of Death items

(13.4 % of the variance); 5 Death Avoidance items (7.7% of the variance); 5 Escape Acceptance items (6.0% of the variance); and 5 Neutral Acceptance items (5.7% of the variance). The 5 components account for 66.2% of the variance.

The result of factor analysis has made it quite clear that the five dimensions are relatively independent. The high loading of each item on the theoretically appropriate factor and the good to high alpha coefficients demonstrate that factors are pure and internally consistent.

The DAP-R intercorrelation matrix is presented in Table 2.

< Insert Table 2 about here >

Of note is the moderate positive association between AA and EA, and the moderate negative association between AA and FD. The Death Avoidance (DA) dimension correlates positively with FD, accounting for 22% of the variance, and negatively with AA (4% of the variance). Thus, we have replicated Gesser et al. (1987-88) and demonstrated that Death Avoidance is relatively distinct from Fear of Death. It is surprising that DA has never been investigated in its own right, given the enormous amount of work already done on death anxiety. A great deal of additional research is needed to understand how DA and FD are related to each other and what variables are related to these two different manifestations of the same uneasiness about personal mortality.

One important observation is that death attitudes in individuals tend to be a mixed bag, with conflicting attitudes

that counterbalance each other in the service of adaptation (Feifel, 1990). Therefore, in death education and counselling, it is important that individuals are made aware of the diverse attitudes that may be present, and how these attitudes together determine the way they conduct their lives.

Reliability of the DAP-R

Alpha coefficients of internal consistency and 4 week test-retest coefficients of stability are presented in Table 3. Alpha

<Table 3 about here>

coefficients range from a low of .65 (Neutral Acceptance) to a high of .97 (Approach Acceptance); stability coefficients range from a low of .61 (Death Avoidance) to a high of .95 (Approach Acceptance). Taken together, the DAP-R scales have good to very good reliability.

Convergent-Discriminant Validity

The correlations pertaining to the convergent-discriminant validity of the DAP-R are presented in Table 4. FD was positively

< Insert Table 4 about here >

related to Templer's Death Anxiety Scale and negatively related to SD ratings of Life and Death. DA was negatively related to SD ratings of Death, but not significantly related to SD ratings of Life. NA was positively related to Hooper & Spilka's Indifference toward Death and SD ratings of Life, but unrelated to SD ratings of Death. AA was positively related to Hooper & Spilka's measure

of Death as an Afterlife of Reward, and to SD ratings of Life and Death. Finally, EA was positively correlated with SD ratings of Death, but contrary to prediction, was unrelated to SD ratings of Life.

The fact that nearly all of the predicted correlations were confirmed attests to the construct validity of the five dimensions. The findings that EA is negatively related to perceived physical well-being (see Table 7) but not to SD ratings of life attitude suggest that poor physical health might be the main reason for EA.

Age and Gender Differences

The death attitude ratings of the young, middle-aged and older adults were subjected to a 3 (age group) by 2 (sex) Multivariate Analysis of Variance (MANOVA). Only the main effects of age and sex were significant.

Age Differences. Age group means (averaged over the total number of items for each scale), standard deviations, and F-ratios are presented in Table 5. Consistent with prediction, there was

< Table 5 about here >

a significant multivariate effect for age (Multivariate $F(10, 580) = 5.46, p < .001$). Univariate F -tests revealed significant differences for Fear of Death ($F(2, 294) = 3.42, p < .05$), Neutral Acceptance ($F(2, 294) = 8.55, p < .001$), and Escape Acceptance ($F(2, 294) = 14.76, p < .001$). A marginal level of significance was found for Approach Acceptance ($F(2, 294) = 2.86, p < .06$).

Noteworthy here is the greater variability in AA in all age groups. This suggests that opinions are more sharply divided with respect to beliefs in an afterlife.

Subsequent post hoc Tukey comparisons of the means shows that older adults are significantly less afraid of death and more accepting of death as a reality compared to the young, but not when compared to the middle-aged. Older adults are significantly more prone to accepting death as an escape from life compared to both middle-aged and younger adults. Older adults are also more accepting of life after death, particularly in comparison to middle-aged adults.

Kalish (1976) has proposed several explanations for the decrease of FD in older adults. First, the elderly may feel that they have already have their "fair share of life" and feel that they are ready to die. In contrast, young adults have not yet fulfilled their life goals, and therefore fear that death may cut short what is rightfully theirs (Diggory & Rothman, 1969). There is evidence that fear of death is relatively high at this stage of life (Birren, Kinney, Schaie, & Woodruff, 1981).

Another plausible interpretation is that the elderly may have become socialized with respect to death, because they have survived the death of so many friends and loved ones (Kalish, 1976). It is also possible that they may have lost interest in life because of physical decline, illness and personal losses. From an existential perspective, many of elderly may feel that

they have completed their missions in life and are ready to die.

Our finding on EA is consistent with the notion that the elderly are willing to be freed from the infirmities of the body. Decreased opportunities for engaging in meaningful activities and increased isolation may also contribute to the increase in EA with advancing age.

Results on AA are more complex. As predicted, older adults indeed show the highest AA scores. However, they differ significantly from the middle-aged but not the young adults. This pattern of findings replicate the result of Keller et al. (1984).

One plausible interpretation is that young adults may still have residues of beliefs in heaven from childhood. Such beliefs are further eroded in middle life, but revived in old age.

Gender Differences. MANOVA revealed a significant multivariate effect for gender (Multivariate $F(5, 290) = 2.48, p < .05$). Univariate F -tests showed significant differences on Death Avoidance, Approach Acceptance, and Escape Acceptance. Gender means, standard deviations, and F -ratios are presented in Table 6.

< Table 6 about here >

Examination of the means shows that females are significantly more accepting of life after death and significantly more accepting of death as an escape from life compared to males. Males, on the other hand, are significantly more prone to avoid all thoughts of death compared to females.

Death Attitudes and Well-Being

Of interest is the relationship of death attitudes to well-being. Most of our predictions were supported by the results, which are presented in Table 7. The bottom panel shows the results for the combined sample.

< Table 7 about here >

FD is associated with psychological distress and depression. The associations, however, hold only for the older adults. Templer (1971) reports that death anxiety is a common component of depression. Such anxiety is alleviated when depression lessens.

DA is associated with psychological distress, but significant associations were found only for the middle-aged and older adults. For older adults, DA is also related to depression. It is possible that DA prevents individuals from dealing with thoughts and feelings of death which exist below conscious awareness and which might, nonetheless, affect behaviour. Failure to deal with these thoughts and feelings creates psychological discomfort.

NA is positively related to psychological and physical well-being and negatively to depression, particularly for the young and middle-aged. Individuals who accept death as an inevitable reality of life appear to enjoy physical and mental health. It is likely that individuals with this attitude are motivated to make life as full and meaningful as possible.

AA is positively associated with subjective well-being, but this was only found for the older adults. Older adults who are more accepting of life after death experience greater

psychological well-being and lower depression.

EA was associated with reduced physical well-being. This relationship was strongest for young adults. Young adults whose lives are filled with pain, illness, and suffering are probably more likely to long for an escape.

Considering all the correlations with well-being and depression, it is clear that NA is most adaptive. This result reinforces our earlier suggestion that when individuals come to terms with death as an inevitable fact of life, they are more likely to make the best use of their lives. It is also consistent with the reasoning that people who feel that they have led a meaningful, fulfilling life are more likely to accept death without fear. In either event, the beneficial effects of NA on mental health are quite convincing.

The benefits of AA seem limited to the older adults. As the end of their earthly journey approaches, when we have to let go all the things that are dear to us, belief in an happy afterlife is indeed a powerful source of hope and comfort. No wonder such belief is negatively related to feelings of depression and positively related to perceived psychological well-being. A combination of NA and AA seems to be the best antidote to depression and death fear.

Conclusions

To our knowledge, the DAP-R is the only instrument that measures a broad spectrum of death attitudes. It is our contention

that a better understanding of death fear can be achieved only in the context of other death attitudes. It would not be fruitful to study death fear in isolation. It is possible that the same level of death fear may reflect very different death attitudes. For example, the person with a low death fear and a high escape acceptance is very different from another person with the same low level of death fear, but a high neutral acceptance. The former is probably sick and tired of living; the latter may be highly motivated to complete his/her life tasks before it is too late. Therefore, it is the patterns of different death attitudes rather than the magnitude of a single death attitude that best captures individual differences.

The findings on the relative magnitude of death attitudes reinforce our observation that death acceptance is more salient than death anxiety. The scores for both DF and DA tend to be around the midpoint of the 7-point scale, thus reflecting uncertainty. All scores for the three acceptance scales reflect endorsement. Sooner or later, all individuals must in their own ways come to terms with their personal mortality. Therefore, it is important to study how individuals psychologically prepare themselves for the final exit and measure the different routes towards death acceptance.

The existential emphasis that people need a sense of meaning in order to survive and face death offers a useful conceptual framework to integrate various patterns of death attitudes. Thus,

those who feel that they have led a productive, meaningful life should be high in NA but low in FD, DA and EA. Individuals who derive meaning and optimism from beliefs in a happy afterlife would be high in AA but low in FD, DA, and EA. We can also predict that those who find life devoid of meaning because of an incurable disease may be high in EA, but low in FD and DA. In short, the meaning construct is relevant to many different constellations of death attitudes. Future research should focus on individual differences in the overall patterns of death attitudes.

Existential theory provides us with an integrating conceptual framework, whereas the DAP-R promises to be a valid and reliable instrument. Armed with these two tools, we are better equipped to grapple with the complex issues surrounding death attitudes.

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Footnotes

1. Reprints of this articles may be obtained from Paul T. P. Wong, Department of Psychology, Trent University, Peterborough, Ont. Canada, K9J 7B8.

2. Gina Gesser died unexpectedly shortly after collecting the data for this paper. This paper is dedicated to her in memory of her contributions to research on death attitudes.

Table 1

Rotated component structure of the DAP-R

Item No.	Loading	Item
<u>Component I: Approach Acceptance (AA)</u>		
16.	.90	Death brings a promise of a new and glorious life.
25.	.90	I see death as a passage to an eternal and blessed place.
15.	.89	Death is a union with God and eternal bliss.
22.	.86	I look forward to a reunion with my loved ones after I die.
28.	.84	One thing that gives me comfort in facing death is my belief in the afterlife.
4.	.84	I believe that I will be in heaven after I die.
31.	.83	I look forward to a life after death.
8.	.80	Death is an entrance to a place of ultimate satisfaction.
13.	.80	I believe that heaven will be a much better place than this world.
27.	.73	Death offers a wonderful release of the soul.
<u>Component II: Fear of Death (FD)</u>		
32.	.76	The uncertainty of not knowing what happens after death worries me.
18.	.76	I have an intense fear of death.
21.	.75	The fact that death will mean the end of everything as I know it frightens me.
7.	.71	I am disturbed by the finality of death.
2.	.71	The prospect of my own death arouses anxiety in me.
20.	.69	The subject of life after death troubles me greatly.
1.	.44	Death is no doubt a grim experience.

Item No.	Loading	Item
<u>Component III: Death Avoidance (DA)</u>		
19.	.83	I avoid thinking about death altogether.
12.	.82	I always try not to think about death.
26.	.81	I try to have nothing to do with the subject of death.
3.	.73	I avoid death thoughts at all cost.
10.	.69	Whenever the thought of death enters my mind, I try to push it away.
<u>Component IV: Escape Acceptance (EA)</u>		
29.	.80	I see death as a relief from the burden of life.
23.	.77	I view death as a relief from earthly suffering.
9.	.75	Death provides an escape from this terrible world.
11.	.74	Death is deliverance from pain and suffering.
5.	.68	Death will bring an end to all my troubles.
<u>Component V: Neutral Acceptance (NA)</u>		
24.	.83	Death is simply a part of the process of life.
14.	.81	Death is a natural aspect of life.
6.	.70	Death should be viewed as a natural, undesirable, and unavoidable event.
30.	.49	Death is neither good nor bad.
17.	.40	I would neither fear death nor welcome it.

Table 2

Intercorrelations of the DAP-R dimensions

DAP-R Dimensions	DA	NA	AA	EA
Fear of Death (FD)	.47***	-.12*	-.40***	-.28**
Death Avoidance (DA)		.02	-.20**	-.10
Neutral Acceptance (NA)			-.07	-.03
Approach Acceptance (AA)				.57***
Escape Acceptance (EA)				---

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

Table 3

Reliability of the DAP-R

DAP-R Dimension	Alpha Coefficient	Test-Retest (N=90) (4 week interval)
Fear of Death	.86	.71
Death Avoidance	.88	.61
Neutral Acceptance	.65	.64
Approach Acceptance	.97	.95
Escape Acceptance	.84	.83

Table 4

Correlates of the DAP-R

DAP-R Dimension	Templer's Death Anxiety	Hooper & Spilka's Afterlife	Indiff	Semantic Differential Life	Death
Fear of Death	.61***	-.33***	-.07	-.25***	-.61***
Death Avoidance	.16	-.02	-.01	-.11	-.32***
Neutral Acceptance	-.34***	.03	.27***	.20***	-.08
Approach Acceptance	-.27**	.82***	.15	.20***	.59***
Escape Acceptance	-.25**	.28**	.23*	.01	.42***

*** $p < .001$

** $p < .01$

* $p < .05$

Table 5

Death attitude means (standard deviations) as a function of age

Death Attitude Dimension	Age Groups			F	Tukey HSD		
	1 18-29	2 30-59	3 60-90		1vs2	2vs3	1vs3
(n) Multivariate	(100)	(100)	(100)	5.46***			

Fear of Death	3.25 (1.3)	3.10 (1.1)	2.72 (1.3)	3.42*			*
Death Avoidance	2.84 (1.2)	2.89 (1.4)	2.93 (1.5)	<1.00			
Neutral Acceptance	5.31 (0.9)	5.59 (0.9)	5.80 (0.8)	8.55***			**
Approach Acceptance	4.84 (1.7)	4.70 (1.8)	5.38 (1.5)	2.86+		*	
Escape Acceptance	4.06 (1.7)	4.15 (1.6)	5.20 (1.2)	14.76***		**	**

*** $\underline{p} < .001$ ** $\underline{p} < .01$ * $\underline{p} < .05$ + $\underline{p} < .06$

Table 6

Death attitude means (standard deviations) as a function of gender

Death Attitude Dimension	Male	Female	F
(n) Multivariate	(137)	(163)	2.48*

Fear of Death	3.13 (1.3)	2.93 (1.3)	<1.00
Death Avoidance	3.07 (1.3)	2.74 (1.4)	4.82*
Neutral Acceptance	5.61 (0.8)	5.53 (1.0)	2.22
Approach Acceptance	4.66 (1.7)	5.23 (1.6)	7.04**
Escape Acceptance	4.19 (1.6)	4.70 (1.6)	4.08*

*** $\underline{p} < .001$ ** $\underline{p} < .01$ * $\underline{p} < .05$

Table 7

Death attitudes and well-being

Age Group	DAP-R Dimension	Well-Being		
		Psychological	Physical	Depression
Young (N=100)	Fear of Death	-.15	-.16	.18
	Death Avoidance	-.19	-.11	.03
	Neutral Acceptance	.10	.28**	-.28**
	Approach Acceptance	.08	-.05	.01
	Escape Acceptance	-.11	-.26**	.15
Middle- Aged (N=100)	Fear of Death	-.11	.02	.03
	Death Avoidance	-.20*	-.01	.04
	Neutral Acceptance	.31**	.31**	-.13
	Approach Acceptance	-.04	-.02	-.01
	Escape Acceptance	-.17	-.12	.09
Elderly (N=100)	Fear of Death	-.31**	-.22*	.24*
	Death Avoidance	-.22*	-.08	.24*
	Neutral Acceptance	.15	.15	-.14
	Approach Acceptance	.20*	.08	-.30**
	Escape Acceptance	-.03	-.07	.00
All (N=300)	Fear of Death	-.20***	-.09	.12*
	Death Avoidance	-.20***	-.07	.08
	Neutral Acceptance	.21***	.21***	-.17**
	Approach Acceptance	.11*	-.03	-.06
	Escape Acceptance	-.08	-.20***	.07

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

undeniable, and unavoidable event.

SA	A	MA	U	MD	D	SD
strongly agree	agree	moderately agree	undecided	moderately disagree	disagree	strongly disagree

OR

SD	D	MD	U	MA	A	SA
strongly disagree	disagree	moderately disagree	undecided	moderately agree	agree	strongly agree

- | | | | | | | | | |
|-----|--|----|---|----|---|----|---|----|
| 7. | I am disturbed by the finality of death. | SA | A | MA | U | MD | D | SD |
| 8. | Death is an entrance to a place of ultimate satisfaction. | SD | D | MD | U | MA | A | SA |
| 9. | Death provides an escape from this terrible world. | SA | A | MA | U | MD | D | SD |
| 10. | Whenever the thought of death enters my mind, I try to push it away. | SD | D | MD | U | MA | A | SA |
| 11. | Death is deliverance from pain and suffering. | SD | D | MD | U | MA | A | SA |
| 12. | I always try not to think about death. | SA | A | MA | U | MD | D | SD |
| 13. | I believe that heaven will be a much better place than this world. | SA | A | MA | U | MD | D | SD |
| 14. | Death is a natural aspect of life. | SA | A | MA | U | MD | D | SD |
| 15. | Death is a union with God and eternal bliss. | SD | D | MD | U | MA | A | SA |
| 16. | Death brings a promise of a new and glorious life. | SA | A | MA | U | MD | D | SD |
| 17. | I would neither fear death nor welcome it. | SA | A | MA | U | MD | D | SD |
| 18. | I have an intense fear of death. | SD | D | MD | U | MA | A | SA |
| 19. | I avoid thinking about death altogether. | SD | D | MD | U | MA | A | SA |
| 20. | The subject of life after death troubles me greatly. | SA | A | MA | U | MD | D | SD |
| 21. | The fact that death will mean the end of everything as I know it | SA | A | MA | U | MD | D | SD |

frightens me.

SA A MA U MD D SD
strongly agree moderately agree undecided moderately disagree disagree strongly disagree

OR

SD D MD U MA A SA
strongly disagree disagree moderately disagree undecided moderately agree agree strongly agree

22. I look forward to a reunion with my loved ones after I die. SD D MD U MA A SA
23. I view death as a relief from earthly suffering. SA A MA U MD D SD
24. Death is simply a part of the process of life. SA A MA U MD D SD
25. I see death as a passage to an eternal and blessed place. SA A MA U MD D SD
26. I try to have nothing to do with the subject of death. SD D MD U MA A SA
27. Death offers a wonderful release of the soul. SD D MD U MA A SA
28. One thing that gives me comfort in facing death is my belief in the afterlife. SD D MD U MA A SA
29. I see death as a relief from the burden of this life. SD D MD U MA A SA
30. Death is neither good nor bad. SA A MA U MD D SD
31. I look forward to a life after death. SA A MA U MD D SD
32. The uncertainty of not knowing what happens after death worries me. SD D MD U MA A SA

DEATH ATTITUDE PROFILE - REVISED (DAP-R): SCORING KEY

<u>DAP-R DIMENSION</u>	<u>ITEMS</u>
FEAR OF DEATH (7)	1, 2, 7, 18, 20, 21, 32
DEATH AVOIDANCE (5)	3, 10, 12, 19, 26
NEUTRAL ACCEPTANCE (5)	6, 14, 17, 24, 30
APPROACH ACCEPTANCE (10)	4, 8, 13, 15, 16, 22, 25, 27, 28, 31
ESCAPE ACCEPTANCE (5)	5, 9, 11, 23, 29

SCORES FOR ALL ITEMS ARE FROM 1 TO 7 IN THE DIRECTION OF STRONGLY DISAGREE (1) TO STRONGLY AGREE (7). FOR EACH DAP-R DIMENSION, A MEAN SCALE SCORE CAN BE COMPUTED BY DIVIDING THE TOTAL SCALE SCORE BY THE NUMBER OF ITEMS COMPRISING EACH SCALE.

REVISED DECEMBER 1991