

DEATH-CONFRONTATION: DOES IT INFLUENCE LEVELS
OF DEATH-ANXIETY AND LIFE-PURPOSE?

by Mary C. Brown

Thesis presented to the School of
Graduate Studies of the University
of Ottawa as partial fulfillment
of the requirements for the degree
of Doctor of Philosophy in Clinical
Psychology



Ottawa, Canada, 1975

UMI Number: DC53939

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.



UMI Microform DC53939
Copyright 2011 by ProQuest LLC
All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

ACKNOWLEDGMENTS

This thesis was prepared under the supervision of Dr. R. H. Shevenell, o.m.i., Founder of the School of Psychology of the University of Ottawa. Sincere appreciation is expressed for his guidance, interest and encouragement, and for his constant availability amid heavy duties.

The writer is indebted to Dr. Dan Lee for his interest and help with statistics and design.

Appreciation is also expressed to Dr. Donald Templer of The Carrier Clinic, New Jersey, and to Dr. James C. Crumbaugh of the Veterans Administration Center, Biloxi, Mississippi, for their generosity in sending materials and articles pertaining to the two tests, and for their interest in reading and commenting on the Interim Report.

Lastly, the writer expresses appreciation to fellow students, Ken MacKinnon and Eugene Shersen, for their help in administration of the tests and computation of results.

CURRICULUM STUDIORUM

Mary C. Brown was born March 20, 1929, in Renfrew, Ontario. She received the Bachelor of Arts degree from Ottawa University in 1960. She received the Master of Education degree in 1966, and the Master of ~~Clinical~~ Psychology degree in 1971, also from the University of Ottawa.

TABLE OF CONTENTS

Chapter	page
INTRODUCTION.	vii
I.- THEORETICAL BACKGROUND.	1
1. Timeliness of a Study Regarding Death	1
2. The Life-Death Paradigm	6
3. Life and Death in the Clinic	10
4. Summary and Comments	14
II.- PURPOSE IN LIFE TEST.	16
1. Frankl's Concept of Meaning	16
2. Construction and Validation Procedures	24
3. Subsequent Research with the <u>PIL</u>	34
4. Evaluation of the <u>PIL</u> Test	45
III.- DEATH ANXIETY SCALE	49
1. Construction and Validation Procedures	49
2. Subsequent Research with the <u>DAS</u>	60
3. Evaluation of the <u>Death Anxiety Scale</u>	68
4. The Present Study: <u>Background and Basic Hypotheses</u>	70
IV.- EXPERIMENTAL DESIGN	75
1. The Sample	75
2. The Tools	77
3. Method of Administration	80
4. Rationale and Hypotheses	83
5. Techniques of Analysis	89
V.- PRESENTATION AND ANALYSIS OF RESULTS.	91
1. Presentation of Results	91
A. Hypothesis I (Major): <u>DAS</u> and <u>PIL</u> Relationship	93
B. Hypothesis II (Minor): Controls	95
C. Hypothesis III (Major): Death-confrontation	99
D. Hypothesis IV (Minor): Age and Sex	104
2. Discussion of Results	107
A. Examination of Hypothesis I (Major)	107
B. Examination of Hypothesis II (Minor)	108
C. Examination of Hypothesis III (Major)	113
D. Examination of Hypothesis IV (Minor)	113
E. Further Considerations from this Research	115

TABLE OF CONTENTS

v

Chapter	page
SUMMARY AND CONCLUSIONS.	121
BIBLIOGRAPHY.	124
Appendix	
1. COPY OF THE COMBINED QUESTIONNAIRE (<u>DAS-PIL</u>)	131
2. DESCRIPTION OF DEATH-THEME FILM.	136
3. DESCRIPTION OF NEUTRAL FILM.	138
4. COPY OF DEATH-THEME READING.	140
5. COPY OF NEUTRAL READING.	142
6. ABSTRACT OF <u>Death-Confrontation: Does It Influence</u> <u>Levels of Death-Anxiety and Life-Purpose?</u>	145

LIST OF TABLES

Table	page
I.- Groups of Subjects.	32
II.- Relationship of <u>PIL</u> with Tests of Other Personality Variables	40
III.- <u>PIL</u> Means and Standard Deviations in Various Studies	44
IV.- The Fifteen <u>Death Anxiety Scale</u> Items	53
V.- <u>DAS</u> Means and Standard Deviations in Various Studies	67
VI.- Comparison of <u>DAS</u> and <u>PIL</u> Means and Correlations for Groups Divided According to Administration Sequence.	72
VII.- Parameters for Treatment Groups and Controls after Removal of Bereaved Subjects.	94
VIII.- Comparison of Treatment Groups and Controls as to <u>DAS</u> and <u>PIL</u> Means, Using a One-way Analysis of Variance, Fixed Effects.	96
IX.- Parameters for the Death-confrontation and Non- bereaved Groups	100
X.- Comparison of Non-bereaved, Bereaved, Death Film and Death Reading Groups as to <u>DAS</u> and <u>PIL</u> Means, Using a One-way Analysis of Variance, Fixed Effects	102
XI.- Differences among <u>DAS</u> Means for Four Groups, Using the Newman-Keuls Test	103
XII.- Comparison of <u>DAS</u> and <u>PIL</u> Means Obtained by the Sample Divided according to Age and Sex, Using Two-factor, Fixed Effects Analyses of Variance. . .	105

INTRODUCTION

The phenomenon of death and dying has long been neglected as an area of clinical concern and research in psychology. The general opinion of those who have reviewed the literature is that much more research is needed into this universal, critical period of every person's life.

This study undertakes to investigate the effect of death confrontation on life purpose, and on death anxiety. If empirical evidence of some effect is established, it might indicate the worth of dealing with death in psychotherapy, and might encourage increase of counseling with the dying and with their families. Findings might also afford some basic guide as to effective approach in such counseling.

Throughout the literature on death, some authors maintain that one who has had a meaningful life will probably experience less anxiety before death. Others hold that one who has confronted the inevitability of his own death is more likely to pursue real life-purpose. It is this latter view which will be investigated in the present study, along with the idea that confrontation with death could also be expected to lower one's death anxiety. That is to say, the effects of confrontation with death both on purpose in life and on death anxiety will be measured, using the Death Anxiety Scale (Templer) and the Purpose in Life Test (Crumbaugh and Maholick).

Bereavement, being a natural confrontation with death, will be studied, and structured death confrontation will be provided by the use of film and reading.

The first chapter presents a review of the literature dealing with the relationship between death anxiety and life purpose, from theoretical and clinical observations. Chapter two presents the Purpose in Life Test, beginning with an examination of Frankl's idea of meaning, this being the rationale on which the test is founded. Construction and validation procedures are outlined, as well as other research studies carried out with the test. The same is done with regard to the Death Anxiety Scale, in chapter three, which ends with a brief exposé of the present study and its basic hypotheses.

The experimental design is presented in chapter four, with a description of the sample, the tools, procedure of administration, rationale and hypotheses, and techniques of analysis. Chapter five presents and discusses the results obtained, and offers suggestions for further research.

The appendices contain copies of the questionnaires used in this study, samples of the readings, and descriptions of the films.

CHAPTER I

THEORETICAL BACKGROUND

This report seeks to explore empirically the relationship between death anxiety and purpose in life. Following a brief exposé of the timeliness and suitability to psychology of a study in the area of death, this chapter presents theoretical, and then clinical, observations of the life-death relationship as background and rationale for the present study. A summary and commentary completes the chapter.

1. Timeliness of a Study Regarding Death.

Dying is a universal, natural, inevitable, predictable,¹ individual, and personal phenomenon, with physiological, historical, social, spiritual, and psychological ramifications of intra- and interpersonal dimensions. It is a developmental crisis, in the sense of critical period, which brings about change, and calls for re-assessment, redefinition of one's self and redirection of one's living.

¹ Predictable as to eventuality, but not always as to time or manner.

As is true of all major universal crises, such as puberty, aging and loss, . . . dying, when closely inspected, proved to have complex psychological accompaniments which reach into all areas of personality development and structure.²

A time of dying is also a crisis calling for adjustment among the survivors. Both the experience of dying and the experience of bereavement carry their characteristic psychological and social processes, peculiar to these events. This being the case, it would seem that death, as experienced both by the dying person and by the bereaved, is an important and necessary area for psychological study, both in research and in clinical practice.

Yet, in the opinion of Kastenbaum, "no topic in psychology has been more neglected through the years."³ Three and a quarter centuries ago, Jeremy Taylor wrote: "It is intended by the necessity of affairs that the precepts of dying well be part of the studies of them that live in health." To him, "it is impossible to consider life deeply without considering death."⁴ His book capped the Ars

2 Edmund C. Payne, "The Physician and His Dying Patient," in Sidney Levin and Ralph J. Kahana (Eds.), Psychodynamic Studies on Aging, Creativity, Reminiscing and Dying, New York, International Universities Press, 1967, p. 112.

3 Robert Kastenbaum and Ruth Aisenberg, The Psychology of Death, New York, Springer, 1972, p. 1.

4 Jeremy Taylor, Holy Dying, 1651; quoted by Kastenbaum in "From Then--to Now--to Where?" Omega, Vol. 4, No. 1, 1973, p. 1-2.

Moriendi tradition,⁵ culminating approximately two and a half centuries of keen attention to the human and spiritual dimensions of dying, on the part of philosophers and religionists.

In psychology, the fear of death and dying has been under consideration at least since Scott, who constructed one of the earliest known questionnaires,⁶ and used it, as did also Stanley Hall,⁷ to gather information on the topic.

Nevertheless, though of prominent concern in philosophy, literature and religion throughout the years, "only in the last decade has there been a systematic examination of the relevance of death concern as a psychological variable."⁸ Even "in the last half century the psychological literature yields relatively few reports dealing with this concept. Psychological theory has also reflected this neglect."⁹

5 There is a new national organization: Ars Moriendi, whose ends are expressed in a text taken from fifteenth century writings under the same name: Ars Moriendi: "the arte and krafte to know well to dye." Introduction and information in John Fryer, "An Introduction to ARS MORIENDI," Omega, Vol. 4, No. 1, 1973, p. 3-5.

6 Colin A. Scott, "Old Age and Death," American Journal of Psychology, Vol. 8, 1896, p. 67-122.

7 G. Stanley Hall, "A Study of Fears," American Journal of Psychology, Vol. 8, No. 2, 1897, p. 147-249.

8 L. Dickstein and S. Blatt, "Death Concern, Futurity and Anticipation," Journal of Consulting Psychology, Vol. 30, No. 1, 1966, p. 11.

9 I. E. Alexander, R. S. Colley, and A. M. Adlerstein, "Is Death a Matter of Indifference?" Journal of Psychology, Vol. 43, 1957, p. 227.

C. W. Wahl finds it "a surprising and significant fact that the phenomenon of the fear of death, while certainly no clinical rarity, has almost no description in psychiatric literature."¹⁰

On the other hand, Godin suggests that with contemporary changes in belief regarding afterlife, heaven, hell, etc., emphasis has shifted to a deeper examination of the immediacy of meaning of life and death.

Certainly, if spiritual interest has waned, psychological concern has increased immensely, rising from 0.9% of the total content of psychological publication in 1948 to 6.8% in 1970.¹¹

Perhaps this can be viewed as partial corroboration of the statement that "we live today in an era in which the problem of death is part of the Zeitgeist."¹²

Kastenbaum and Ainsenberg's¹³ review of research shows that present data relevant to death fears run the gamut from a sociological survey of fifteen hundred adults to an intensive analysis of a single case. Though the psychological studies "show a healthy diversity in the variety of populations

10 C. W. Wahl, "The Fear of Death," in Herman Feifel (Ed.), The Meaning of Death, Toronto, McGraw-Hill, 1965, p. 19.

11 A. Godin, Death and Presence, The Psychology of Death and the Afterlife, Brussels, Lumen Vitae Press, 1973; reviewed in The Tablet, Vol. 17, February 1973, p. 154.

12 I. E. Alexander and A. M. Adlerstein, "Death and Religion," in Feifel, The Meaning of Death, p. 271.

13 Kastenbaum and Aisenberg, op. cit., p. 66.

investigated," samples on the whole have been small, and the studies have been of the "one-shot," "one-perspective" sort, using a single instrument at a single point in time, so that "at the moment, we simply do not possess a systematic body of empirical knowledge on this topic," but "must rely overmuch on scattered research findings based on rudimentary and flawed techniques."¹⁴

Thus it is not difficult to understand why Feifel is of the opinion that "there is a pressing need for more reliable information and systematic, controlled study in this field."¹⁵ Jackson maintains that "there is no place where the mind of man is compelled to deal with the unpenetrated boundaries of life as it is in the building of a psychology of death and dying."¹⁶ And one tends to agree with the statement:

It may be that psychology is particularly favored to be enlightening here, since some feel that it is a sector where humanistic and physicist-engineer cultures, too often insulated and at cross-purposes, intersect. Clearly, psychology's own imperative for interdisciplinary perspective should not be minimized.¹⁷

14 R. Kastenbaum, "Psychological Death," in L. Pearson (Ed.), Death and Dying, London, Case Western Reserve University Press, 1969, p. 1.

15 Feifel, The Meaning of Death, p. xv-xvi.

16 Edgar N. Jackson, "Grief and Religion," in Feifel, The Meaning of Death, p. 231.

17 Herman Feifel, "Attitudes towards Death: A Psychological Perspective," Journal of Consulting and Clinical Psychology, Vol. 33, No. 3, 1969, p. 295.

2. The Life-Death Paradigm.

Throughout the literature dealing with death and dying some authors hold that one must come to grips with the inevitability of one's death in order to pursue a meaningful life; others maintain that persons who have led meaningful lives will feel less anxiety towards death. These tenets might seem contrary to the expectation:

If human existence obeyed laws of rational logic, it would seem that those who live life most intensely . . . would most fear death. For wouldn't death terminate something very precious to them? On the other hand, . . . all those who find life a painful burden, should welcome it as a deliverance from their miseries. But experience shows this not to be the case. . . . Those whose lives have no meaning cannot give meaning to their death . . . those whose lives were full and exciting faced death calmly and courageously.¹⁸

And this is corroborated by "the frequently heard statement that those who have least to live for are most afraid of death."¹⁹

Plato,²⁰ who defined life as an apprenticeship for death, emphatically recommended meditation on death in order to discover a meaning for life. Spinoza, on the other hand, advised meditation on life in order to grasp the meaning of

¹⁸ Ignace Lepp, Death and Its Mysteries, Toronto, Macmillan, 1968, p. 52-53.

¹⁹ Gardner Murphy, "Discussion," in Feifel, The Meaning of Death, p. 330.

²⁰ Lepp, op. cit., p. 153.

death. In Pascal's opinion, "the confronting of death actually increases the intensity of human consciousness."²¹ And Heidegger expresses a view common to most existential philosophers when he says that "death and absolute nothingness are constantly before the inner eye of man and life gets its inner meaning only by the ever-present knowledge of inevitable death."²² He goes on to say that

. . . the consciousness of death not only vivifies the felt quality of experience, but also acts as the crucial factor in producing individuality . . . only the person who realizes that he must face death alone truly experiences the sense of his own individuality.²³

Thus he emphasizes the consideration of death, whereas Nietzsche puts the emphasis on quality of life: "Only those who live fully can embrace death wholeheartedly, while those whose aliveness has undergone mortification are driven to reject death."²⁴

21 Pascal, quoted by Rollo May, "Existential Psychology and the Problem of Death," in Existential Psychotherapy, Toronto, CBC Publications, 1967, p. 58.

22 Heidegger, quoted by M. H. Saffron, "Thanatology: A Historical Sketch," in B. Schoenberg et al. (Eds.), Loss and Grief: Psychological Management in Medical Practice, New York, Columbia University Press, 1970, p. 331.

23 Heidegger, quoted by Robert Olson, "Death," Omega, Vol. 2, 1971, p. 276.

24 Nietzsche, quoted by Norman O. Brown, "Life Against Death," Voices, Vol. 5, Spring, 1969, p. 20.

Kaufmann contends that "the individual who has made something of his life can meet death without anxiety."²⁵ At the same time, "the man who accepts his death may find in this experience a strong spur to making something of his life and may succeed in some accomplishment that robs him of the fear of death."²⁶ He, therefore, gives expression to both approaches.

Jung looks at the cause-effect of the same two elements, but from the aspect of lack, or non-fulfilment: "The negation of life's fulfilment is synonymous with the refusal to accept its ending . . . not wanting to live is identical with not wanting to die."²⁷ And this is echoed somewhat in the words of Paul Tillich: "The person gives up being because he is afraid of non-being. It is a surrendering of the meaning of life because we are afraid of death."²⁸ He poses the vital question: "If one is not able to die, is he really able to live?"²⁹

25 W. Kaufmann, quoted by Feifel, Introduction of The Meaning of Death, p. xiii.

26 -----, "Existentialism and Death," in Feifel, The Meaning of Death, p. 60.

27 C. Jung, "The Soul and Death," in Feifel, The Meaning of Death, p. 6.

28 Paul Tillich, The Courage To Be, New Haven, Yale University Press, 1952; paraphrased by May, op. cit., p. 56.

29 -----, "The Eternal Now," in Feifel, The Meaning of Death, p. 32.

Speaking also from the angle of negation, but reversing the order, Fromm feels that "irrational fear of death results from the failure of having lived . . . to die is poignantly bitter, but the idea of having to die without having lived is unbearable."³⁰ Feifel notes this also, in referring to research in this area:

One leitmotiv that is continually coming to the fore in this area is that the crisis is often not the fact of oncoming death per se . . . but rather the waste of limited years, the unassayed tasks, the lost opportunities, the talents withering in disuse, the avoidable evils which have been done.³¹

Continuing in the same vein, Kavanaugh remarks that "we resent death, perhaps, because of our feelings about the incompleteness of our lives."³² According to him, men best learn to die well by learning to live well, and "the most miserable men near death are those who had no clear aims in life or whose aims were beyond any human achievement."³³

Thus it would seem that "the manner in which a person reacts to approaching death is intimately related . . . with the extent to which his goals have been satisfied or

³⁰ Erich Fromm, Man For Himself, New York, Holt, Rinehart & Winston, 1967, p. 166.

³¹ Feifel, "Attitudes Towards Death," in The Meaning of Death, p. 127.

³² Robert Kavanaugh, Facing Death (flyleaf), Los Angeles, Nash Publishing, 1972, 226 p.

³³ Ibid., p. 17.

frustrated in his past life."³⁴ Looking at it from the other perspective, "if the human being becomes capable of facing courageously the absolute certainty of his death, he grows more authentic and begins to imbue his life with new meaning."³⁵ "The realization of death places immediate and tremendous pressure upon a man. It makes the problem of life a problem of first importance."³⁶ Indeed, Feifel feels that "life is not comprehended truly or lived fully unless the idea of death is grappled with honestly."³⁷ And he extends this premise not only to the individual, but to mankind in general: "Only by encompassing the concept of death into his life will man fully understand himself, and only the culture which countenances death will truly savor life."³⁸

3. Life and Death in the Clinic.

As in the general study of death, "there is an amazing paucity of material in the literature on the psychotherapeutic

34 J. Zinker and D. L. Fink, "The Possibility for Psychological Growth in a Dying Person," The Journal of General Psychology, Vol. 74, 1966, p. 196.

35 Julius E. Heuscher, "Existential Crisis, Death, and Changing 'World Designs' in Myths and Fairy Tales," Journal of Existentialism, Vol. 8, No. 25, 1966, p. 46.

36 R. Kastenbaum, "The Vitality of Death," Omega, Vol. 2, 1971, p. 266.

37 Feifel, The Meaning of Death, p. xv.

38 -----, "Attitudes towards Death: A Psychological Perspective," p. 295.

handling of death fears."³⁹ From actual experiences with the dying, Rosenthal tells us that some patients have stated that an open and honest discussion of death and dying has liberated them from heretofore unrecognized chains. "Fearing death less enabled them to relate more positively to life."⁴⁰ Still speaking in terms of dying persons, she says:

As the personality develops toward maturity as a total entity, less and less is it overshadowed by the prospect of death. If a high degree of integration can be achieved, the prognosis of reducing neurotic fears of death to a normal level is excellent.⁴¹

Bowers and his colleagues maintain that "the meaning of both life and death must be considered by professionals who treat the patient so that the patient can find personal fulfillment, a fuller self-realization, even in extremis."⁴²

The goals of therapy with the terminal patient are to strengthen the meaning of life, for this . . . makes for richer meaning for the terminal events, for in the face of his death the person can rise to the full stature of his being as a person. In fact, he may find it in dying when he never was able to find it in the past events of his life. . . . This is no insignificant goal in ministering to the dying patient.⁴³

39 Hattie Rosenthal, "The Fear of Death as an Indispensable Factor in Psychotherapy," American Journal of Psychotherapy, Vol. 17, No. 4, 1963, p. 620.

40 Ibid., p. 622.

41 Ibid., p. 629.

42 M. Bowers, E. Jackson, J. Knight, and L. LeShan, Counseling the Dying, Toronto, Thomas Nelson, 1964, p. 73.

43 Ibid., p. 78.

In Frankl's view, "a positive evaluation of the past may counteract the fear of aging and death to a certain extent."⁴⁴ And he is of the opinion that "one moment can retroactively flood an entire life with meaning."⁴⁵

Drawing from twelve years of experience with a wide variety of terminal cancer patients, including over five thousand hours of intensive individual psychotherapy, LeShan has found that through confronting his death, the patient "becomes a fuller and richer person. He does not die defeated and beaten by life, but as a stronger and more complete individual."⁴⁶ When he attains awareness, plus time to adjust to his pending death, "pain and anxiety are minimized, and the patient can live with dignity and even some pleasure while dying gracefully."⁴⁷

According to Weisman, "a dying person may retain some capacity to operate on a level higher than that of a sick organism. He may even be able to transform his inner anxiety

44 Viktor E. Frankl, "Psychiatry and Man's Quest for Meaning," Journal of Religion and Health, Vol. 1, No. 2, 1962, p. 102.

45 -----, The Doctor and the Soul, Baltimore, Penguin Books, 1952, p. 58.

46 L. LeShan, "Psychotherapy and the Dying Patient," in Pearson, op. cit., p. 30.

47 B. G. Glaser and A. L. Straus, Time for Dying, Chicago, Aldine, 1968, p. 69.

into an understanding of his own significance: a major therapeutic effort."⁴⁸ In his view:

The purpose of studying the dying process is to learn ways of helping people to attain significant survival, so that as they near the end they can achieve purposeful death.

Significant survival is a quality of life that means much more than simply not to die. Purposeful death also means more than dying; it includes a measure of fulfilment, quiescence, resolution, and even traces of personal development.⁴⁹

Kastenbaum sees the confronting of death as worthwhile anytime, and indeed, "the sooner the better. The way a person integrates the prospect of death into his personality while he is still a youth may have far-reaching implications for that person's mastery of problems of later life."⁵⁰

Though the following quotation alludes to terminal patients, it is also applicable to persons whose death is not soon expected:

Our goal is not only to reawaken the inner life, but also to help liberate those inner forces which can enable the patient to experience as fully as possible, the meaning of his life and death.⁵¹

⁴⁸ Avery Weisman, in "Discussion," in Levin and Kahana, op. cit., p. 178.

⁴⁹ -----, On Dying and Denying, New York, Behavioral Publications, 1972, p. 33.

⁵⁰ R. Kastenbaum, "Time and Death in Adolescence," in Feifel, The Meaning of Death, p. xiii.

⁵¹ LeShan, op. cit., p. 30, footnote.

4. Summary and Comments.

In the foregoing pages, we have seen that, in the opinion of many, the area of death and dying is a legitimate and necessary study for psychology. In fact, psychology may well be the discipline best suited to handle this topic, encompassing as it does experimental, theoretical, clinical, and empirical approaches to the study of human behavior.

From several aspects, writers have posited a relationship between life-meaningfulness and death anxiety; those actually working with dying persons have also encountered this seeming relationship. These observations are, for the most part, theoretically and clinically based. The present study seeks to investigate empirically the existence of such a relationship, and thereby to validate present armchair and bedside theorizing, as well as to underline the worth of more extensive counseling with the dying.

We have seen that for some authors it is confrontation with death which moves a person to pursuit of purpose in life; for others, meaningfulness in life results in less anxiety before death. It is deemed worthwhile by the writer to endeavor to provide empirical evidence of such a relationship, the emphasis in this study being on the effect of death-confrontation on one's purpose in life. To this is added the study of the effect of death-confrontation on one's level of

death anxiety. If death-confrontation is shown to have a significant effect,

- (a) it would be empirical validation of certain impressions expressed in the literature, and forwarded by psychologists actually working with the dying;
- (b) it might serve as an instigation to deal more directly with death, in counseling and general psychotherapy, and to work more extensively with dying persons and their families.

If death-confrontation does increase life-purpose and lower death anxiety, it would seem advisable that the fact of death be dealt with in psychotherapy and counseling, at any time during life, as also in face of pending death.

In brief, the present project undertakes to explore the effects of death-confrontation on purpose in life and on death anxiety. The real-life confrontation of bereavement will be investigated, along with non-bereavement. Structured death-confrontations (film and reading) will also be used. The effects of all of these will be measured by the Death Anxiety Scale by Templer, and the Purpose in Life Test by Crumbaugh and Maholick. These two will be presented in the following two chapters. The other tools will be described in chapter four, in the presentation of the experimental design.

CHAPTER II

PURPOSE IN LIFE TEST

The Purpose in Life Test¹ was devised in an attempt to quantify Frankl's concept of meaning. This chapter will first elucidate Frankl's own understanding of purpose-in-life, in order that the reader might better understand what is purportedly being measured in the test used in this study. Then the construction and validation procedures of the test itself will be presented, as well as other research carried out with it. There follows a critical evaluation of the test, with reasons for its use in this project.

1. Frankl's Concept of Meaning.

Frankl has postulated in man "an inborn drive which he calls 'the will to meaning.'"² This represents a striving to find a purpose in one's own existence, to find a cause or sense of mission that is one's own. In his words:

. . . we speak of a will-to-meaning; with this we designate man's striving to fulfill as much meaning in his existence as possible, and to realize as much value in his life as possible.³

1 Part A of the Purpose in Life Test is in Appendix 1.

2 James C. Crumbaugh and Leonard T. Maholick, "The Case for Frankl's 'Will to Meaning,'" Journal of Existential Psychiatry, Vol. 4, No. 13, 1963, p. 43.

3 Viktor E. Frankl, "The Spiritual Dimension in Existential Analysis and Logotherapy," Journal of Individual Psychology, Vol. 15, May 1959, p. 161.

His belief in meaning, based on experience and backed by observations in hospitals and concentration camps, is founded on three tenets:

Life has meaning under all conditions; man has the will to reach out for meaning and feels frustrated or empty if this will is not applied; and man has the freedom, within obvious limitations, to find the meaning of his life.⁴

To him, in fact, "the pursuit of meaning is more than man's inalienable right--it is the essence of his humanness."⁵ So much so, that if man represses or disregards the pursuit of meaning, "he opens up in himself the infernal pit of the existential vacuum,"⁶ which Frankl defines as "inner emptiness, the feeling of having lost the meaning of existence and the content of life."⁷ This feeling of meaninglessness is not pathological, but is generally human, even the most human of all that there may be in man, but if overly pronounced it can become what Frankl terms noögenic neurosis, which he defines as "a neurosis which has originally and genuinely been caused by a spiritual problem, a moral conflict, or an existential crisis."⁸

4 J. B. Fabry, The Pursuit of Meaning, Boston, Beacon, 1968, p. 37. (Underlining mine.)

5 Ibid., p. 80.

6 Ibid.

7 Frankl, "The Spiritual Dimension in Existential Analysis and Logotherapy," p. 162.

8 Ibid., p. 163.

Frankl maintains that there is "no such thing as a universal meaning of life, but only the unique meaning of individual situations."⁹ Yet there are some situations which have something in common, and also meanings which are shared by human beings throughout society and throughout history. And these meanings are what he understands by values: "one may define values as those meaning-universals which crystallize in the typical situations a society--humanity--has to face."¹⁰ As Crumbaugh explains: "A meaning is an individually desired goal; a value is an objective sought by the group as a unit."¹¹ A value, as used by Frankl, "is a culture-wide source of motivation, whereas a meaning is a source of motivation that is effective for a particular individual."¹² Frankl stresses this uniqueness of meaning over the universality of values, for in his experience, in the concentration camps and elsewhere, "the unique meanings of man's life situations remain, even if universal values should become discredited."¹³

9 Viktor E. Frankl, "What Is Meant by Meaning?" Journal of Existentialism, Vol. 7, No. 25, 1966, p. 22.

10 Ibid.

11 J. C. Crumbaugh, Everything to Gain: A Guide to Self-fulfilment through Logotherapy, Chicago, Nelson-Hall,

12 Ibid., p. 238.

13 Fabry, op. cit., p. 110.

On the one hand, Frankl sees meaning as something objective, inherent in the situation, "out there," beyond, to be reached for. On the other hand, he sees meaning as something highly subjective: every person has to find the unique meaning for each situation in his life, something he does not share with anyone else.

For the meaning of life differs from man to man, from day to day, and from hour to hour. What matters, therefore, is not the meaning of life in general, but rather the specific meaning of a person's life.¹⁴

Frankl¹⁵ distinguishes and classifies three chief groups of values wherein a man may find meaning:

- (a) creative: what a man GIVES to the world in terms of his creation (achievements, accomplishments)
- (b) experiential: what he TAKES from the world in terms of encounters and experiences (culture, nature, love of others)
- (c) attitudinal: the STAND he takes when faced with a fate which he cannot change (bereavement, sickness, etc.).

Frankl maintains that man's attitudes, even more than his activities and experiences, provide him with the opportunity to find life's deepest meaning:

What matters is not the kind of work, but the motivation. What matters is not how large the radius of your activities, but only how well you fill its circle.¹⁶

14 Viktor E. Frankl, Man's Search For Meaning, New York, Washington Square Press, 1963, p. 171.

15 -----, "What Is Meant by Meaning?" p. 23. (Capitalization and typing layout mine.)

16 Fabry, op. cit., p. 41.

And particularly, "it is by our attitudes when facing unavoidable suffering that we express our belief in 'ultimate meaning,' existing on the highest possible level."¹⁷ To him, in man's search for meaning, the existence of a higher dimension is always presupposed, "even by atheists, who reject, 'not a suprahuman dimension, but a traditional concept of God.'"¹⁸ Frankl describes the will to meaning as the subjective side of a spiritual reality in which the meaning is the objective side. When he speaks of the spiritual dimension, he alludes, not to religion as generally understood, but to that which is "genuinely human" in man--the transcendental.

When man transcends himself . . . he rises above the level of the somatic and the psychic, and enters the realm of the genuinely human. This realm is constituted by a new dimension: the noetic, it is the dimension of spirit.¹⁹

In Frankl's definition religion is the awareness of this suprahuman dimension and the basic trust in ultimate meaning residing in that dimension. He maintains that "the individual life is geared to ultimate meaning,"²⁰ and that human existence is essentially self-transcendence rather

¹⁷ Ibid., p. 49.

¹⁸ Ibid., p. 182.

¹⁹ Frankl, "The Spiritual Dimension in Existential Analysis and Logotherapy," p. 159.

²⁰ Fabry, op. cit., p. 187.

than self-actualization. He sees self-actualization "not as an end in itself, but as an effect of meaning fulfilment."²¹
As he says:

Self-fulfilment and self-actualization cannot possibly be life's final purpose or man's last aim; on the contrary, the more man directs himself toward them the more he will miss them.²²

Man's primary concern is not self-actualization, but fulfilment of meaning and, moreover, an "excessive concern with self-actualization may be traced to a frustration of the will-to-meaning."²³

Frankl is so convinced that the spiritual dimension is an integral part of man's existence that he declares that "man's refusal to see reality beyond the merely human dimension can result in feelings of emptiness, meaninglessness, frustration, estrangement, loneliness, anxiety and guilt."²⁴ His idea is that religion, in whatever form, cannot be excluded from the many ways in which humans have found and still can find meaning. He acknowledges that "man can never grasp

21 Viktor E. Frankl, "Self-transcendence as a Human Phenomenon," Journal of Humanistic Psychology, Vol. 6, Fall 1966, p. 99.

22 -----, "The Spiritual Dimension in Existential Analysis and Logotherapy," p. 160.

23 -----, "Self-transcendence as a Human Phenomenon," p. 99.

24 Fabry, op. cit., p. 169.

the reality of the Ultimate, whatever name is given to it, but everything depends on how he responds to its demands."²⁵ Thus Ultimate meaning exists, but it is ultimately unknowable for the individual.

Man can participate in ultimate meaning only by responding, to the best of his limited capacities, to the meaning demands of the moment. The day-by-day pursuit of meaning gives content to his life. Happiness, peace of mind, satisfaction, success, are only by-products of his pursuit of meaning.²⁶

And yet, though he cannot know the Ultimate meaning, man's responsibility is to interpret correctly the meanings inherent in a situation, not to invent meanings, but to discover them. For man's freedom of choice "may lead either to a meaningful or an empty life. To be meaningful . . . life must be lived not only freely but responsibly."²⁷ If freedom is not used in terms of responsibility, it will not lead to meaning, but on the contrary, will add to the existential vacuum. As Frankl puts it, each man is responsible for "what he does, whom he loves and how he suffers."²⁸

Frankl admits that the meaning of human existence is threatened not only by suffering but also by death. And yet:

25 Ibid., p. 178.

26 Ibid., p. 188.

27 Ibid., p. 130.

28 Ibid., p. 131.

Does it not completely cancel out the meaning of our life? By no means. As the end belongs to the story, so death belongs to life. If life is meaningful, then it is so whether it is long or short, whether a man can live in his children or dies childless.²⁹

Frankl would hold that even a man who finds himself in the most dire distress, in which neither activity nor creativity can bring values to his life nor experience give meaning to it, can still give his life meaning by the way and manner in which he faces his fate, in which he takes his suffering upon himself. In this way, "life never ceases to hold meaning, since even a person who is deprived of both creative and experiential values is still challenged by an opportunity for fulfilment, that is, by the meaning inherent in an upright way of suffering."³⁰ For the possibility of realizing attitudinal values by the very attitudes with which we face our suffering is there to the last moment. Thus, Frankl claims, that "life does not lack a meaning until the last breath, until a man's death."³¹ This is due to the fact that "even the negative aspects of human existence, such as suffering, guilt, and death can still be turned into

29 Viktor E. Frankl, "On Logotherapy and Existential Analysis," American Journal of Psychoanalysis, Vol. 18, No. 1, 1958, p. 33.

30 Ibid., p. 32.

31 -----, "Psychiatry and Man's Quest for Meaning," Journal of Religion and Health, Vol. 1, No. 2, 1962, p. 101.

something positive, provided they are faced with the right attitudes."³²

Frankl has shown that the meaning of life is not measured in terms of years lived; that life can be made meaningful retroactively even during the last hours; and, most importantly, that life's deepest and ultimate meaning can often be perceived under circumstances when no help is available, when life has been stripped of all unessentials, which is certainly the case in face of imminent death.

Having outlined meaningfulness as understood by Frankl, we present the tool which claims to measure it, and which is used in this study.

2. Construction and Validation Procedures.

As was previously pointed out, the Purpose in Life Test was devised by Crumbaugh and Maholick³³ in an attempt to quantify Frankl's concept of "meaning in life." The authors rationally define the phrase "purpose in life" as the ontological significance of life from the point of view of the experiencing individual. Having operationally defined

³² Viktor E. Frankl, "Logotherapy and Existential Analysis: A Review," American Journal of Psychotherapy, Vol. 20, No. 2, 1966, p. 253.

³³ J. Crumbaugh and L. Maholick, "An Experimental Study in Existentialism: The Psychometric Approach to Frankl's Concept of Noogenic Neurosis," Journal of Clinical Psychology, Vol. 20, No. 2, 1964, p. 200-207.

it as that which is measured by this instrument, they set about the task of showing that this instrument measures³⁴ something which is (a) what Frankl is referring to by the phrase in question, (b) different from the usual pathology, and (c) identifiable as a distinguishing characteristic of pathological groups in contrast to "normal" populations.

The attitude scale was specially designed to evoke responses believed related to the degree to which an individual experienced "purpose in life," the a priori basis of the items being the literature of existentialism, particularly Frankl's logotherapy, and a "guess" as to what type of material would discriminate patients from non-patients.

The authors realized that they were designing a scale on the "unorthodox principle that while a person cannot actually describe his real attitudes, yet he can and will give a pretty reliable approximation of his true feelings from conscious consideration."³⁵ Were this assumption wrong, they expected that it would show up both in low reliability and in low validity as measured against an operational criterion of either mental health or life purpose.

The complete Purpose in Life Test (PIL)³⁶ comprises three sections:

34 Ibid., p. 201.

35 Ibid.

36 Henceforth the Purpose in Life Test will be referred to as PIL.

Part A: twenty statements, graded as to response

Part B: thirteen sentence-completion items

Part C: paragraph composition on one's personal aims, etc.

Part A is objectively scored. Parts B and C are clinically interpreted, and have proven useful in individual client interviews. The authors themselves state that "for most research purposes, these sections may be ignored."³⁷

Part A, the section used in this study, contains twenty statements, consisting of a stem and a graded choice between two extremes to complete the stem. The structural pattern of the items is of a seven-point scale as follows:

1. I am usually:

1	2	3	4	5	6	7
completely bored			(neutral)			exuberant enthusiastic

The direction of magnitude was randomized in order to minimize position preferences and "halo" effect. The subject rates himself on each item, the score being the sum of the ratings of the total number of items.

A pilot study using twenty-five items resulted in the discarding of half of them and the substitution of new ones. Of these, twenty-two items stood up in item analysis. Each

³⁷ J. Crumbaugh and L. Maholick, Manual of Instructions for the Purpose in Life Test, Chicago Plaza, Ill., Psychometric Affiliates, 1969, p. 3.

item is a scale within a scale, similar to the Likert technique, except that the quantitative extremes of each item were set by qualitative phrases which seemed a priori to be identified with quantitative extremes of attitudes. The authors felt that if the choices were wrong, they would be eliminated by low item validity. If right, the scale would be less monotonous and would stimulate more meaningful responses.

Patient-nonpatient Comparisons.- The authors theorized that if the PIL were valid, nonpatient groups could be expected to score higher than patient groups. In a validation experiment they ranked five groups according to theorized descending levels of "purpose in life" as follows:

- graduate students N:30
- undergraduate students N:75
- out-patients of private psychiatrists N:49
- out-patients of a clinic N:50
- hospitalized alcoholics N:21

Ages ranged from seventeen to over fifty years, with an average about thirty.

To these groups were administered:

- the Purpose in Life Test (all groups)
- the Frankl Questionnaire (Groups II, III, V)
- Allport-Vernon-Lindzey Scale of Values (Groups II, III, V)
- the MMPI (Group IV only)

In addition, each patient of Group IV was evaluated by a therapist's rating of each PIL item as he thought the patient should have rated it.

Results showed a significant difference between scores of patient and nonpatient groups, with a progressive decline in total and item scores, in accord with their theorized declining level of "purpose in life." This the authors saw as "consistent with predictions from the orientation of construct validity."³⁸

The PIL was found to predict patients and nonpatients with 65% accuracy for women and 75% accuracy for men.

Frankl's Questionnaire and the PIL.- For this same study,³⁹ Frankl translated into English his own questionnaire, originally consisting of thirteen items devised to estimate the presence of existential vacuum. The experimenters quantified six of these items to three degrees. For example, Item 3: "Do you feel that your life is without purpose?" was scored 1 = frequently; 2 = seldom; 3 = never.

Correlations between the PIL and the Frankl Questionnaire scores was .68 (Pearson product-moment, N = 136), from which the authors concluded that both were measuring essentially the same function which Frankl describes as "purpose in life" (presuming that Frankl's scale represents his attempt to define operationally what he means).

³⁸ Crumbaugh and Maholick, "An Experimental Study in Existentialism," p. 204.

³⁹ Ibid., p. 202.

Criterion Ratings.- A partial concurrent validation of the PIL scores was made by comparison with the criterion ratings assigned by the patients' therapists of each PIL item as they thought the patients should have rated themselves. It yielded an r of .27 (Pearson product-moment, $N = 39$) which is, admittedly, "only very modest success,"⁴⁰ but the authors account for it in part as due to the therapists' ratings being made only on patients and this after a single interview.

In the opinion of the authors, the fact that there was little relationship between the PIL and any of the Allport-Vernon-Lindzey scales suggests that the PIL measures something different from values. In a comparison with the MMPI ($N: 45$ patients), the only scales to show any substantial relationship to the PIL were K (validity), $r = .39$, and D (depression), $r = -.30$. The authors took this to indicate that the PIL is "not just another measure of the usual forms of pathology,"⁴¹ thus supporting Frankl's hypothesis of a new type of neurosis stemming from meaninglessness. Incidence of low purpose in life in depressive patients is clinically observable, though attribution of cause-and-effect is complex and variable.

40 Ibid., p. 204.

41 Ibid., p. 205.

Response Sets.- In a study with forty subjects, Snavely⁴² found a correlation of .57 between the PIL and the Marlowe-Crowne Social Desirability Scale. Retest results under further experimental conditions yielded a correlation of only .36, indicating that the PIL cannot be considered highly influenced by social desirability set. This is supported by Durlak,⁴³ who found a negligible correlation in one study: $r = .01$ (N: 120) and, in another, $r = .006$ (N: 94).

However, the authors advise that, like any other "self" test, the PIL should be employed "with great caution in competitive situations since the subjects can reasonably infer most of the desirable attitudes."⁴⁴

Cross-validation.- Later, Crumbaugh⁴⁵ undertook to cross-validate the above findings and to apply the test to further categories of subjects. This he did with a total

42 H. R. Snavely, an unpublished social course project, Carleton College, 1962, cited in Crumbaugh and Maholick, Manual, p. 2.

43 J. A. Durlak, "Relationship between Attitudes towards Life and Death among Elderly Women," Developmental Psychology, Vol. 8, 1973, p. 146 (Extended Report).

44 James C. Crumbaugh, "Aging and Adjustment: The Applicability of Logotherapy and the Purpose-in-Life Test," The Gerontologist, Vol. 12, Winter 1972, p. 419.

45 -----, "Cross Validation of Purpose-in-Life Test Based on Frankl's Concepts," Journal of Individual Psychology, Vol. 24, May 1968, p. 74-81.

of 1,151 subjects, comprising six normal and six psychiatric groups, as presented on page 32 in Table I, taken directly from the author. Crumbaugh used a revised form of the PIL, dropping two items which required negative scoring. The test was rescored for fifty of the 225 cases of the previous study, and a Pearson's r of .995 was found between the two forms. The MMPI and the Srole Anomie Scale were also administered.

The criterion of external rating was repeated, by ministers for the group of active and leading parishioners, and by therapists for the patients, this time after a second interview.

On the basis of his theorizing, the author predicted:

- (a) a difference in mean PIL scores of the ten groups in descending order--CONSTRUCT VALIDITY
- (b) correlation of PIL scores with therapist rating of patient scores and minister rating of parishioner scores--CONCURRENT VALIDITY
- (c) no significant relationship between PIL and MMPI scores other than the D-scale--DISCRIMINANT VALIDITY
- (d) moderate relationships only between PIL and Srole Anomie Scale--DISCRIMINANT VALIDITY

Crumbaugh predicted correctly the order of means for the four normal groups. In the psychiatric population the schizophrenic groups scored unexpectedly high. In a personal communication with the author,⁴⁶ Frankl suggested that

⁴⁶ Crumbaugh, "Cross-validation of Purpose-in-Life Test based on Frankl's Concepts," p. 77, footnote reference.

Table I.-
Groups of Subjects.

Designation	Description	N		
		male	female	total
"Normal"				
N1	Successful business and profes- sional personnel (Rotarians, Kiwanians, etc.)	214	16	230 ^a
N2	Active and leading Protestant parishioners	63	79	142
N3	College undergraduates	165	252	417 ^b
N4	Indigent hospital patients (non-psychiatric)	4	12	16
Psychiatric				
P1	Neurotics, outpatients, mixed diagnosis	95	124	225 ^{c,d}
P2	Neurotics, hospitalized	6	7	13
P3	Alcoholics, hospitalized	24	14	38 ^e
P4	Schizophrenics, hospitalized, Negro	7	4	11
P5	Schizophrenics, hospitalized	17	24	41
P6	Psychotics (non-schizophrenic) hospitalized	7	11	18
Total		602	543	1151 ^d

a Includes previous Group I, 14 males and 16 females.

b Includes previous Group II, 44 males and 31 females.

c Includes previous Groups III and IV, 47 males, 52 females.

d Includes 6 subjects of unindicated sex.

e Includes previous Group V, 14 males and 7 females.

J. C. Crumbaugh, "Cross-validation of Purpose-in-Life Test Based on Frankl's Concepts," Journal of Individual Psychology, Vol. 24, May 1968, p. 75.

this was quite in keeping with logotherapeutic theory: the schizophrenic would answer the PIL items in reference to his own significant inner world of fantasy wherein he resides purposefully.

The difference between normal and psychiatric subjects was highly significant and, on the whole, the results support the construct validity of the PIL. Moreover, the difference in variance between patient and nonpatient populations was significant ($F = 2.20$, $p < .01$). This, too, ⁴⁷ confirms a prediction from the theory of logotherapy, as greater patient variability on the PIL reflects the fact that some patients have noögenic problems and some do not--some patients experience meaningfulness and some do not.

Correlations of the therapists' ratings and of the ministers' ratings with the PIL were .38 (N:50) and .47 (N:120), respectively, these results being "in line with the level of criterion validity which can usually be obtained from a single measure of a complex trait."⁴⁸

Results also showed that "what the PIL measures is not directly identifiable with anomie or any MMPI scale except perhaps Depression."⁴⁹

⁴⁷ Crumbaugh and Maholick, Manual, p. 2.

⁴⁸ -----, "Cross-validation of Purpose-in-life Test Based on Frankl's Concepts," p. 79.

⁴⁹ Ibid., p. 80.

Reliability.- The split-half (odd-even) correlation of the PIL results from 120 normal subjects yielded a coefficient of .85 corrected by Spearman-Brown formula to .92. Formerly it had been determined as .81, corrected to .90 (N: 225, 105 normals, 120 patients).⁵⁰

Norms were drawn up for these 1,151 cases. They are percentile equivalents of the raw scores for Part A of the test, and are interpreted in some detail in the Manual.⁵¹ In general, the authors propose that raw scores of 113 or more suggest the presence of definite purpose and meaning in life, while raw scores of 91 or below suggest the lack of clear meaning and purpose, the mean lying at score 102.

The authors concluded from this study that the instrument, the PIL, is supported as a reliable and valid measure of Frankl's conception of meaning and purpose in life, and that the results favor the correctness of his formulations in logotherapy.

3. Subsequent Research with the PIL.

At the time of the publication of test and manual, no consistent relationships had been found between PIL scores and variables of age, sex, education, or economic

⁵⁰ Crumbaugh and Maholick, "An Experimental Study in Existentialism," p. 202.

⁵¹ -----, Manual, p. 3.

status. In two studies^{52,53} representing the first application of the PIL to older populations, it was shown that retired professionals, specifically teachers and clergymen, typically maintain a satisfactory level of adjustment, although retired clergymen were reliably higher than the professors in the dimension of meaning and purpose in life (N: 50, age 65-75). "These findings support those in the development of the PIL to the effect that purpose in life is not identifiable with adjustment."⁵⁴

In a study with middle-aged women, Hurley⁵⁵ concluded that there is a definite relationship between socio-economic position and perceived meaning in life, and that employment status is not significantly related to such meaning, though there was a significant trend towards higher PIL scores among employed subjects.

52 F. G. Acuff, Retirement, Meaning and Adjustment: The Emeritus Professor and Retired Clergy of a Southwestern State, unpublished Ph.D. dissertation, University of Missouri, 1967.

53 F. G. Acuff and B. Gorman, "Emeritus Professors: The Effect of Professional Activity and Religion on Meaning," Sociological Quarterly, Vol. 9, Winter 1968, p. 112-116.

54 Crumbaugh, "Aging and Adjustment: The Applicability of Logotherapy and the Purpose-in-Life Test," p. 419.

55 D. C. Hurley, An Examination of the Relationship between Purpose or Meaning in Life, Socio-economic Position and Factors of Employment in a Group of Middle-aged Women from Two Distinct Socio-economic Brackets, unpublished Master's dissertation, University of British Columbia, 1970.

Cavanaugh⁵⁶ distinguished groups by a declining score according to theorized levels of purpose in life, as Crumbaugh had done. In a sample of 210 including "normals" and patients, he was able to classify subjects into theorized high and low purpose groups with accuracies ranging from 60% to 100% correct classification. He obtained a test-retest reliability coefficient of .79 and found that the PIL correlated with the FQ to a degree of .68.

In a study with 237 subjects, age 18 to 69, and of Grade VIII to Ph.D. education, Murphy⁵⁷ used the PIL, the FQ, and the Semantic Differential to determine whether degree of purpose in life differed for groups committed to each of the four Frankl-proposed life objectives (Commitment to God, to a Loved One, to a Cause, to Society as a Community of People). He found no significant differences among various age groups. The highest absolute mean was obtained by the group committed to God; the next highest being those committed to a Loved One, there being no significant difference between these two groups. Murphy obtained a reliability of .90 for the PIL, .75 for the FQ. He concluded that "available

56 M. E. Cavanaugh, The Relationship between Frankl's "Will to Meaning" and the Discrepancy between the Actual Self and the Ideal Self, unpublished doctoral dissertation, University of Ottawa, 1966, viii-115 p.

57 Leonard Murphy, Extent of Purpose-in-Life and Four Frankl-proposed Life Objectives, unpublished doctoral dissertation, University of Ottawa, 1967, viii-150 p.

evidence indicates that these instruments measure with a sufficient consistency to be informative measuring tools."⁵⁸ He also had administered to the subjects a form containing two questions: (1) Does your life have purpose or meaning? (Elaborate if you wish.); (2) If your life does have purpose or meaning, what is it which gives it this purpose or meaning?

The consistency between the PIL scores and the responses to these questions was, to him, further proof of the validity of the PIL.

Doerries⁵⁹ found that students who belonged to one or more campus organizations scored higher on the PIL than those who belonged to one or none. Results also showed that women scored significantly higher than men (N: 62 women, N: 60 men).

Yarnell⁶⁰ later carried out a study to further investigate the construct validity of the PIL by studying the relationship between PIL scores and various measures of personality of normal and schizophrenic subjects (N: 40 each, males). His findings corroborated those of Crumbaugh with

58 Ibid., p. 77.

59 Lee E. Doerries, "Purpose in Life and Social Participation," Journal of Individual Psychology, Vol. 26, No. 1, 1970, p. 50-53.

60 T. D. Yarnell, "Purpose-in-Life Test: Further Correlates," Journal of Individual Psychology, Vol. 27, No. 1, 1971, p. 76-79.

regard to mean scores for normals and schizophrenics. He found no significant correlation with age or IQ or educational level for either group. There was a significant negative correlation with the Rotter I-E Control Scale,⁶¹ which "measures the degree to which the individual assumes responsibility for his own life, or projects this externally."⁶² Presumably, "individuals with greater purpose in life see themselves less at the mercy of luck (more in control of the situation) than those with less purpose."⁶³

This author has also demonstrated, with fifty male college students, an r of $-.47$ ($p < .01$) between the PIL and the neuroticism scale of the Eysenck Personality Inventory, and an r of $.43$ ($p < .01$) between neuroticism and the Rotter I-E Control, as well as negative correlations between the PIL and some measures of anxiety and anxiety proneness.⁶⁴

In yet another study⁶⁵ it was reported that regular marijuana users scored significantly lower on the PIL than nondrug users (N : 27 and 28).

61 J. B. Rotter, "Generalized Expectancies for Internal versus External Control of Reinforcement," Psychological Monographs, Vol. 80, No. 1, 1966, No. 609.

62 J. C. Crumbaugh, "Frankl's Logotherapy: A New Orientation in Counseling," Journal of Religion and Health, Vol. 10, No. 4, 1971, p. 373.

63 Yarnell, op. cit., p. 78.

64 Ibid.

65 G. D. Shean and F. Fechtmann, "Purpose in Life Scores of Marijuana Users," Journal of Clinical Psychology, Vol. 27, No. 1, 1971, p. 112-113.

In his study with two hundred subjects, age 13 to over 65, Meier⁶⁶ found no significant sex relationship to PIL scores, but he reported significant differences in mean scores between various age groups. For example, the age group 17-19 differed significantly from all other age groups, and the 13-15 group differed from all groups except the 25-35 group. It may be noted that among the adult groups there were no significant differences, which is in accord with Crumbaugh's earlier findings.

Meier's study also corroborated those of Crumbaugh regarding educational level, and showed as well that religious differences, as defined in that context (denominational membership), are not significantly related to variations in PIL scores.

Table II on page 40 presents results of other studies indicating the relationship of PIL scores with scores of tests of other personality variables.

Crumbaugh and Maholick call attention to the fact that all of the relationships to PIL scores reported (with the possible exception of the MMPI D-scale) involve personality traits rather than psychiatric syndromes or psychodiagnostic categories.

66 A. Meier, Frankl's "Will to Meaning" as Measured by the Purpose in Life Test in Relation to Age and Sex Differences, unpublished Master's thesis, University of Ottawa, May 1973, ix-112 p.

Table II.-
Relationship of PIL with Tests of Other Personality
Variables.

Experimenter(s)	Test	N	Significances found	r
Crumbaugh & Maholick (1964)	MMPI	45	K scale D scale	.39 -.30
Nyholm (1966)	CPI	34	Self-acceptance	.40
	California Personality Inventory		Sense of well-being	.52
			Achievement via conformance	.63
			Psychological mindedness	.47
	MMPI	68	D scale	-.42
			Si scale	-.45
Elmore & Chambers (1967)	Srole Anomie	94		-.51
	POI Shostrom's Personal Orientation Inventory			
	MMPI		Hy, Pd, Si scales	None Neg.
Crumbaugh (1968)	MMPI	50	Pt scale, D scale (both)	-.44
		143	D scale	-.65
	Srole Anomie	249	Males	-.48
			Females	-.32
Crumbaugh, Lozes & Shrader (1968)	Cattell 16 PF	56	Anxiety scale	-.52
			Self-confidence	.44
			Other scales	None
	Cattell MAT	56	Home and Parental Sentiment Subtest	.28
			Other scales	None
	Gordon Personal Profile	56	Responsibility	.39
	Buhler Life	56	Emotional Stability	.43
	Goals Inventory			None

Material culled from J. C. Crumbaugh and L. T. Maholick,
Manual of Instructions for Purpose in Life Test, Chicago Plaza,
Ill., Psychometric Affiliates, 1969, p. 2-3; other sources.

This fact, plus the obtained high relationship between the PIL and Frankl's Questionnaire, and the PIL's significant separation of patient and non-patient populations, suggests that the PIL does measure, as intended, a new factor (existential vacuum) which is the essential ingredient of a new neurosis (noögenic neurosis).⁶⁷

It measures, as its authors designed it to, "the degree to which the subject experiences a sense of meaning and purpose in life."⁶⁸

Of special interest to the present study are the projects of Durlak, who felt that "Frankl's notion that the meaning of life is enhanced as one finds meaning in suffering and death would lead one to expect a negative relationship between 'purpose in life' and 'fear of death.'"⁶⁹ In order to test his hypothesis, he sampled three populations:

- 40 college students - Experimental Psychology - Wisconsin U.
- 40 college students - Introductory Psychology - Vanderbilt U.
- 40 high school students - English - Taft, Chicago.

To these were administered the PIL and Lester's Fear of Death Scale (FODS);⁷⁰ the Semantic Differential⁷¹ was administered to one group.

67 Crumbaugh and Maholick, Manual, p. 3.

68 Crumbaugh, "Cross-validation of Purpose-in-Life Test based on Frankl's Concepts," p. 74.

69 J. A. Durlak, "Relationship between Individual Attitudes towards Life and Death," Journal of Consulting and Clinical Psychology, Vol. 38, No. 3, 1972, p. 463.

70 D. Lester, "A Scale Measuring the Fear of Death: Its Construction and Consistency," Brandeis University, 1966, for ADI:PR, June 20, 1967, No. 9499, 2 p.

71 C. E. Osgood et al., The Measurement of Meaning, Urbana, University of Illinois Press, 1967.

The correlation between purpose in life and fear of death for the total sample was found to be $-.54$ ($p < .001$), confirming the hypothesis that those whose scores reflect a higher purpose and meaning in their life tend to fear death less. In the group which also did the Semantic Differential, subjects with above median scores on the PIL had significantly higher mean factor scores on the evaluative dimension for both concepts, while subjects low on the PIL evaluated the concept of death negatively. This is in keeping with Neuringer, who also used the Semantic Differential with concepts of life and death, and whose eighteen pairs of adjectives⁷² were adopted by Durlak for this study.

In a replication study⁷³ involving ninety-four Vanderbilt students, a significant negative correlation was again found between scores on the PIL and on the FODS.

Durlak introduced the matter of religion into his first study, posing three questions regarding belief in God and the afterlife. Since the responses did not significantly differ in any particular way as a function of PIL scores, he concluded that "it does not appear that beliefs of this sort

72 C. Neuringer, "Divergencies between Attitudes towards Life and Death among Suicidal, Psychomatic and Normal Patients," Journal of Consulting and Clinical Psychology, Vol. 32, 1968, p. 59-63.

73 J. A. Durlak, "Relationship between Individual Attitudes towards Life and Death." Extended Report (unpublished), p. 6.

could serve as the explanation for the different attitudes towards life and death."⁷⁴

Later, Durlak carried out somewhat the same study⁷⁵ with thirty-nine women residents from two retirement and nursing homes (ages 67-88, average 76). A significant negative correlation of -0.38 was found between PIL and FODS scores. Considering the restricted variable range as well as the limited number of subjects, this correlation was accepted as indicative of a moderate degree of relationship between the two scales.

The results of Durlak's studies provide fairly significant indication of a trend worthy of further exploration with extension to other and larger populations.

Table III on page 44 presents a partial listing of research studies done with the PIL. It shows the type of subjects used and the group means and standard deviations which were attained. To date there are seventeen studies published, and at least seven others which have not been published.⁷⁶

⁷⁴ Ibid.

⁷⁵ J. A. Durlak, "Relationship between Attitudes towards Life and Death Among Elderly Women," Developmental Psychology, Vol. 8, 1973, p. 146. Extended Report (unpublished), p. 2.

⁷⁶ Crumbaugh and Maholick, Manual, p. 4.

Table III.-

PIL Means and Standard Deviations in Various Studies.

N	Subjects	M	SD
30	Harvard summer school graduates	124.78	11.80
75	Undergraduate college students	116.84	14.00
49	Outpatients of private psychiatrists	101.80	22.38
50	Outpatients of Bradley Clinic (non-profit)	101.30	18.14
21	Hospitalized patients, alcoholics	89.57	16.60
230	Successful businessmen and professionals	118.90	11.31
142	Active and leading parishioners	114.27	15.28
417	College undergraduates	108.45	13.98
16	Indigent hospital patients (non-psychotic)	106.40	14.49
225	Outpatients, neurotics, mixed diagnosis	93.31	21.67
13	Hospitalized neurotics, mixed diagnosis	95.31	18.36
38	Hospitalized patients, alcoholics	85.37	19.41
11	Hospitalized schizophrenics, Negro	108.00	17.71
41	Hospitalized schizophrenics	96.66	16.12
18	Hospitalized psychotics	80.50	17.50
56	Trainee Sisters (religious community)	119.27	10.02
40	Air force men in university courses	110.03	12.70
40	Hospitalized schizophrenics	81.88	26.47
39	Elderly women, retired institution residents	123.20	12.04
237	Normals, age 18 to 69, Gr. VIII to Ph.D.		
	males	117.90	12.59
	females	114.72	16.72
27	Undergraduate marijuana users	88.47	
28	Undergraduate nondrug users	98.39	16.84
50	Retired persons, age 65-75		
32	Parishioners: Grade IX or less	109.41	16.09
32	Parishioners: Grade X - XII	114.06	11.29
32	Parishioners: Post-secondary education	115.28	8.65
40	Students age 13 to 15	106.87	14.06
40	Students age 17 to 19	101.32	15.53
40	Young adults age 25-35	110.50	13.29
40	Adults age 45-55	111.12	12.75
40	Retired adults age 65 and over	112.90	13.83

Material culled from Crumbaugh, Maholick, Murphy, Meier, Cavanaugh, Acuff, Doerries, Shean and Fechtmann, et al.

As can be seen from the table, samples cover a fairly wide range of normal and patient populations. Ages range from 13 to 76, with most in the young adult range, up to 30 years, with a fair number in the 45-50 range, and in the elderly range. An age which has been measured comparatively few times is the span from thirty to forty-five. This is of interest, as this span encompasses an age which is recognized, developmentally, as a time of assessment, questioning, re-integration of life plans and purpose. Though numbers used in some studies have been fairly large (417, 237, etc.), for the most part samples have been rather small. Reportings of age and sex are rather sparse, and studies done specifically in age and sex differences are few.

4. Evaluation of the PIL Test.

The PIL test is based on a clearly and carefully elaborated concept of meaning. This is a decided advantage in that one's idea of what is being measured is delineated to an appreciable degree. The fact that it correlates so highly with the questionnaire devised by Frankl, the author of the concept of meaning used, speaks well for its concurrent validity. Moreover, the authors had the benefit of Frankl's cooperation, critique and clarification throughout the development of the test. The authors concluded that, through their studies, the instrument is supported as a reliable and valid

measure of Frankl's concept of meaning and purpose in life and that, moreover, the results favor the correctness of his formulations in logotherapy.

According to one report:

It is presently the only scale available which purports to measure a phenomenological dimension: the degree to which an individual is finding purpose and meaning in life.⁷⁷

The test has been subjected to rather extensive validation, cross-validation and reliability testing. There is a sizeable fund of studies carried out with it, over a fairly wide age range and with various educational and occupational levels, with "normal" and patient populations. It has proven its capacity to distinguish patient and nonpatient groups, and to predict such categories.

Its assessment of purpose in life has tallied with expected levels of various groups assembled according to theorized descending degrees of meaningfulness.

There has been rather extensive manifestation of low or negative correlation of the PIL test with tests of other personality variables, which supports its claim to be a measure of something "other."

The test itself is simply constructed, straightforward, easy to administer in individual or group settings. Instructions

⁷⁷ Alan C. Butler and Lester Carr, "Purpose in Life through Social Action," The Journal of Social Psychology, Vol. 74, 1968, p. 243.

on the form are "easily understood without further comment, by nearly all adult and adolescent samples, of about fourth grade or higher."⁷⁸ Language used is simple; the scale-within-a-scale approach allows for answers of degree, and the random direction of the gradings offsets possible stereotypy or patterning in responses.

The test is economical of time, in administration and in execution, requiring less than half an hour in combination with the other test given. This is an advantage, especially when pretesting treatment is also administered. And yet, though short, the test affords satisfactory measurement, as evidenced in research reports.

Scoring is objective, being the simple sum of the numerical values circled for the twenty items. This allows for rapid and accurate rating. Moreover, the PIL has been "validated as a group measure."⁷⁹

While clearly outlining its weaknesses as well as its merits, and pointing out the need for still more basic work with the test itself, both Buros reviewers⁸⁰ (Braun and Domino) conclude by encouraging further research with the PIL.

78 Crumbaugh and Maholick, Manual, p. 3.

79 Crumbaugh, "Frankl's Logotherapy: A New Orientation in Counseling," p. 377.

80 Oscar Krisen Buros, The Seventh Mental Measurement Yearbook, Vol. I, 1972, p. 314-315.

In brief, the PIL test has been chosen for this study because it measures what the writer seeks to measure. It "fits" what the writer sees as being meant by meaning in the quotations from the literature regarding life purpose and death anxiety, including those of Frankl himself, whose concept of meaning the test claims to measure. It has the added and necessary advantage of having been quite amply put to the test for its validity and reliability in measuring meaning and purpose in life as enunciated by Frankl.

The following chapter will present the test which is to be used in conjunction with the PIL.

CHAPTER III

DEATH ANXIETY SCALE

This chapter describes the scale to be used in measuring death anxiety. Construction and validation procedures are presented, as well as other related research, and an evaluation of the scale itself. This is followed by a brief exposé of the present study, and the statement of the basic hypotheses.

1. Construction and Validation Procedures.

At the time that Templer devised the Death Anxiety Scale, "clinical psychologists and psychiatrists had paid relatively little attention to the topic of fear of death."¹ Three methods of assessment had been used: interviews, projective techniques, questionnaires, but with the exception of one questionnaire (Boyar's Fear of Death Scale²), "neither the reliability nor the validity of any instrument or procedure for measuring death anxiety had been determined."³

1 D. I. Templer, Death Anxiety Scale, reprint from the Proceedings, 77th Annual Convention, APA, 1969, p. 737. (A copy of the Death Anxiety Scale is presented in Appendix 1.)

2 J. I. Boyar, The Construction and Partial Validation of a Scale for the Measurement of the Fear of Death, unpublished doctoral dissertation, University of Rochester, 1964.

3 Templer, op. cit., p. 737.

Interview questioning ranged from the lengthy thirty-two questions of Bromberg and Schilder⁴ to the two questions of Jeffers et al.⁵ Boyar's Fear of Death Scale (FODS) seemed to be "more adequate than the instruments thus far reported in the literature,"⁶ including the statistical procedures used to test its value. (In addition to reliability checks, Boyar had tested validity by administration of the FODS, both before and after two movies, one intended to increase fear of death, and the other innocuous.) Templer decided to construct another scale to measure death anxiety "because of the possible limitations associated with items of relatively narrow content, and only a single validity procedure."⁷ As Templer himself said:

The DAS was constructed to fill a need. Specifically, much of the research upon fear of death has been methodologically weak because of the absence of a measuring device with thoroughly determined reliability and validity.⁸

4 W. Bromberg and P. Schilder, "Death and Dying," Psychoanalytic Review, Vol. 20, 1933, p. 133-185.

5 F. C. Jeffers, C. R. Nichols, and C. Eisdorfer, "Attitudes of Older Persons towards Death," Journal of Gerontology, Vol. 16, 1960, p. 53-56.

6 D. I. Templer, "The Construction and Validation of a Death Anxiety Scale," Journal of General Psychology, Vol. 82, 1970, p. 166.

7 -----, Death Anxiety Scale, p. 737.

8 -----, "Relatively Non-technical Description of the Death Anxiety Scale," Archives of the Foundation of Thanatology, Vol. 3, No. 3, 1971, p. 91.

Accordingly, on a rational basis, he drew up items pertaining to fear of death, having a wider range of life experience than that reflected by Boyar's FODS which covered primarily the act of dying, the finality of death, corpses and their burial.

Forty items were devised, twenty-three being keyed true, and seventeen false. Seven judges rated the face validity of these items: a clinical psychologist, two graduate students in clinical psychology, four chaplains in a state mental hospital. The direction of the question intended by the author to indicate greater death anxiety was specified, and the judges rated each item from one to five on this basis:

- 1 - Irrelevant to death anxiety
- 2 - Slightly associated with death anxiety
- 3 - Moderately associated with death anxiety
- 4 - Considerably associated with death anxiety
- 5 - Very greatly associated with death anxiety.

Nine items attained an average rating of below 3.0 and were discarded. The thirty-one items receiving a rating of 3.0 or higher were embedded in two hundred filler items, and the last two hundred items of the MMPI, none of which is scored on the primary clinical scales.

Item Analysis.- To determine internal consistency, item total score point biserial correlation coefficients for three independent groups of subjects were utilized:

- 45 undergraduate psychology students at the University of Kentucky
- 50 students of classes and colleges in Kentucky and Tennessee
- 46 Introductory Psychology students at Western Kentucky U.

Fifteen items with point biserial coefficients significant at .10 in two out of three analyses were retained. The probability of a truly zero correlation being significant at the .10 level in two out of three analyses is .028.

Table IV on the following page, taken directly from Templer's article, lists the items retained in his scale.

To determine the relative independence of the retained items, phi coefficients were computed, and since none exceeded .65, it was inferred that there is no excessive inter-item redundancy.¹⁰

Response Sets.- In order to test for agreeing response tendency set, the DAS was correlated with the fifteen items of the Couch and Keniston short scale measure of agreement response set.¹¹ Subjects were thirty-seven students at Hopkinsville (Kentucky) Community College, 19 in Introductory

¹⁰ Templer, "The Construction and Validation of a Death Anxiety Scale," p. 167.

¹¹ A. Couch and K. Keniston, "Yeasayers and Neasayers: Agreeing Response Set as a Personality Variable," Journal of Abnormal and Social Psychology, Vol. 60, 1960, p. 151-174.

Table IV.-
The Fifteen Death Anxiety Scale Items.

Key	Content
T	I am very much afraid to die.
F	The thought of death seldom enters my mind.
F	It doesn't make me nervous when people talk about death.
T	I dread to think about having to have an operation.
F	I am not at all afraid to die.
F	I am not particularly afraid of getting cancer.
F	The thought of death never bothers me.
T	I am often distressed by the way time flies so very rapidly.
T	I fear dying a painful death.
T	The subject of life after death troubles me greatly.
T	I am really scared of having a heart attack.
T	I often think about how short life really is.
T	I shudder when I hear people talking about a World War III.
T	The sight of a dead body is horrifying to me.
F	I feel that the future holds nothing for me to fear.

D. I. Templer, "The Construction and Validation of a Death Anxiety Scale," The Journal of General Psychology, Vol. 82, 1970, p. 167.

Psychology, 18 freshmen in English. As the correlation coefficient was .23, not significant at the .05 level, it appeared "that agreement response set accounts for little of the variance of the DAS."¹²

As a further check on response set, the DAS and the Marlowe-Crowne Social Desirability Scale¹³ was administered to forty-six Introductory Psychology students at Western Kentucky University. The product-moment correlation coefficient between the two scales was not significant ($r = .03$). Since the Social Desirability Scale measures the tendency to respond in a socially desirable direction, it would appear that this response set is not appreciably related to the Death Anxiety Scale.

Reliability.- Thirty-one of the thirty-seven Hopkinsville Community College subjects completed the DAS a second time after a lapse of three weeks. A correlation coefficient of .83 demonstrated acceptable test-retest variability. A coefficient of .76 (Kuder-Richardson Formula 20) demonstrated reasonable internal consistency with these thirty-one subjects.

¹² Templer, "The Construction and Validation of a Death Anxiety Scale," p. 168.

¹³ D. P. Crowne and D. Marlowe, "A New Scale of Social Desirability Independent of Psychopathology," Journal of Consulting Psychology, Vol. 24, 1960, p. 349-354.

Validation Procedures.- Two separate projects were undertaken to establish construct validity of the DAS, one with psychiatric patients, one with college students.

In the first instance, twenty-one psychiatric patients who had spontaneously verbalized fear of, or preoccupation with, death were obtained by three methods: referrals by hospital chaplains, patients' records, and names obtained from the director of nursing in consultation with her staff. Control subjects were matched for diagnosis, sex and approximate age. They obtained a DAS mean score of 6.77, compared with 11.62 for the experimental group. A t of 5.79 was significant at the .01 level (two-tailed test), so that it could be concluded that "psychiatric patients who spontaneously verbalize death anxiety have higher DAS scores than other psychiatric patients."¹⁴

The second project involved seventy-seven advanced undergraduates at Murray State University. They completed the first 366 items of the MMPI, then after a fifteen-minute break, a word-association test,¹⁵ the DAS (embedded in the last two hundred items of the MMPI), and Boyar's FODS. In

¹⁴ Templer, "The Construction and Validation of a Death Anxiety Scale," p. 169.

¹⁵ S. H. Osipow and R. R. Grooms, "Norms for Chain of Word Associations," Psychological Reports, Vol. 16, 1965, p. 796.

the word-association task, the subjects were required to write ten associations to the word "death" and to four other words (love, hate, paper, life), these being included to render less obvious the nature of the research.

A high correlation (.74) was found between the DAS and the FODS. A correlation of .25 between the DAS and the number of emotional word associations was significant at the .05 level.

In a pilot study using the word-association test and the DAS (forty Introductory Psychology students, Western Kentucky University), it was found that those who obtained high DAS scores tended to give words that described emotions. The correlation coefficient between DAS scores and emotional words was .41 ($p < .01$). In a cross-validation of this procedure with forty-eight students in another undergraduate psychology class of the same university, ten judges were used to check emotional content of words given. A correlation coefficient of .31 was found ($p < .05$). Thus a positive relationship between DAS scores and emotional words associated was established. Templer deemed it "plausible that the appearance of affective words is a sign of death anxiety,"¹⁶ supporting his opinion by allusion to Rapaport,¹⁷ who

¹⁶ Templer, "The Construction and Validation of a Death Anxiety Scale," p. 171.

¹⁷ D. Rapaport, Diagnostic Psychological Testing, Chicago, Yearbook Publishers, 1946, x-562 p.

maintained that affective response in a word-association test represents an association disturbance. The fact that a projective technique which seems to tap death anxiety correlated significantly with the DAS was, to Templer, another indication that the DAS "does in fact measure death anxiety".¹⁸

Templer used the MMPI for two reasons: because it contains three anxiety scales, and because it measures personality variables.

First, the MMPI contains three well-known measures of anxiety: the Manifest Anxiety Scale, the Welsh Anxiety Scale and the Welsh Anxiety Index. Templer reasoned that if the DAS correlated as highly with each of these as they intercorrelate with each other, then the scale would not have discriminant validity¹⁹ and it could be presumed that the DAS measures anxiety in general rather than death anxiety in particular. Coefficients of correlations with the anxiety scales were: Manifest Anxiety Scale, .39 ($p < .05$); Welsh Anxiety Scale, .36 ($p < .05$); Welsh Anxiety Index, .18 (ns).

Thus death anxiety was seen to correlate positively with general anxiety, though not as highly as intercorrelations among the three scales.

¹⁸ Templer, "The Construction and Validation of a Death Anxiety Scale," p. 174.

¹⁹ D. T. Campbell and D. W. Fiske, "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix," Psychological Bulletin, Vol. 59, 1959, p. 81-105.

The MMPI was also used because "it was considered worthwhile to determine the relationship of the DAS to personality variables, particularly as measured by the MMPI scales,"²⁰ the role of personality variables in death anxiety being mentioned fairly frequently in the literature. The only studies that have related death anxiety to personality variables have used the MMPI, with conflicting results.^{21,22,23} The rather low correlations obtained in Templer's study do not support the impression that death anxiety is associated with certain syndromes of psychopathology. In order to ascertain if the correlations were due to lack of psychopathology, among the test group, the MMPI with the DAS items embedded, was administered to an abnormal population: thirty-two patients in admission wards of Western State Hospital, with diagnoses of psychosis, neurosis, personality disorder. The DAS correlated positively with a number of scales, the highest being .56 for Sc., .49 for Pt., and .47 for D. This is consistent with clinical literature in which it has been

20 Templer, "The Construction and Validation of a Death Anxiety Scale," p. 172.

21 Boyar, op. cit.

22 P. J. Rhudick and A. S. Dibner, "Age, Personality, and Health Correlates of Death Concerns in Normal Aged Individuals," Journal of Gerontology, Vol. 16, 1961, p. 44-49.

23 W. M. Swenson, "Attitudes towards Death in an Aged Population," Journal of Gerontology, Vol. 16, 1961, p. 49-52.

stated that schizophrenics, obsessive-compulsives, and depressives have a high level of death anxiety.

Effect of Embedding.- Later, in order to determine if embedding the items had an effect on the DAS score, the DAS was administered to 158 students at Hopkinsville Community College in two ways:²⁴ items embedded in last two hundred MMPI items (78 subjects: 30 male, 48 female); items placed before two hundred MMPI items (80 subjects: 32 male, 48 female).

Since on the first testing there did not appear to be any readily apparent explanation for the significant differences in variance, replication was done to rule out a Type I error, with similar administration to 186 different students from the same college. Means obtained for embedded and non-embedded were 6.70 and 6.95, respectively ($t = .50$, ns). From which Templer decided that a "reasonable conclusion is that embedding of DAS items has little or no effect upon scores."²⁵ In subsequent studies, the DAS was used in its own right, as a separate scale of fifteen items.

24 D. I. Templer, "Death Anxiety Scale Means, Standard Deviations and Embedding," Psychological Reports, Vol. 29, 1971, p. 173-174.

25 Ibid., p. 174.

2. Subsequent Research with the DAS.

In subsequent studies, a considerable amount of useful data has been collected. Templer²⁶ undertook to determine the relationship between verbalized and nonverbalized death anxiety, measuring the former with the DAS and the latter by galvanic skin response to death-related words, these two measures and their discrepancy then being related to the repression-sensitization dimension of personality.²⁷ He deemed this study important because of the implication in clinical literature that

. . . death anxiety is an almost universal human experience and that the defense mechanisms of denial and repression account for people dealing with death anxiety in different ways and with different degrees of effectiveness.²⁸

Subjects were forty-nine heterogeneous adult patients in Malcolm Bliss Mental Health Center, St. Louis. First, the DAS was administered, embedded in the 156 items of the Repression-Sensitization Scale, then the GSR test was given, with thirty words presented at thirty-second intervals. The

26 D. I. Templer, "The Relationship between Verbalized and Nonverbalized Death Anxiety," The Journal of Genetic Psychology, Vol. 119, 1971, p. 211-214.

27 D. Byrne, "The Repression-Sensitization Scale: Rationale, Reliability and Validity," Journal of Personality, Vol. 29, 1961, p. 334-349.

28 Templer, "The Relationship between Verbalized and Nonverbalized Death Anxiety," p. 211.

words comprised ten death-related words, ten high in other affective content, and ten neutral words, all arranged in sets of three, with choice and positioning random.

Results showed a correlation between DAS and DGSR (galvanic skin response to death-related words) to be .80 ($p < .05$). From this it was concluded that these measures of death anxiety were significantly though modestly correlated, indicating that the DAS possibly picks up un verbalized or unconscious death anxiety, in addition to verbalized.

The Repression-Sensitization Scale correlated .51 ($p < .01$) with the DAS and .02 with the DGSR. The discrepancy between DAS and DGSR correlated with R/S at .38 ($p < .01$). Templer felt that this was

. . . insufficient basis to maintain that autonomically detected death anxiety is a measure of repressed death anxiety. A more acceptable statement would be that it is independent of repression-sensitization; this is in contrast to the DAS which is rather highly correlated with repression-sensitization.²⁹

In other words, Templer would explain these results as indication that "'the sensitizer,' who ruminates about death rather than denying its threat, is inclined to higher DAS scores than the 'repressor.'"³⁰

²⁹ Ibid., p. 213.

³⁰ D. I. Templer, "Relatively Non-technical Description of the Death Anxiety Scale," Archives of the Foundation of Thanatology, Vol. 3, Summer 1971, p. 92.

Templer also undertook to evaluate degree of death anxiety as a function of age and sex in diverse populations. For this study,³¹ he selected a total of 2,559 subjects from very different sources:

283 apartment residents (upper middle class)	age 19-85 (aver. 48.8)	123M 160F
125 hospital aides (lower income)	age 18-61 (aver. 33.2)	13M 112F
137 psychiatric patients	age 17-59 (aver. 31.8)	78M 59F
743 students	age 13-21 (aver. 15.8)	299M 444F
1271 parents	age 31-74 (aver. 44.0)	569M 702F

Among these subjects, Templer found no significant correlation between DAS score and age for any of the groups. For all groups, females exhibited higher scores than males, statistically significant ($p \leq .001$) for apartment dwellers, adolescents and parents of adolescents.

Among 223 father-son units and 419 mother-daughter units, he found significant correlations with DAS scores for all combinations of parent-adolescent relationships, the highest being with parents and adolescents of the same sex. The highest of all correlations was found between husband and wife (.57). From these results Templer deduced that death anxiety "is not so much a fixed entity as a state that is

31 D. I. Templer, "Death Anxiety: Age, Sex and Parental Resemblance in Diverse Populations," Developmental Psychology, Vol. 4, No. 1, 1971, p. 108.

sensitive to environmental events in general, and to the impact of intimate interpersonal relationships in particular."³² According to him:

The death anxiety resemblance of family members is explained in terms of learning within the context of intimate interpersonal relationships rather than in terms of psychodynamic postulates. . . . The especially high correspondence between husband and wife death anxiety may be a function of the proximity of this relationship and of shared life experiences.³³

In his view, such evidence of intra-familial resemblances in death anxiety and such conceptualization of the possible reasons for it provide "a potential basis for the treatment of pathological death anxiety by a broad spectrum behavioral approach."³⁴

In another study,³⁵ using Eysenck's Personality Inventory (with 384 undergraduates at Bloomfield College, New Jersey), Templer found a significant correlation between the DAS and Neuroticism, zero correlation between the DAS and Extraversion. In the same study, he found no significant differences on DAS scores between smokers and nonsmokers but he did find, within the smoker group, a significant negative correlation between DAS score and amount of smoking.

³² Ibid., p. 108.

³³ Ibid. Extended Report, p. 4.

³⁴ Ibid.

³⁵ D. I. Templer, "Death Anxiety: Extraversion, Neuroticism, and Cigarette Smoking," Omega, Vol. 3, 1972, p. 53-56.

In a study using the Cornell Medical Index, the MMPI D scale, and the DAS with seventy-five retired employees (Western Telegraph Company), a positive correlation was found between death anxiety and depression. From this Templer ventured that, "it is tentatively suggested that high death anxiety is commonly part of a depressive syndrome in elderly persons."³⁶ The absence of any demonstrated positive relationship between death anxiety and somatic pathology led him to conclude that, "apparently, decline of somatic integrity is ordinarily not a crucial determinant of death anxiety level."³⁷ He came to the general conclusion that "death anxiety is usually related more to the degree of personality adjustment and subjective state of well-being than to reality-based factors"³⁸--an observation which can be linked to the present study.

In the only known study³⁹ of death anxiety among Negroes, Templer came to the conclusion that blacks and

36 D. I. Templer, "Death Anxiety as Related to Depression and Health of Retired Persons," Journal of Gerontology, Vol. 26, No. 4, 1971, p. 522.

37 Ibid.

38 Ibid.

39 Cf. "We have yet to find an empirical study directed specifically to death fears of black Americans." Robert Kastenbaum and Ruth Aisenberg, The Psychology of Death, New York, Springer, 1972, p. 65.

whites share similar attitudes towards death. This was documented by the similar means and deviations, and also by the higher DAS scores for females in both blacks and whites. "This sex differential has been well documented in a number of studies with white subjects."⁴⁰ It is of interest to note that with Negro persons, the difference between male and female in DAS scores is less than with white persons (sample: 124 whites, 134 blacks).

Templer also undertook to investigate the relationship between death anxiety and religious affiliation, belief and activity⁴¹ (213 students, psychology classes, Western Kentucky University). A conclusion based on his findings was that for these college students, "religious variables do not appear to be highly related to death anxiety."⁴² He did, however, find a significantly higher DAS score for those who professed themselves uncertain as to life after death, compared with those who professed certainty (yes or no). This corroborates the conclusion of other authors who found that, in the matter of belief in an afterlife, "degree of

40 R. E. Pandey and D. I. Templer, "Use of the Death Anxiety Scale in an Interracial Setting," Omega, Vol. 3, No. 2, 1972, p. 129.

41 D. I. Templer and E. Dotson, "Religious Correlates of Death Anxiety," Psychological Reports, Vol. 26, 1970, p. 895-897.

42 Ibid., p. 897.

certainty rather than the nature of one's conviction is a more crucial variable with respect to death anxiety."⁴³

In a subsequent study⁴⁴ with religiously involved persons, Templer obtained mean DAS scores for both men and women which were lower than those obtained in any other studies with the DAS (267 participants in predominantly Protestant, evangelical retreats). The women attained an all-time low of 4.21, while the men's mean was 3.67. Even here it is evident that the usual higher score for females maintains. Overall conclusion was that, apparently, religiously very involved persons have lower DAS scores.

Table V on page 67, taken from Templer, though adapted and updated, presents a summary of much of the research reported heretofore. It shows means and standard deviations for twenty-three categories of samples in seven studies, comprising over 3600 subjects varying in age (13 to 85), sex, socio-economic status, normality, and race. Distribution of sampling is quite evenly spread among adolescent-young adult (mainly students), 1675, and adult,

43 I. E. Alexander and A. M. Adlerstein, "Affective Responses to the Concept of Death in a Population of Children and Early Adolescents," Journal of Genetic Psychology, Vol. 13, 1958, p. 167-177; quoted in Templer and Dotson, op. cit., p. 895.

44 D. I. Templer, "Death Anxiety in Religiously Very Involved Persons," Psychological Reports, Vol. 31, 1972, p. 361-362.

Table V.-

DAS Means and Standard Deviations in Various Studies.

N	Subjects	M	SD
134	Lincoln University undergraduate Negroes	6.35	3.28
124	Lincoln University undergraduate whites (Templer, 1969; 1970)	6.16	3.21
77	Murray University undergraduates	5.13	3.10
32	Heterogeneous psychiatric patients	6.78	2.97
21	High death anxiety psychiatric patients	11.62	1.96
21	Controls for high death anxiety psychiatric patients (Templer & Dotson, 1970)	6.77	2.74
104	Male Western Kentucky U. undergraduates	6.07	3.12
109	Female Western Kentucky U. undergraduates (Templer, Ruff & Franks, 1971)	6.66	3.07
123	Male apartment house residents	4.85	2.88
160	Female apartment house residents	6.11	3.31
299	Adolescent males	5.72	3.07
444	Adolescent females	6.84	3.21
569	Fathers of adolescents	5.74	3.32
702	Mothers of adolescents	6.43	3.22
78	Male heterogeneous psychiatric patients	6.50	3.55
59	Female heterogeneous psychiatric patients	7.15	3.72
13	Male psychiatric aides	5.08	2.25
112	Female psychiatric aides (Templer, 1971)	6.33	3.24
49	Heterogeneous psychiatric patients (Templer, 1971)	7.13	3.45
46	Retired males	4.15	3.29
29	Retired females (Templer, 1972)	4.41	3.43
217	Bloomfield (N.J.) college males	6.69	2.72
167	Bloomfield (N.J.) college females	7.84	2.99

D. I. Templer, "Death Anxiety Scale Means, Standard Deviations and Embedding," Psychological Reports, Vol. 29, 1971, p. 174 (slightly adapted as to dates).

1754. Numbers of psychiatric patients tested are comparatively low, though sufficient for purposes used.

A partial summary of information gleaned from the research reported in the table is as follows:

females tend to score higher than males;

no appreciable difference in scores according to age;

psychiatric patients score higher than normals;

parent-adolescent scores are very similar, especially between those of the same sex (e.g., father-son);

similarity of husband-wife scores is very high;

religiously involved persons score low.

During the course of the present research study, the first two above might be further established, or contested.

3. Evaluation of the Death Anxiety Scale.

Constructed after a review of literature pertaining to the measurement of the fear of death, Templer's DAS was

an attempt to improve on existing scales. Of the questionnaires reported in the literature, it seems to be the one most thoroughly tested for statistical soundness, and has been widely used in further experimentation.

Care was taken by the author to determine that the scale measured death anxiety, as distinguished from general anxiety and also to test the scale for susceptibility to response sets.

In its use, the DAS has discriminated psychiatric from "normal" populations, and has shown consistency in the measurement of certain other populations, e.g., females were higher in scores in all studies, with both black and white subjects.

The scale itself is short, simple, clear, unambiguous, easy to administer, to do, and to score. Time of execution is short, so that both the DAS and the accompanying test for this study can be completed within half an hour.

The DAS scale appears to afford a fair sampling of general attitudes to one's own death. In the author's words: "The DAS purports to measure the sort of death anxiety that one is aware of and willing to acknowledge."⁽⁴⁵⁾46 The moderate correlation attained with the GSR to death-related words

⁽⁴⁵⁾ 46 Templer, "Relatively Non-technical Description of the Death Anxiety Scale," p. 91.

would seem to indicate that it also picks up un verbalized or unconscious death anxiety.

In the writer's view, the DAS is the most satisfactory instrument available at this time, and is considered adequate for this research.

4. The Present Study: Background and Basic Hypotheses.

Recent psychology has seen an awakening interest in the area of death and dying. Both recent and not-so-recent philosophers and psychologists have linked death and life from two main outlooks: (a) that one must come to grips with death in order to pursue a meaningful life; and (b) that one whose life has been meaningful will be less fearful of death.

In the review of the literature, one author has been encountered who has linked these two elements in empirical studies (see p. 41-43). Durlak's results showed a negative correlation between death anxiety and purpose in life. Though his samples were small, and one instrument, the FODS, of rather questionable validity and reliability, his results were sufficiently suggestive to warrant further investigation.

A pilot study⁴⁷ related to the present research project was carried out with a sample consisting of fifty members

47 Mary C. Brown, Is There a Relationship Between Death Anxiety and Purpose in Life?, unpublished Interim Report presented to the Faculty of Psychology of the University of Ottawa, Ontario, 1974, iv-110 p.

of a religious congregation, using the PIL and the DAS, in order to further establish the existence of a relationship between death anxiety and life-purpose. Though the correlation for the total sample ($-.249$ $N:50$ Age: 25-74) was significant only at the .1 level, the middle group ($N:36$ Age: 35-45) attained a correlation of $-.444$, significant at the .01 level.

To check for the possible effect of order of administration, the group of fifty was randomly halved. To one half the PIL was administered first, followed by the DAS; to the other half, the DAS was administered first, followed by the PIL. This alternative-order administration produced quite interesting results, as presented in Table VI on page 72. Prior administration of the PIL yielded a correlation of .005, ns, while prior administration of the DAS yielded a correlation of $-.543$, $p < .01$. The difference in the correlations was not due to accidental clustering of certain age groups, as a subsequent examination of raw data showed an even distribution.

Moreover, means for the two tests were noticeably different for the two groups, though not significantly so. Thus prior administration of the DAS resulted in a lower DAS and higher PIL mean than for the prior administration of the PIL (Table VI). This would seem to support the theory that consideration of death results in a more serious and

Table VI.-

Comparison of DAS and PIL Means and Correlations for Groups
Divided According to Administration Sequence.

	<u>PIL Administered</u> First (n:25)	<u>DAS Administered</u> First (n:25)
<u>PIL</u>		
Mean	113.56	118.24
SD	11.98	8.29
<u>DAS</u>		
Mean	6.20	5.60
SD	2.31	2.61
<u>DAS vs. PIL</u>		
r	.005 ns	-.543 p < .01

Material taken from Mary C. Brown, Is There a Relationship Between Death Anxiety and Purpose in Life?, Interim Report presented to Faculty of Psychology, University of Ottawa, Ontario, 1974.

purposeful consideration of life. The results would also seem to indicate that a prior consideration of death tends to decrease death anxiety.

Basically, the present study seeks to further investigate the effect of confrontation with death on life-purpose and on death anxiety. In testing this relationship, the prior DAS-administration order will be used exclusively, except for one control group, where the PIL:DAS order will again be explored. Different types of death-confrontation will be used, including the real-life confrontation of bereavement, and two structured confrontations, a film and reading with a death-theme. All of these will be compared with each other, and with non-bereavement, as to their effects on DAS and PIL scores. Neutral stimuli (film, reading, no-stimulus) will also be used as controls.

If death-confrontation does have an effect on levels of death anxiety and purpose in life, then one could expect this to be manifested in higher or lower means on the DAS and PIL tests, according to varying degree or type of death-confrontation (real or structured, film or reading, etc.). In all cases, one would generally expect that according to level of purpose in life or death anxiety, high scores on the DAS would accompany low scores on the PIL, and vice versa.

Thus the main expectations for this study would be:

- (a) an overall negative correlation between DAS and PIL means, for the total sample, and for the different groups;
- (b) significant differences in DAS and PIL means for groups experiencing death-confrontation as compared with the no death-confrontation group (non-bereaved), and with each other.

The main hypotheses would then be:

- I. There is no correlation between DAS and PIL scores.
- III. There are no differences in DAS or in PIL means among the death-confrontation and no death-confrontation groups.
(Bereaved, Death Film, Death Reading, Non-bereaved)

These hypotheses will be investigated, as well as minor hypotheses to be presented in the chapter dealing with the experimental design (Chapter IV, p. 75-90).

It is hoped that this study will serve to clarify and possibly to quantify the effect of death-confrontation on death anxiety and on purpose in life. It is also undertaken with an interest towards encouraging wider and more enlightened counseling with dying persons and with their families.

The following chapter will present the sample, tools used in addition to the DAS and PIL, methods of administration, rationale and hypotheses, and proposed techniques of statistical analysis.

CHAPTER IV

EXPERIMENTAL DESIGN

The purpose of this chapter is to present the design of the present research study. The chapter begins with a discussion of the sample, and a description of the tools used. The method of administration is then outlined, followed by an exposition of rationale and hypotheses, and a description of proposed techniques of analysis.

1. The Sample.

The sample consisted of 209 summer school undergraduate students (122 women, 87 men), who participated voluntarily, out of a possible 214. Age span was from eighteen to fifty-six, with an average of 29.33 years (women 28.56; men 30.39). This population was chosen because of a certain homogeneity (similar educational level), and because, being in classes, they could more easily be exposed to the treatments required in the study. Also, a fair number of studies have already been run with undergraduate students using both the DAS and PIL separately, and there is therefore material for comparison.

Classes approached were selected according to largest enrolment among English and Psychology courses. Professors were asked to allow one-half hour of class time for the experimentation. One professor declined since his was a half-

semester course. In soliciting participation from the students, professors were asked to inform them of the following:

The project is a doctoral research in clinical psychology.

It is not an intelligence or personality test, but a questionnaire on two basic realities.

It is to be done voluntarily and anonymously.

It will have no effect on their term marks.

The nature of the study will not be disclosed beforehand, as this might affect the results, but a full explanation will be given later, if desired.

One of the six professors did not relay this information. The same items were reviewed at the beginning of each testing session.

Constitution of Groups.- Participation of six classes having been ensured (there being six types of treatment), the specific class for the specific treatment was decided by random choice. Class numbers were drawn out of a box, and assigned to treatments which had been fixed in a certain order beforehand. The classes were used intact as groups, because random assignment of subjects to groups would have incurred complications in scheduling of times and places, as well as possible overlap in time for some students, resulting in fewer participants.

The following list summarizes the allocation of classes to treatments:

<u>Class</u>	<u>N</u>	<u>Treatment</u>	<u>Tests Administered</u>
I	37	Film - death theme	<u>DAS</u> - <u>PIL</u>
II	26	Film - neutral	<u>DAS</u> - <u>PIL</u>
III	38	Reading - death theme	<u>DAS</u> - <u>PIL</u>
IV	32	Reading - neutral	<u>DAS</u> - <u>PIL</u>
V	49	No stimulus	<u>DAS</u> - <u>PIL</u>
VI	27	No stimulus	- <u>PIL</u>

2. The Tools.

Tools used in this research comprise the following:

(a) DAS-PIL questionnaire; (b) films; (c) readings.

(a) DAS-PIL Questionnaire.- The DAS and the PIL test having been presented in detail in chapters two and three, the writer herein deals with (i) the format used in the present research, and (ii) the adjunct to the DAS.

(i) Format.- Both the PIL and the DAS have revealing titles which might possibly produce a "set" towards answering. In the published PIL, the title is particularly predominant, large and black, and the printing throughout is "of the type found in children's beginning readers."¹

¹ George Domino, in O. K. Buros, The Seventh Mental Measurement Yearbook, p. 315.

In order to offset possible influence of the titles, the two questionnaires were typed and assembled under the heading "Research Questionnaire." This also facilitated distribution and ensured that the DAS would be done first, since the two were stapled together in the order DAS:PIL. Further advantages were that there was no danger that the pairs would get mixed, and no need for some sort of identification such as numbers in order to preserve anonymity.

For the group doing the PIL only, this test was given alone, under the same title, Research Questionnaire. Two weeks later, this latter group received the questionnaire with the DAS stapled after the PIL, to ensure adherence to the PIL:DAS order and again to preserve pairs and anonymity.

Also, care had been taken not to reveal the subject-matter of the questionnaires, beyond the statement that it dealt with basic realities, and the new combined form helped to continue this up to the time of answering.

(ii) Adjunct to the DAS.⁻² A few questions were appended to the DAS, in order to gather information regarding (1) incidence of bereavement,^{2a} (2) relationship with the deceased, and (3) personal experience of nearly dying. Bereavement being a real-life confrontation with death,

² See Appendix 1.

^{2a} Bereavement in this study: loss of immediate family or close friend.

information would be used for comparison with structured treatment groups (films and readings).

(b) Films.- Two films were used as treatment prior to testing, one group viewing a film with a death theme, and another group seeing a neutral film.

Death-theme Film: "Soon There'll Be No More Me"
- 10 min. - color³

This film is about a nineteen-year-old woman who is terminally ill with cancer. She herself acts in the film, with her husband and child, and it is her voice which is heard, as she writes in a diary to her daughter her thoughts and feelings about her impending death.

The film was previewed by three judges (two psychologists, one film advisor) who assessed it as fitting for the experiment at hand.

Neutral-theme Film: "L'evasion des carrousels"- 1967
- 8 min. - color⁴

This film is a nonverbal fantasy film about horses who rise from a merry-go-round and go running through fields and forests. The photography is quite intriguing. There is no commentary, no real theme, no explanation given.

(c) Readings.- Two readings were used as treatment prior to testing, one group receiving a passage with a death

3 See Appendix 2 for producer's description.

4 See Appendix 3 for description.

theme, and another group receiving a neutral passage. Both were entitled simply, "A Reading," and both were 534 words long.

Death-theme Reading.-⁵ A personal consideration of the inevitability of one's own death, beginning, "There is no doubt about it, some day I am going to die," and focusing throughout on one's own demise. The reading was assessed by three psychologists as quite adequate for the purpose intended.

Neutral Reading.-⁶ A passage dealing with play as characteristic of animals and men. It was more difficult to find a truly neutral reading since, in a reading, one cannot get away from words which can have different connotations for different people. However, this selection was considered sufficiently neutral and foreign to the idea of death for the present purpose, again as assessed by three psychologists.

3. Method of Administration.

The six classes taking part in the research were informed as to time of testing, but not as to treatment, until the actual testing session. The general preamble used with all six classes was as follows:

⁵ See Appendix 4.

⁶ J. Arthur Thomson, "The Play of Animals," in Short Stories and Essays, Toronto, Ryerson Press, 1949, p. 314-319. See Appendix 5.

Thank you for taking part in my research. I really appreciate it. I will not tell you what it is about beforehand, as that might affect the results, but I shall be glad to come back to describe it later if you wish.

You will be answering a questionnaire. It is not a personality test, nor a test of intelligence, but a survey of attitudes on two basic realities.

The format is quite simple. The first part is straight true-false. If a statement is true or mostly true for you, circle T for true; if a statement is false, or mostly false for you, circle F for false.

The second part gives you a choice of degree in your response. For example (blackboard demonstration with an extraneous example):

A day in the country is

a real							a real
bore							delight
1	2	3	4	5	6	7	

For each statement, circle the number that would be most nearly true for you. Note that the numbers extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgment either way; try to use this rating as little as possible.

Any questions?

For those groups who had a stimulus, film or reading, the following was added:

Before answering the questionnaire you will view a ten-minute film (read a short passage). After you have seen it (read it), please do not discuss it, but think about it in silence while the questionnaire is being passed.

For those groups for whom the stimulus had a death theme, the following was also added:

This is a reading about dying. Is there anyone of you who feel strongly that you would rather not read it?

This film is about a woman of nineteen who is terminally ill with cancer. She herself is in the film, and it is her voice which you will hear as she writes to her daughter her thoughts and feelings about her coming death. Is there any one of you who feel strongly that you would rather not see it?

No one withdrew. One gentleman asked, "Is it gruesome?" and was assured that it is not. One lady, after viewing the film, did not wish to answer the questionnaire.

After completion of the questionnaire, time was spent in discussion of the film, to allow for expression of reactions, and to resolve any difficulties which might have arisen as a result of the viewing. This was in line with suggestions made by the film-makers.⁷

In all classes, a psychology student helped to distribute the questionnaires in order to render the process more efficient and rapid and to help anyone who might have difficulty with mechanics of the questionnaire. Silence was maintained as questionnaires were passed in order to preserve possible effects of the stimuli, to prevent distraction, and to allow for consideration of what had been seen or read.

At the end of each session, the class was asked not to discuss the exercise with anyone outside the class, in order to prevent possible contamination of the study by pre-knowledge among subjects not yet tested.

7 See Appendix 2. Instructions for before and after.

Two weeks later Group VI was asked to do the tests in the order PIL:DAS. This was to serve two purposes: as a check for the reverse-order effect, and as a reliability check for the PIL.

The latter was possible, since this group had formerly done only the PIL, and the DAS being done second in this instance would have no effect on the second doing of the PIL.

After all classes had finished, including the Group VI rerun, the writer returned to give a brief exposé of the research as a whole, and to report the basic results for the various groups. Five classes were revisited; in the sixth, both professor and population had changed.

4. Rationale and Hypotheses.⁸

As has been shown in the pilot study of this research, prior administration of the DAS yielded a significant negative correlation ($-.543$), along with lower DAS and higher PIL means, whereas prior administration of the PIL yielded a correlation of $.005$ ns. Since, in this study, the DAS:PIL order of administration is used exclusively, one would expect a significant negative correlation between DAS and PIL scores for the total sample, and for the groups individually. For Group VI, which later answered the PIL followed by the DAS,

⁸ Formal statement of hypotheses is found on p. 88.

one would expect a pronounced lack of correlation. This would repeat the findings of the pilot study and thereby further support the hypothesis that confrontation with death tends to increase purpose in life (Hypothesis I).

Control Groups.- As can be seen, several checks are incorporated into the schema of this study. The neutral film and reading are controls for those with a death-theme; groups with no treatment provide a check for those exposed to stimuli; and the taking of the PIL alone provides a check on the effect of the DAS on the PIL scores. The PIL:DAS administration is a further check on order-effect.

If there were no controls with neutral stimuli, then any differences in scores might be attributable merely to the presence of stimuli, and not to the nature of the death-stimuli. If effects are due to the nature of the stimulus alone, one would expect significant differences between neutral and death-stimuli groups; that is, death-film versus neutral-film; death-reading versus neutral-reading.

One would expect also no differences in means among neutral and no-stimuli groups. This would mean that the neutral stimuli had no noticeable influence on scores. Thus bereaved and non-bereaved subjects could be gathered from these groups, as also from the no-stimulus group. Any differences in scores for the bereaved group could then be attributed to the effects

of bereavement. For the Non-bereaved group, differences could be attributed to lack of confrontation with death (Hypothesis II).

These two groups, Bereaved (N:42) and Non-bereaved (N:65) were then compared with the structured confrontations, Death-film (N:23) and Death-reading (N:23) to investigate for any significant differences among them, this being the major part of this study.

If confrontation with death does have a dual effect of lowering death anxiety and increasing life-purpose, then groups exposed to death-stimuli could be expected to obtain lower DAS and higher PIL means than the no death-stimulus group.

Since the confrontations vary in type and intensity, ranging from no confrontation (non-bereaved), through the structured confrontations (film and reading), to real-life confrontation (bereavement), a certain gradation in results could be expected among the groups, for both measures; that is, a graded lowering of death anxiety and a corresponding increase in purpose in life, as reflected in DAS and PIL means.

Of the structured confrontations, the film was deemed a more intense stimulus, since it impinges on all senses, is dramatic, and in this case a true-life presentation of death-proximity. As the producer of this film has said:

The film offers an intense, profound, and intimate experience in which mature, sensitive students may become personally involved and deeply moved. If any vicarious experience can bring a person face to face with his innermost motivations and fundamental values, this film is capable of such a task.⁹

The reading was considered somewhat less intense, being a paper presentation which would involve reading only and not form, motion, color, sound. However, it does have the element of concentration on the inevitability of one's own personal dying and death. As one of the judges said:

I don't particularly like it. It's fairly hard to take. As a stimulus for death confrontation, it's good. It has three or four key ideas: sudden death and slow and lingering death. The words are graphic: alone - ice - evermore, etc. It made me think slowly and seriously with myself as a focus.

Bereavement, being a real-life confrontation, would be expected to be the most intense, impinging as it does on all senses, and being of a very personal nature. Its effects, then, could be expected to be the most pronounced, as compared with the structured confrontations, and as compared with non-bereavement (Hypothesis III).

As has been noted in the review of the literature, women in general tend to score higher than men on the DAS, but there is little evidence of sex differences for PIL scores. Among adults there is no statistical evidence of differences due to age for either test. Sex and age differences are also

⁹ See Appendix 2.

investigated for this sample, with expectations in line with the above stated findings (Hypothesis IV).

On the following page is a listing of hypotheses arising from the foregoing observations. In each instance, the stated hypothesis is followed by a brief statement of the corresponding expectations.

Hypotheses.

The following null hypotheses are listed in order of statistical investigation. The crux of the study is contained in Hypotheses I and III. The second one has to do with the control groups used, and the fourth is secondary to the main issue.

- I. There is no correlation between DAS and PIL scores.

Expectation: Significant negative correlation.

- II. There are no differences in DAS or PIL means among the treatment groups and controls.

Expectations: Differences between neutral and death-stimuli groups.

No differences among neutral and no-stimuli groups.

- III. There are no differences in DAS or in PIL means among the death-confrontation and no death-confrontation groups.
(Bereaved, Death Film, Death Reading, Non-bereaved)

Expectations: Increasing DAS means and decreasing PIL means for the groups as ordered above.

Significant differences between:
Bereaved and Non-bereaved
Bereaved and Structured Confrontations
Non-bereaved and Structured Confrontations

- IV. There are no differences in DAS or in PIL means for the sample grouped as to age and sex.

Expectations: Higher DAS mean for women than for men.
No differences in PIL for men or women.
No differences in either test according to age.

5. Techniques of Analysis.

The data were first analyzed for parameters of the sample as a whole, and for test reliability. A test-retest reliability coefficient was calculated for the PIL in Group VI, and a split-half reliability coefficient for the total sample on both tests.

Hypothesis I.- The Pearson product-moment coefficient of correlation was computed to assess the relationship between the two tests, for the whole sample, and among the various groups.

Before any further analysis, subjects who had experienced bereavement of immediate family or close friends were removed from all groups in order to avoid compounding of effects of bereavement and other stimuli. The resulting groups were as follows:

Group A	Death Film	23
Group B	Neutral Film	17
Group C	Death Reading	23
Group D	Neutral Reading	18
Group E	No stimulus	28 (DAS - <u>PIL</u> only)
Group F	No stimulus	20 (<u>PIL</u> only)

Hypothesis II.- A one-way, five-level analysis of variance, fixed effects, was used to test for significant differences among the first five groups. This was done in order to check out effects of the control groups used (B: Neutral Film, D: Neutral Reading, E: No stimulus groups).

A post hoc comparison was made using the Scheffé test, to identify any specific differences. A t test was computed to determine any differences in PIL scores between Group E and Group F.

Hypothesis III.- It was expected that there would be no differences among the neutral and no-stimulus groups. A one-way, three-level analysis of variance, fixed effects, was used to confirm this expectation. The levels were Groups B, D, and E, as listed on p. 89.

From these groups were gathered subjects for the Bereaved (N:42) and Non-bereaved (N:65) groups. These were subsequently compared with the Death Film and Death Reading groups, as to DAS and PIL scores, by a one-way, four-level analysis of variance, fixed effects, followed by a post hoc comparison using Newman-Keuls test.

Hypothesis IV.- Two 2 X 2 analyses of variance, fixed effects, were used to determine the relationship between age and sex and scores on both tests.

In the following chapter, the results of the research experiment will be presented and discussed.

CHAPTER V

PRESENTATION AND ANALYSIS OF RESULTS

The first part of this chapter presents the results of the analysis, dealing first with reliability checks of the tests used, and parameters for the sample as a whole. The correlation between the DAS and PIL are then reported, followed by results of the investigation of the control groups. Results pertaining to the major hypothesis follow; that is, the relationship between death-confrontation and test scores. Age-sex relationships with scores are then presented.

The second part of the chapter presents discussion of the results in the light of the basic rationale, followed by further speculation, conclusions and suggestions for further research.

1. Presentation of Results.

Sample as a Whole.-¹ Scores obtained on the PIL ranged from 63 to 134, with a mean of 112.41 (SD: 12.36). Scores on the DAS ranged from 0 to 13, with a mean of 7.08 (SD: 3.30). The PIL mean is higher than average for the

¹ Sample referred to contains all groups except F, which did the PIL only (N:182).

general population (102).² It is commensurate with means for other groups of undergraduate college students which tend to fall between 108 and 112 (see p. 35, Chapter II). The DAS mean is also higher than average (6) (see Table V, p. 67). This may be due in part to the greater number of women in the sample (110 women, 72 men) as, in general, women tend to score higher than men on the DAS.

Test Reliability.- Group F, which had first done the PIL only, answered both tests, two weeks later, in the order PIL - DAS. This allowed for a test-retest check on the PIL. Since the DAS was done second, it had no effect on the second performance of the PIL. A comparison of the two sets of PIL scores yielded a correlation of .76, significant to the .001 level.

A split-half comparison of scores was made according to odds-evens distribution. The Rulon method of computation yielded correlation as follows:

DAS $r_{tt} = .75$ (N:182)

PIL $r_{tt} = .91$ (N:182)

This confirms the reliability findings cited in the test reviews.

2 J. C. Crumbaugh and L. T. Maholick, Manual of Instructions for Purpose in Life Test, Chicago Plaza, Ill., Psychometric Affiliates, 1969, p. 3-4.

A. Hypothesis I (Major)

There is no correlation between DAS
and PIL scores.

The Pearson product-moment method produced a correlation of $-.31$, significant at the $.001$ level. (All groups except F, N:182). Thus Hypothesis I is rejected, suggesting that there is a relationship between degree of death anxiety and degree of purpose in life. The fact that the correlation is negative indicates that high DAS scores tend to accompany low PIL scores and vice versa, which further supports the expectations drawn from the theory that those with high purpose in life tend to fear death less and vice versa.

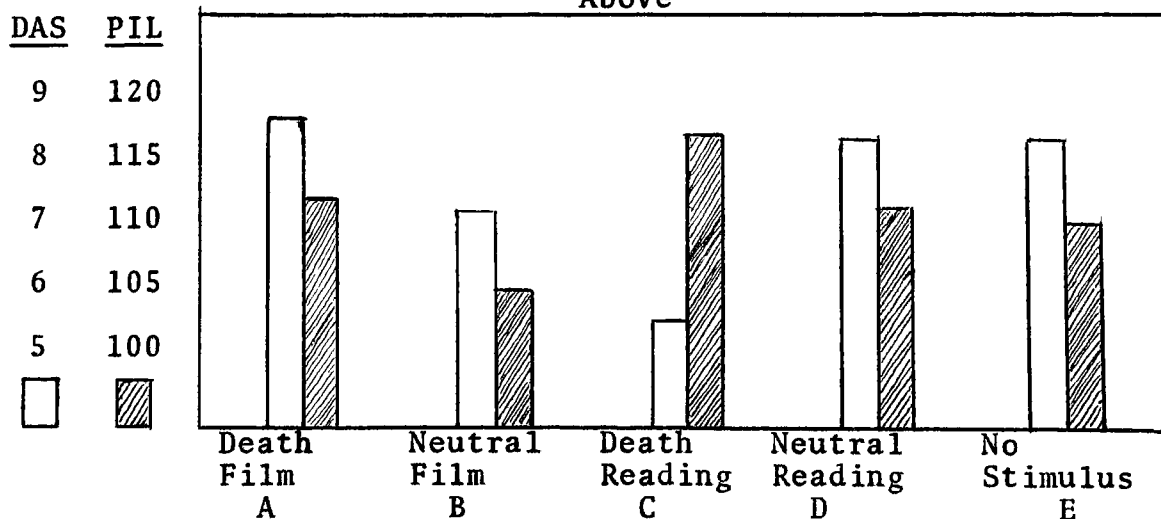
Table VII, p. 94, presents parameters for all treatment groups, after removal of subjects who had experienced bereavement. As can be seen, the negative correlation persists throughout, though not always significantly so. A graphical presentation^(Fig. 1) is included on the same page for the sake of visual comparison. It is interesting to note that the Death-reading group is highest in PIL and lowest in DAS means, while the other groups, including the Death-film, are fairly similar as to test means.

Table VII.-

Parameters for Treatment Groups and Controls after Removal of Bereaved Subjects.

Group	N	DAS		PIL		r	p
		M	SD	M	SD		
A Death Film	23	8.52	3.28	112.78	8.79	-.66	.001
B Neutral Film	17	7.00	3.03	105.06	14.92	-.41	.1
C Death Reading	23	5.87	2.95	116.70	9.36	-.15	ns
D Neutral Reading	20	7.95	3.04	112.40	11.98	-.47	.05
E No Stimulus	28	8.07	3.43	110.11	12.53	-.13	ns
F PIL only	20	-	-	105.40	11.55	-	-

Figure 1.-
Graphical Comparison of Means Cited Above



B. Hypothesis II (Minor)

There are no differences in DAS or in PIL means among the treatment groups and controls.

This has to do with the exploration of the control groups which are not part of the major study but were used to check for possible influence on test scores of the treatments themselves, regardless of nature. If there were no appreciable differences in scores of the controls (neutral film and reading) as compared with the no-stimulus group, then one could assume that the instruments themselves do not exert any sizeable influence on test scores. Also, any difference between the neutral and death-theme treatments could be attributed to the influence of the death-theme, and not to the instrument itself.

An examination of the means in Table VII shows a pattern in the expected direction for all groups for the PIL; that is, higher PIL means for groups exposed to the death-stimuli. The expected pattern is also evident for the DAS except for the death-film; that is, higher DAS means for groups exposed to neutral and no-stimuli. To investigate the significance of these differences, a one-way analysis of variance was calculated for all groups except F, which did only the PIL. Table VIII on p. 96 shows a significant F for the differences among the groups for the PIL, but not for the DAS. A post hoc comparison by the Scheffé test failed to

Table VIII.-

Comparison of Treatment Groups and Controls as to DAS and PIL Means, Using a One-way Analysis of Variance, Fixed Effects.

Source	df	SS	MS	F	p
<u>DAS</u>					
Between	4	102.54	25.63	2.43	ns
Within	106	1119.15	10.56		
Total	110	1221.69			
<u>PIL</u>					
Between	4	1431.46	357.87	2.55	.05
Within	106	14843.20	140.03		
Total	110	16274.67			

identify any significant differences among the various treatment and control groups. Thus the null hypothesis II is retained for both tests.

According to these results, the means for the neutral film and reading groups did not differ from those of the no-stimulus group. Thus one can assume that the use of the film or reading of itself exerted no significant influence. Similarly, the differences in means between death-theme and control groups were not significant. This could indicate that the death-theme itself exerted no appreciable influence on scores, and the analysis of structured confrontations could end here. However, the comparison with the control groups was not an essential part of this study. Moreover, the arithmetic means do differ in the expected direction, though not significantly so. If, in the exploration of the major hypothesis, differences are found among the real-life and structured confrontations, then these differences can be attributed to the death-theme and not to the format of the treatment used.

Thus the use of control groups gave no clear-cut distinction between neutral and death-stimuli, but it did afford evidence of the lack of influence of the use of a film or reading.

A subsequent analysis of variance was calculated among the neutral and no-stimulus groups taken alone (B, D, E). This was done to further ensure lack of difference in influence

on DAS and PIL scores, so that subjects could be taken from these groups to be used in the major comparison of death-confrontations. Using only the neutral and no-stimulus groups ensured the absence of possible effects of the Death-Film and Reading. Thus the Bereaved group would have experienced only the real-life confrontation of bereavement, and not the structured death-confrontations (film and reading); the Non-bereaved group would have experienced neither the real-life nor the structured confrontations.

Other Controls Used.

(a) Administration: Order Effect.- As a check on order effect, Group F did the tests in the sequence PIL - DAS. It is interesting to note that the resultant correlation was .00008, as compared with the sizeable and significant negative correlations of the groups following the DAS - PIL sequence. (See Table VII, p. 94.) This is a repeat of the phenomenon found in the pilot study and cited on page 71 of this research paper. This suggests some particular influence on test-correlation of doing the DAS first. One interpretation could be that prior consideration of death seems to have a more noticeable effect on test-correlation than does prior consideration of life-purpose. Another interpretation could be that a response set is created by the administration of the DAS first. One could also think of the DAS as a type of death-confrontation with influence on test scores.

(b) Influence of DAS on PIL.- A t test was calculated to compare PIL means for Group E (DAS-PIL only) and Group F (PIL only) to check for possible influence on PIL scores if the DAS is administered first. The respective means were:

Group E: DAS-PIL only 110.11 SD 12.76 N:28

Group F: PIL only 105.40 SD 11.55 N:20

The resultant t was 1.31, nonsignificant. According to this, PIL scores are not significantly different when the DAS is administered first.

C. Hypothesis III (Major)

There are no differences in DAS or in PIL means among the death-confrontation and no death-confrontation groups. (Bereaved, Non-bereaved, Death Film, Death Reading)

This has to do with the relationship of death-confrontation to degree of death anxiety and level of life-purpose, the expectation being that experience of death-confrontation would be accompanied by lower DAS and higher PIL scores.

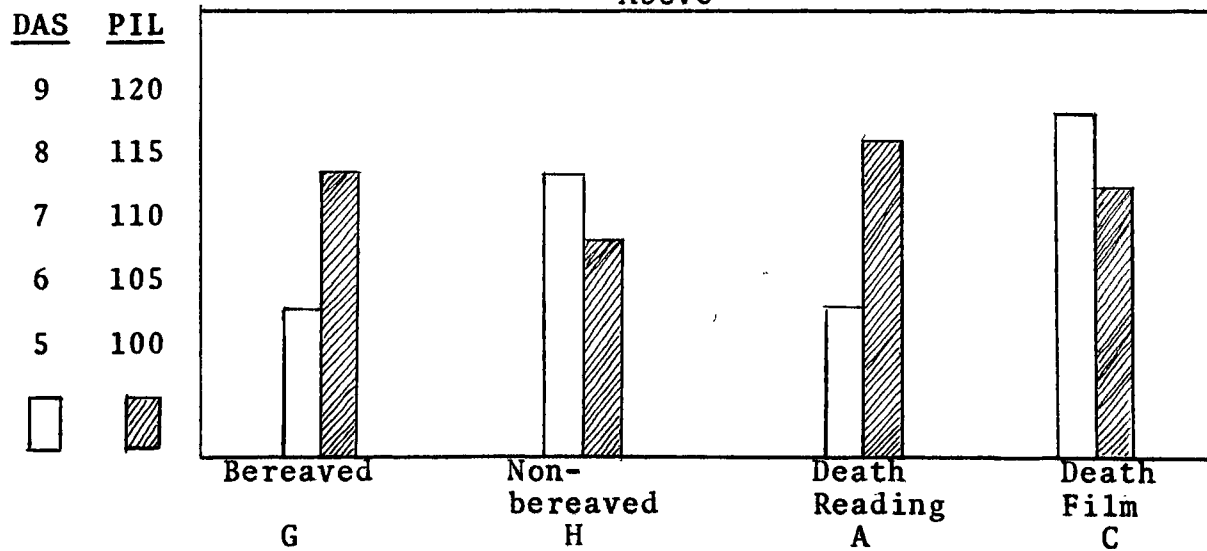
The subjects gathered from the neutral and no-stimulus groups comprised two groups: Group G, Bereaved (N:42) and Group H, Non-bereaved (N:65). These were compared with the structured death-confrontations: Group A, Death Film (N:23) and Group C, Death Reading (N:23). Table IX, p. 100, presents parameters for these four. On this same page is a graphical (Fig. 2)

Table IX.-

Parameters for the Death-confrontation and Non-bereaved Groups.

Group	N	DAS		PIL		r	p
		M	SD	M	SD		
G Bereaved	42	5.81	2.99	113.03	10.15	-.32	.05
H Non-bereaved	65	7.75	3.24	109.49	13.34	-.26	.05
A Death Reading	23	5.87	2.95	116.70	9.36	-.15	ns
C Death Film	23	8.52	3.28	112.78	8.79	-.66	.01

Figure 2.-
Graphical Comparison of Means Cited
Above



presentation, with DAS means superimposed on PIL means for the sake of comparison of interrelation of test scores.

Table X, p. 102, presents the results of the analysis of variance calculated to determine the significance of differences among these means. According to this table, there are significant differences among the groups for the DAS means, but not for the PIL. Thus Hypothesis III is rejected for the DAS, but retained for the PIL. This supports the hypothesis that death-confrontation has an effect of lowering death anxiety; it does not support the hypothesis that death-confrontation also has the effect of increasing purpose in life.

A post hoc comparison of DAS means by the Newman-Keuls test identified significant differences among the following pairs:

- (i) Bereaved versus Non-bereaved (Bereaved lower)
- (ii) Bereaved versus Death Film (Bereaved lower)
- (iii) Death Reading versus Death Film (Reading lower)
- (iv) Death Reading versus Non-bereaved (Reading lower)

Results of the post hoc Newman-Keuls test are reported in Table XI, p. 103. These results are in accordance with the expectations except for the Death-Film which does not seem to have had the expected influence on DAS scores.

Table X.-

Comparison of Non-bereaved, Bereaved, Death Film and Death Reading Groups as to DAS and PIL Means Using a One-way Analysis of Variance, Fixed Effects.

Source	df	SS	MS	F	p
<u>DAS</u>					
Between	3	178.70	59.57	5.89	.01
Within	149	1506.89	10.11		
Total	152	1685.58			
<u>PIL</u>					
Between	3	973.76	325.59	2.46	ns
Within	149	19688.00	132.13		
Total	152	20661.76			

Table XI.-

Differences among DAS Means for Four Groups, Using the Newman-Keuls Test.

Group	B	NB	DF	DR
Bereaved	-	1.94*	2.71*	.06
Non-bereaved		-	.77	1.88*
Death Film			-	2.65*
Death Reading				-

*p < .05

What is also evident in Table XI is the very slight difference in means in the following pairs:

Bereaved and Death Reading: .06

Non-bereaved and Death Film: .77

Standard deviations are also very similar, differing by only .04 for both pairs.

Briefly, these results suggest that the real-life confrontation of bereavement may have the influence of lowering death anxiety. The Death Reading confrontation seems to have had a commensurate influence. On the other hand, the Death Film seems to have exerted little influence, as its results are commensurate with those of the non-confrontation group (Non-bereaved). A fuller examination of these results follows in the discussion section of this chapter.

D. Hypothesis IV (Minor)

There are no differences in DAS or in PIL means for groups divided as to age or sex.

Two two-way analyses of variance revealed a significantly higher DAS mean for women than for men, and no significant differences in the PIL for either sex. There was no evidence of any significant relationship with age for either test. Thus Hypothesis IV was rejected for the DAS with regard to sex, and retained for the PIL with regard to both sex and age. The results, presented in Table XII, p. 105, are in accordance with expectations, and confirm findings in other studies cited in the review of the test literature.

Table XII.-

Comparison of DAS and PIL Means Obtained by the Sample Divided according to Age and Sex, Using Two-factor, Fixed-effects Analyses of Variance.

Factor	df	SS	MS	F	p
<u>DAS</u>					
Sex	1	88.47	88.47	8.39	.01
Age	1	.39	.39	.04	ns
Sex X Age	1	4.62	4.62	.44	ns
Residual	177	1866.50	10.55		
Total	180	1959.98			
<u>PIL</u>					
Sex	1	100.97	100.97	.71	ns
Age	1	53.55	53.55	.38	ns
Sex X Age	1	12.04	12.04	.08	ns
Residual	177	25375.22	142.56		
Total	180	25541.78			

Age Groups : 30 yrs. and over
29 yrs. and under

Below is a listing of the hypotheses, with an indication of rejection or retention, as outlined in the foregoing pages. This summary is followed by discussion, further speculations, and suggestions for further research arising from this study.

Results of Testing of Hypotheses

Hypothesis I

There is no correlation between DAS and PIL scores.

Rejected.

Hypothesis II

There are no differences in DAS or in PIL means among the treatment groups and controls.

Retained.

Hypothesis III

There are no differences in DAS or in PIL means among the death-confrontation and no death-confrontation groups. (Bereaved, Non-bereaved, Death Film, Death Reading)

Rejected for the DAS, retained for the PIL.

Hypothesis IV

There are no differences in DAS or in PIL means for the sample divided as to age and sex.

Rejected for the DAS, retained for the PIL (sex).

Retained for both the DAS and the PIL (age).

2. Discussion of Results.

This section presents discussion of the results and suggestions for further research, dealing with the hypotheses in order. A summary of findings is then given, followed by further considerations drawn from this research.

A. Examination of Hypothesis I (Major): Relationship between Death Anxiety and Life-purpose

This is one of the major hypotheses derived from the theoretical discussion in chapter one regarding the relationship between death anxiety and purpose in life. The data indicate that there is a significant relationship. Moreover, the fact that the correlation is negative gives some indication of the nature of that relationship. Thus it would seem that subjects who express a high degree of death anxiety have a lower sense of life-purpose than those who express lesser amounts of death anxiety. Conversely, those subjects who express a high degree of purpose in life tend to have a lower level of death anxiety.

These results confirm similar findings in three other studies^{3,4,5} thus providing further empirical evidence to back the theoretical and clinical observations reported in chapter one. With this basic evidence, one might be equipped to pursue other and further studies as to the nature of this relationship between death anxiety and life-purpose.

B. Examination of Hypothesis II (Minor):
Function of the Control Groups

In the analysis of treatment and control groups, one would have expected significant differences in DAS and PIL scores for a specific treatment and its control, i.e., between death-film and neutral film, and between death reading and neutral reading. As was seen, this was not the case. Thus one must assume that neither of the films nor of the readings differed from each other in their relationship to test results beyond what could have happened by chance.

Also, the mere fact of seeing a film or reading a passage exerted no particular influence on scores, as there

3 J. A. Durlak, "Relationship between Attitudes towards Life and Death Among Elderly Women," Developmental Psychology, Vol. 8, 1973, p. 146. Extended Report (unpublished). See p. 43-45 of the present study.

4 Mary C. Brown, Is There a Relationship between Death Anxiety and Purpose in Life?, Interim Report presented to Faculty of Psychology, University of Ottawa, Ontario, 1974, p. 80-82.

5 -----, unpublished study with 195 Grade IX students, May 1974, $r = -.31$, $p < .001$.

were no significant differences between groups undergoing treatments and those with no stimulus prior to testing. The subsequent comparison of neutral and no-stimulus groups when analyzed alone, again showed no significant differences among them.

From these results, one can assume that the neutral treatments are probably neutral in their relationship to test scores, and therefore subjects could safely be gathered from among them for the Bereaved and Non-bereaved groups. It can also be assumed that any differences which might emerge among the Death-confrontation groups would be attributable to the nature of the confrontation itself, and not to its format (film or reading).

C. Examination of Hypothesis III (Major):
Relationship of Death-confrontation to
Death Anxiety and Purpose in Life

When the Bereaved and Non-bereaved groups were compared with the structured death-confrontations as to relationship with test scores, significant differences were found among them for the DAS, but not for the PIL. These results supported the hypothesis that death-confrontation tends to lower death anxiety, but there was no statistical evidence for the hypothesis that death-confrontation also tends to increase purpose in life. Results will be examined first in pairs, then in general for the DAS. Discussion of PIL results will follow.

(a) Pair Similarities.- Perhaps it will simplify matters somewhat to first recall the similarities found among the following pairs: Bereaved and Death Reading; Non-bereaved and Death Film. As has been remarked, the means and standard deviations for each of these pairs differ very slightly. This similarity is reflected in the significant differences reported. Thus both Bereaved and Death-reading groups were significantly lower than both the Non-bereaved and Death-film groups.

One could conclude that the Death Film exerted little or no influence on level of death anxiety, since the relationship is similar to the Non-bereaved group which had been exposed to no death-confrontation. On the other hand, the influence of the Death Reading could be seen as commensurate with that of Bereavement.

(b) Bereaved versus Non-bereaved.- Those who had experienced bereavement scored significantly lower on the DAS than the Non-bereaved. This is in accord with expectations, and supports the hypothesis that confrontation with death has an effect of lowering death anxiety. Bereavement breaks through denial and forces a person to face a reality which he may formerly have avoided. It can also evoke thoughts of one's own mortality, and provides an occasion for coming to grips with it. Facing the dreaded fact may serve to allay the anxiety attendant on it, just as facing any object of fear which cannot be done away with can help to lower

fear, or at least to bring it within one's ken and control.

Moreover, the degree of relationship to the deceased seems to have had an effect. Bereavement in this study was operationally defined as pertaining to those who had lost immediate family members or close friends. Many of the Non-bereaved had lost grandparents, cousins, and casual friends. There was very little difference between these latter and those who had not been bereaved at all (DAS: 7.60 and 7.75; PIL: 109.49 and 108.53, respectively). Relatives designated as "special" or "favorite" were included as close friends in the Bereaved group.

It would seem, therefore, that it is not merely bereavement, but bereavement of significant others which has the effect of lowering death anxiety. This is understandable in that loss of someone close would tend to have a deeper impact on the bereaved one, bringing him more forcibly before the fact of death.

These results could be an incentive and indication for further study dealing with the various degrees of relationship to the deceased. Greater care could be taken to assess the degree of closeness, regardless of the relationship. A knowledge of different characteristics of various bereavements might be a guide for more efficient counseling with bereaved persons.

(c) Bereavement versus Death-Film, and Death-Reading versus Death-Film.- These two pairs can be conveniently considered together.

As has been noted, the Death-Film group differed very little from the Non-bereaved group in DAS means. At the same time, the DAS mean was significantly lower for the Death Reading group as compared with the Death-Film group. One could surmise that the effect of the Death Reading was more immediate, whereas for the Death Film, one cannot be sure that there was actually no effect at all. There may have been a need for a time lapse, to turn from reactions to another's dying to consideration of one's own, whereas, with the Reading, the invitation was immediate, direct, and personal. It might have been more sound, methodologically, to have administered the test to these same subjects, after a lapse of time, perhaps two to four weeks, to assess whether there were any long-term effects on scores. (One would, of course, have to contend with the possibility of intervening confounding events!)

In general, one thing which is underlined by the findings regarding the different death-confrontations is that it is not merely confrontation with death that is related to lowering of death anxiety, but confrontation of a personal nature which somehow promotes the facing of one's own inevitable mortality, and truly coming to grips with it.

(d) Results regarding the PIL.- Theoretically, one would expect that confrontation with death, besides lowering death anxiety, would also have raised the level of life-purpose. The hypothetical expectation was that this would be reflected in PIL scores. The negative correlation established between the two tests (Hypothesis I) would also support this expectation. However, there is no statistical evidence of any influence of death-confrontation on PIL scores. Thus there is no support for the hypothesis that death-confrontation tends to increase life-purpose. Obviously, for this sample, the conclusion is that there is no significant relationship between death-confrontation and level of purpose in life. Possible interpretations regarding these results are treated in Section E on further considerations (p. 119).

D. Examination of Hypothesis IV (Minor):
Relationship of Age and Sex to
Test Scores

In the exploration of the relationship of age and sex to test scores, no differences were found for either test (DAS or PIL) for the groups divided according to age. This repeats findings of other studies to date in which no differences were found for the adult age bracket.

Women were found to have significantly higher means than men for the DAS, there being no differences for either sex in PIL scores. This is again in accord with the findings

of other studies, and so evidence is accumulating which might be grounds for a study as to why and how women differ from men in death anxiety. However, there being admittedly so many unexplored and only partially explored facets to the fear of death, it might be wiser to investigate these first, as well as to construct a scale which could tap and measure these facets, once identified. Some of the areas which have already been suggested are such things as:

- fear of death or fear of dying
- fear of one's own death or dying, or fear of the death or dying of another
- fear of what may follow death
- fear of consequences of one's dying for the bereaved
- fear of loss of bodily integrity or fear of loss of one's person-integrity.

These are only a few of the possible "components" of death fear which need exploration and clarification. If this were done first, then a study of the specific nature of woman's fear as compared with man's might be more fruitful.

Once again, the knowledge of the main differences in fear of death for the different sexes could be a decided aid to the counselor in dealing with the issues, whether it arises with a dying person, a bereaved person, or in the course of psychotherapy.

At this point it is appropriate to present a summary of findings. This is followed by further considerations with regard to this research.

Summary of Findings.

1. There is a negative correlation between death anxiety and life purpose.
2. There is no apparent influence on scores of the use of a film or reading as treatment, regardless of its nature or theme.
3. Bereaved persons report lower death anxiety than those who have not been bereaved.
4. Those who read the passage with the death theme focused on their own mortality, reported lower death anxiety than the non-bereaved and the death-film viewers.
5. The viewing of the death film did not seem to have any effect of lowering DAS scores.
6. Death-confrontation did not have any influence on life-purpose scores, and there is therefore no statistical evidence that death-confrontation increases purpose in life.
7. Women reported significantly higher death anxiety than men.
8. There are no differences in DAS or PIL means for the sample divided according to age.

E. Further Considerations from this Research

One element which is not taken into account in this study is the possible dynamic character of attitudes towards life and death. It seems reasonable to assume that one's sense of meaning, as also one's level of death anxiety, would vary from time to time. At certain life periods, such as adolescence, marriage, loss of job, health, etc., one's sense of purpose could undergo an upheaval and reorganization.

At these times one could expect a change in PIL scores, and possibly corresponding changes in DAS scores. Similarly, successive death events, such as first or further bereavements, might result in changes in DAS scores and corresponding changes in PIL scores.

There is also the possibility that encounters with death might have the effect of first raising death anxiety because of deepening realization, and then a subsequent lowering as the individual once again comes to grips with the reality, and further adjusts his attitudes towards it. The same period of adjustment could apply to life-purpose, which might first be lowered by the confusion and temporary disillusionment of a major life event, followed by greater organization and deeper purpose.

The association of high death anxiety with low life-purpose, and vice versa, was demonstrated in the exploration of Hypothesis I. If both of these elements are dynamic in character, then one could expect a rather teeter-totter effect of the two, a correlated fluctuating of both levels, throughout life, depending on circumstances which affect either life or death attitudes.

What these observations suggest is the possibility of longitudinal studies which would take into account these fluctuations in attitudes towards death and life, as reflected in DAS and PIL scores. This would provide the means for an

in-depth study of the interrelationship of death anxiety and life-purpose.

It might be interesting to pursue such a study in the light of Dabrowski's theory of growth resulting from periods of disintegration.⁶

Longitudinal or cross-sectional studies could also be carried out in a developmental study of the concept of death and the evolution of one's attitudes towards it, as well as a developmental study of the concept of life-meaning, and the evolution of one's sense of life-purpose. Such studies would seem to be supported by the following statement:

Let us not emphasize a fixed repertoire of responses which are aimed at death and only at death. It is more realistic for the student of human behaviour and experience to learn how to trace the development of death orientations in the individual case, how to read the shifting patterns, and how to discriminate between death as a central or peripheral concern in a particular behaviour pattern.⁷

The above quotation also gives some indication of possible application to therapy of the results of such a study.

Death Film.- According to the analysis, the Death Film apparently had no influence on DAS scores, as compared

6 Kazimierz Dabrowski, Personality Shaping through Positive Disintegration, Boston, Little, Brown & Co., 1967, xxxiv-270 p.

7 Robert Kastenbaum and Ruth Aisenberg, The Psychology of Death, New York, Springer, 1972, p. 107.

with the Death Reading and with Bereavement. This may possibly have been due to the fact that the film was about someone else's death, and not a direct involvement as in case of bereavement, nor a direct invitation to consider one's own demise, as in the Death Reading. There may also have been a type of environmental "practice" effect. There is a fairly wide portrayal of death and dying in movies, TV, newscasts, etc. People are used to seeing films where the hero dies, to come alive and die again tomorrow. In society in general, amid this steady diet of death scenes, a rather pervasive denial of death is found and, perhaps consequently, a pervasive anxiety towards death. Somehow these encounters fail to touch people in a way which helps them come to grips with death and adjust their attitudes towards it. Perhaps this is what happened here, with the Death Film.

During the discussion following the film, there was much expression of sympathy for those involved, and expressions as to the injustice of it all. Following the reading there was more expression of personal reactions to the exercise, ranging from dislike and discomfort to appreciation of the worth of thinking of one's own mortality. In other words, the film was in "third person," and so were the remarks; the reading was in "first person," and so were the remarks.

Looking at both film and reading from the point of view of their use as aids to confrontation of one's own

attitudes towards death, it would seem that the Death Reading is the more effective of the two (e.g., in workshops with doctors, nurses and others who deal with dying and bereaved persons). Further experimentation could be done in this regard following the theory that those who work with the dying must first come to grips with their attitudes towards their own mortality.

PIL Results.- The lack of significant differences among PIL means may find its explanation, at least in part, in the lack of time between death-confrontation and testing. Time may be necessary to assimilate the experience of death-confrontation first into one's attitudes towards death, and then into one's attitudes towards life.

The Bereaved group is the only death-confrontation studied in which there was a time lapse prior to testing (an average of two to three years). It is therefore interesting to note that between the Bereaved and Non-bereaved groups the difference in PIL scores is close to significance (a t of 1.71 as compared with the necessary 1.98 for a significance of .05). Opinions in the literature as to the time necessary to work through the mourning process tend to cluster around one or two years. Those in this sample whose bereavement was more recent may not yet have totally worked through their grief. Effects of bereavement from the point of view of recency is another area which is open to further exploration.

Another possible interpretation of PIL results can be proposed. It may be that confrontation with death has the effect of calling into question one's past and present assessment of the meaning of life, resulting in a lower, or at least a "plateau" life-purpose until further assimilation is made. This would suggest the advisability of a further testing after a lapse of time (two to four weeks), particularly with the PIL. In fact, methodology in a study such as this might well have included a sequence such as:

<u>DAS:PIL</u> . . .	Death Confrontation . . .	<u>DAS:PIL</u> . . .	<u>DAS:PIL</u>
	(Structured)	(immediate)	(2 - 4 weeks later)

Of course, another very evident possibility is that the results are representative of fact, and that there is no significant relationship between death-confrontation and level of life-purpose. For this sample, that is what has been shown. However, in the light of the above observations, and of the relationship between DAS and PIL demonstrated in Hypothesis I, the writer feels that it would be worthwhile to explore further the possible influence on life-purpose of death-confrontation, with larger and different samples, and with adjustments in methodology as mentioned above.

The next section of this thesis presents the summary, conclusions and suggestions for further research.

SUMMARY AND CONCLUSIONS

This paper investigated the relationship between death-anxiety and life-purpose, with the focus on the influence of death-confrontation on both of these. The literature was reviewed to present theoretical and clinical observations regarding the interrelationship of death-anxiety and life-purpose. The present project was undertaken to further validate these observations empirically and to investigate the effects of death-confrontation. The problem was defined in terms of the major hypothesis that death-confrontation tends to lower death anxiety and to increase purpose in life. The other major hypothesis sought to add further evidence of a negative correlation between death anxiety and life purpose. Two minor hypotheses dealt with the control groups used, and with the possible relationship with test scores of age and sex.

To test these hypotheses, the PIL and DAS were administered to 209 undergraduate summer school students, divided into groups. Two groups were exposed to structured death-confrontations (film and reading). Control groups with a neutral film and reading and without any stimulus before testing were used to check for effects of the treatment format. The real-life confrontation of bereavement was compared with the structured death-confrontations and with non-bereavement as to possible influence on DAS and PIL scores.

Finally, the sample was investigated for possible relationship of age and sex to test scores.

The Pearson product-moment correlation, one-way and two-way analyses of variance, t test and post hoc comparisons by the Scheffé and Newman-Keuls were used to assess the significance of the data. Test reliability was explored by means of a test-retest for the PIL on one group, and split-half for both tests for the total sample, by the Rulon method.

Results of the analysis led to the following conclusions. There is, for this sample, empirical data to show that the PIL and DAS tests are negatively correlated, thus validating the clinical and theoretical observations outlined in the beginning of this study.

There is also empirical evidence that bereaved persons report lower death anxiety than the non-bereaved. Those who experienced the structured confrontation of the death-reading also reported significantly lower death anxiety, whereas there was no statistical evidence for any influence on death anxiety from exposure to the film.

Women were found to report significantly higher death anxiety than men, and there was no evidence of differences in either DAS or PIL means according to age. ..

Some suggestions for further research arising from this present project are as follows:

Suggestions for Further Research.

1. Further investigation of the influence of bereavement on levels of death anxiety and of purpose in life, with various age groups and socio-economic levels.
2. Exploration of other aspects of bereavement with different age groups (recency of bereavement, relationship to the deceased, etc.).
3. Longitudinal studies of fluctuations in life-purpose and death-anxiety, and their interrelation.
4. In-depth study of death-anxiety, from a theoretical approach, and through a developmental approach, in the study of different age groups (questionnaire, interviews, etc.).
5. Construction of a scale expanded to include the aspects of death-anxiety discovered or hypothesized in the above study (No. 4).
6. Exploration of how and why women tend to differ from men in reported death-anxiety.
7. Exploration of possible application to counseling and therapy of the results of the above studies.

Example: Knowledge of how death-anxiety differs in men and women would be an aid in helping them to come to grips with it.

8. Further exploration of the use of the Death Reading as an instigation to death-confrontation, in workshops with professionals who work with dying and bereaved persons.

BIBLIOGRAPHY

Acuff, Gene, and Benjamin Gorman, "Emeritus Professors: The Effect of Professional Activity and Religion on Meaning," Sociological Quarterly, Vol. 9, Winter, 1968, p. 112-116.

Among fifty retired, successful businessmen, those who were religiously oriented obtained significantly higher scores on the Purpose in Life Test.

Arnold, Magda B., and John A. Gasson, "Logotherapy and Existential Analysis," in Magda B. Arnold and John A. Gasson (Eds.), The Human Person, New York, Ronald, 1954, p. 462-492.

Gives a brief exposé and critical evaluation of Frankl's theory of meaning.

Cavanagh, Michael E., The Relationship between Frankl's "Will to Meaning" and the Discrepancy between the Actual Self and the Ideal Self, unpublished doctoral dissertation, Ottawa, Ontario, University of Ottawa, 1966, viii-115 p.

Illustrates that it is possible to classify subjects into theorized high and low life-purpose with high accuracy. Provides further evidence of the consistency of measuring of the PIL tool.

Crumbaugh, James C., "The Application of Logotherapy," Journal of Existentialism, Vol. 5, No. 20, 1965, p. 403-412.

Outlines the processes and practical techniques used in Frankl's logotherapy. Shows the emphasis on seeking and committing oneself to a purpose in life outside one's self (God, an Other, Society).

-----, "Cross-validation of Purpose-in-Life Test Based on Frankl's Concepts," Journal of Individual Psychology, Vol. 24, No. 1, 1968, p. 74-81.

Presents further quantitative evidence re the validity of Frankl's basic thesis, through extension of previous PIL findings to other samples in relationship to depression, anomie and social desirability.

-----, "Frankl's Logotherapy: A New Orientation in Counseling," Journal of Religion and Health, Vol. 10, No. 4, 1971, p. 373-386.

Presents in a less scientific manner the basic philosophy, principles and techniques of logotherapy; aids in further understanding of just what is meant by Frankl's "will to meaning."

Crumbaugh, James C., "Aging and Adjustment: The Applicability of Logotherapy and the Purpose-in-Life Test," The Gerontologist, Vol. 12, No. 4, 1972, p. 418-420.

Summarizes results of several PIL studies done with elderly persons, along with suggestions for use of this instrument in further investigation of problems of aging.

Crumbaugh, James C., and Leonard T. Maholick, "The Case for Frankl's 'Will to Meaning,'" Journal of Existential Psychiatry, Vol. 4, No. 13, 1963, p. 43-48.

Shows how Frankl's concept of meaning, primarily a perceptual phenomenon evolves from Gestalt, dynamic and harmonic concepts of motivation and carries them beyond onto ontological implications.

-----, "An Experimental Study in Existentialism: The Psychometric Approach to Frankl's Concept of Noogenic Neurosis," Journal of Clinical Psychology, Vol. 20, No. 2, 1964, p. 200-207.

First published experimental study to empirically measure Frankl's concept of meaning. Complete, concise and careful report of validation procedures. Lengthy discussion of results.

Doerries, Lee E., "Purpose in Life and Social Participation," Journal of Individual Psychology, Vol. 26, No. 1, 1970, p. 50-53.

Supplies data re relationship of age, sex and social desirability to PIL scores.

Durlak, Joseph A., "Relationship between Individual Attitudes toward Life and Death," Journal of Consulting and Clinical Psychology, Vol. 38, No. 3, 1972, p. 463. (Extended Report, p. 1-7.)

Provides evidence of a negative correlation between the PIL and measures of fear of death, in support of Frankl's theory.

-----, "Relationship between Attitudes towards Life and Death among Elderly Women," Developmental Psychology, Vol. 8, 1973, p. 146. (Extended Report, p. 1-6.)

Somewhat the same study as the above, applied to a small sample of elderly women.

Fabry, Joseph B., The Pursuit of Meaning, Boston, Beacon Press, 1968, viii-211 p.

Provides an elaboration of Frankl's concept of meaning and its application in logotherapy, including some allusions to death and suffering and its role in life-meaning.

Feifel, Herman (Ed.), The Meaning of Death, Toronto, McGraw-Hill, Paperbacks, 1965, xvi-352 p.

Contains excellent articles by several well-known authors, in some of which allusion is made to the life-death relationship.

Frankl, Viktor E., "Logos and Existence in Psychotherapy," American Journal of Psychotherapy, Vol. 7, No. 1, 1953, p. 8-15.

Underlines the "spiritual" nature of man (that which is specifically human)--not limited to "objectivization," and stresses the spiritual aim of logotherapy.

-----, The Doctor and the Soul, New York, Knopf, 1955, xxi-289 p.

Useful here for the comprehensive exposition of Frankl's theory of meaning as related to life, death, suffering, love.

-----, "On Logotherapy and Existential Analysis," American Journal of Psychoanalysis, Vol. 18, No. 1, 1958, p. 28-37.

Deals with the possibility of life having meaning right to the last breath, and of man's responsibility to pursue it.

-----, "The Spiritual Dimension in Existential Analysis and Logotherapy," Journal of Individual Psychology, Vol. 15, May 1959, p. 147-165.

Contains a critique of self-actualization, pointing rather to man's self-transcendence and will to meaning.

-----, "Beyond Self-actualization and Self-expression," Journal of Existential Psychiatry, Vol. 1, No. 1, 1960, p. 5-20.

Explains theory of logotherapy in light of former principles, giving a clearer perspective to its origin and development.

-----, "Psychiatry and Man's Quest for Meaning," Journal of Religion and Health, Vol. 1, No. 2, 1962, p. 93-103.

Concise presentation of basis and methods of logotherapy. Speaks of anxiety which thrives in an existential vacuum, and of the effect of a positive evaluation of one's past life on fear of death.

Frankl, Viktor E., Man's Search for Meaning: An Introduction to Logotherapy, New York, Washington Square Press, 1963, xv-214 p.

A partial summary of the former book, The Doctor and the Soul, with added account of concentration camp experiences.

-----, "Logotherapy and Existential Analysis: A Review," American Journal of Psychotherapy, Vol. 20, No. 2, 1966, p. 252-260.

Review incorporating content of former articles.

-----, "What Is Meant By Meaning?" Journal of Existentialism, Vol. 7, No. 25, 1966, p. 21-28.

Further exposition of Frankl's concept, dealing with values and meaning, man's freedom-responsibility in finding his own life's meaning, etc.

-----, "Self-transcendence as a Human Phenomenon," Journal of Humanistic Psychology, Vol. 6, Fall 1966, p. 97-106; followed by A. H. Maslow, "Comments on Dr. Frankl's Paper," loc. cit., p. 107-112.

Still further expatiation of Frankl's view of man, beginning with an examination of related theories (May, Buhler, Allport, etc.). Along with Maslow's commentary, it presents a fairly comprehensive treatment of Frankl's concept of meaning, and a clearer idea of where it fits in the evolution of psychological and therapeutic theories.

Kastenbaum, Robert, and Ruth Aisenberg, The Psychology of Death, New York, Springer, 1972, xi-498 p.

The most comprehensive psychological study of death to date. Provides a concise and fairly exhaustive critical review of research in the area of death (p. 65-99), plus suggestions for needed research (p. 64-65). Particularly relevant to this study is the treatment of death as an object of fear (p. 42-64) including a section on death anxiety.

Koestenbaum, Peter, "The Vitality of Death," Omega, Vol. 2, 1971, p. 253-271.

Treats of the liberating and revitalizing effects of accepting the inevitability of one's own death (esp. p. 264-271). Succinct summary of the article on p. 269-271.

Lester, David, "Experimental and Correlational Studies of the Fear of Death," Psychological Bulletin, Vol. 67, No. 1, 1967, p. 27-36.

Critical review of research pertaining to fear of death from 1933-1966. Good bibliography.

Martin, David, and Lawrence S. Wrightsman, Jr., "The Relationship between Religious Behavior and Concern about Death," The Journal of Social Psychology, Vol. 65, 1965, p. 317-323.

Meticulous presentation of a thorough study, beginning with a critical review of religion-death research; deals with age, religiosity, death anxiety and recency of bereavement.

Meier, Augustine, Frankl's "Will to Meaning" as Measured by the Purpose in Life Test in Relation to Age and Sex Differences, unpublished Master's dissertation, Ottawa, Ontario, University of Ottawa, 1973, xi-113 p.

Provides data re differences in PIL means for groups divided according to age and sex.

Murphy, Leonard, Extent of Purpose-in-Life and Four Frankl-proposed Life Objectives, unpublished doctoral dissertation, Ottawa, Ontario, University of Ottawa, 1967, viii-150 p..

Cites differences in PIL scores for sex, age and object of commitment (God, Loved One, etc.). Good theoretical treatment of Frankl's view of man.

Pandey, R. E., and Donald I. Templer, "Use of Death Anxiety Scale in Inter-racial Setting," Omega, Vol. 3, No. 2, 1972, p. 127-130.

The only known study dealing with death anxiety among Negroes. Confirms higher DAS means for white females over white males.

Scott, Colin A.. "Old Age and Death," American Journal of Psychology, Vol. 8, 1896, p. 67-122.

Interesting from historical point of view, as well as for content. Contains first known questionnaire re fear of death, as used in a study by Scott and G. Stanley Hall.

Strom, Kenneth R., and Ned N. Tranel, "An Experimental Study of Alcoholism," Journal of Religion and Health, Vol. 6, July 1967, p. 242-249.

Affords further proof of discriminating power of the PIL, through examination of alcoholics and non-alcoholics.

Templer, Donald I., "Death Anxiety Scale," from Proceedings, 77th Annual Convention, APA, 1969, p. 737-738, based upon a doctoral dissertation submitted to the Department of Psychology, University of Kentucky.

Presents in brief the construction and validation of the DAS.

Templer, Donald I., "The Construction and Validation of a Death Anxiety Scale," The Journal of General Psychology, Vol. 82, 1970, p. 165-177.

A detailed presentation, including a review of previous methods of assessment, construction and validation procedures, comparison with the MMPI, as tested on psychiatric and normal patients.

-----, "The Relationship between Verbalized and Nonverbalized Death Anxiety," The Journal of Genetic Psychology, Vol. 119, 1971, p. 211-214.

Demonstrates that the DAS taps unverbilized as well as verbalized death anxiety.

-----, "Death Anxiety as Related to Depression and Health of Retired Persons," Journal of Gerontology, Vol. 26, No. 4, 1971, p. 521-523.

Exploration of a middle-aged and elderly sample in which it is shown that somatic pathology is not ordinarily a crucial determinant of death anxiety. Provides further DAS data for this age span. Good bibliography.

-----, "Relatively Non-technical Description of the Death Anxiety Scale," Archives of the Foundation of Thanatology, Vol. 3, No. 2, 1971, p. 91-94.

Good summary of research on and with the DAS, written in simpler terms as introduction to "scholars of thanatology" in general. Last paragraph contains conclusions related to the present study.

-----, "Death Anxiety: Extraversion, Neuroticism and Cigarette Smoking," Omega, Vol. 3, 1972, p. 53-56.

Further evidence of absence of relationship between DAS scores and age.

Templer, Donald I., and Carol F. Ruff, "Death Anxiety Scale Means, Standard Deviations and Embedding," Psychological Reports, Vol. 29, 1971, p. 173-174.

Reports results of a study on effects of embedding plus a compilation of data from several studies.

Templer, Donald I., Carol F. Ruff, and Cyril M. Franks, "Death Anxiety: Age, Sex, and Parental Resemblance in Diverse Populations," Developmental Psychology, Vol. 4, No. 1, 1971, p. 108. (Also, Extended Report received from author, p. 1-5.)

Useful for data re DAS mean differences according to the above-mentioned variables, in a total of over 2,500 subjects, age 19 - 85. Detailed presentation with full discussion. The scale itself, with key responses, is included herein.

Yarnell, Thomas D., "Purpose-in-Life Test: Further Correlates," Journal of Individual Psychology, Vol. 27, No. 1, 1971, p. 76-79.

A further investigation of PIL construct validity through study of relationship of PIL and various measures of personality, on normal and schizophrenic subjects. No age differences found.

APPENDIX 1

COPY OF THE COMBINED QUESTIONNAIRE (DAS-PIL)

RESEARCH QUESTIONNAIRE

DIRECTIONS: Please indicate your age and sex, and then answer the 15 questions. If a statement is true or mostly true as applied to you, circle "T". If a statement is false or mostly false as applied to you, circle "F".

Age _____ No. _____ Male _____ Female _____

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

Have you experienced the death of a relation or friend? YES NO

If yes, when? (most recent) _____

Relationship to the deceased? _____

Have you, personally, ever been close to death (dying)? YES NO

If yes, when? _____ Circumstances? _____

- 1-A -

RESEARCH QUESTIONNAIRE (experimental edition)

Age _____ Sex _____ No. _____

For each of the following statements, circle the number that would be most nearly true for you. Note that the numbers always extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgment either way; try to use this rating as LITTLE as possible.

1. I am usually:

1	2	3	4	5	6	7
completely			(neutral)			exuberant,
bored						enthusiastic

2. Life to me seems:

7	6	5	4	3	2	1
always			(neutral)			completely
exciting						routine

3. In life I have:

1	2	3	4	5	6	7
no goals or			(neutral)			very clear goals
aims at all						and aims

4. My personal existence is:

1	2	3	4	5	6	7
utterly			(neutral)			very purposeful
meaningless						and meaningful
without purpose						

5. Every day is:

7	6	5	4	3	2	1
constantly			(neutral)			exactly the same
new and						
different						

6. If I could choose, I would:

1	2	3	4	5	6	7
prefer never			(neutral)			like nine more
to have been						lives just like
born						this one

- 3 -

14. Concerning man's freedom to make his own choices, I believe man is:
- | | | | | | | |
|------------------|---|---|-----------|---|---|-------------------|
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| absolutely | | | (neutral) | | | completely bound |
| free to make all | | | | | | by limitations of |
| life choices | | | | | | heredity and |
| | | | | | | environment |
15. With regard to death, I am:
- | | | | | | | |
|--------------|---|---|-----------|---|---|----------------|
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| prepared and | | | (neutral) | | | unprepared and |
| unafraid | | | | | | frightened |
16. With regard to suicide, I have
- | | | | | | | |
|--------------|---|---|-----------|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| thought of | | | (neutral) | | | never given it a |
| it seriously | | | | | | second thought |
| as a way out | | | | | | |
17. I regard my ability to find a meaning, purpose, or mission in life as:
- | | | | | | | |
|------------|---|---|-----------|---|---|------------------|
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| very great | | | (neutral) | | | practically none |
18. My life is:
- | | | | | | | |
|---------------|---|---|-----------|---|---|-------------------|
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| in my hands | | | (neutral) | | | out of my hands |
| and I am in | | | | | | and controlled by |
| control of it | | | | | | external factors |
19. Facing my daily tasks is:
- | | | | | | | |
|--------------|---|---|-----------|---|---|-------------------|
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| a source of | | | (neutral) | | | a painful and |
| pleasure and | | | | | | boring experience |
| satisfaction | | | | | | |
20. I have discovered:
- | | | | | | | |
|---------------|---|---|-----------|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| no mission | | | (neutral) | | | clear-cut goals |
| or purpose in | | | | | | and a satisfying |
| life | | | | | | life purpose |

APPENDIX 2

DESCRIPTION OF DEATH-THEME FILM



A study guide for the film

SOON THERE WILL BE NO MORE ME

SH C A 10 minute, Color

Appropriate for Humanities, Literature, Creative Writing, Film Study, Psychology, Counseling & Guidance, Philosophy, and Religion

WHAT THE FILM IS . . .

This is a true story, a most uncommon film about man's two most common and inevitable experiences. It is a matter of life and death.

Her daughter had just been born and Lyn Helton was still nineteen years old when she learned that she had a fatal type of cancer. In whatever time she had left, Lyn determined to write a book of hope to be left to the world. Most of all it would be a way to communicate with her daughter who someday would want to know the mother she couldn't remember. The sound track of the film consists of excerpts from Lyn's unfinished book.

WHAT THE FILM DOES . . .

The film offers an intense, profound, and intimate experience in which mature, sensitive students may become personally involved and deeply moved. If any vicarious experience can bring a person face to face with his innermost motivations and fundamental values, this film is capable of such a task.

The film says more about life than it does about death. It deals with a question of greatest importance to every person, the value and meaning of one's own life and goals. Not meaning and value in terms of history or society or economics but in terms of the most basic human need — the need to know one's self.

Lyn Helton, of course, doesn't provide answers for anyone but herself.

But she does, most emphatically, bring up two vital points: that life is a most precious thing and very few ever know how much life they have left to live. The questions each must answer for himself are 'How shall I live the rest of my life?' and 'When shall I begin?'

BEFORE SHOWING THE FILM . . .

The teacher should definitely preview this film before showing it to a class. The subject and nature of the film should be briefly explained and because the film may evoke a highly emotional response, it is suggested that students would not wish to see it should be excused.

AFTER SHOWING THE FILM . . .

Avoid forcing discussion immediately. Allow those who wish to express their thoughts and feelings to do so, but others may feel the need to reflect more deeply and respond at a later time. Some may prefer to write their thoughts rather than to speak out in class.

Ask the class, 'What would you do if you knew that you had only a short time to live?'

If doctors found that you had only a short time to live, would you prefer to be told the truth or would you rather they kept the truth from you? Why?

Has seeing this film changed your life in any way? How?

Why is this film so effective in spite of the fact that it is made largely from still photographs?

Copies of the manuscript: Copies of Lyn Helton's manuscript (8,000 word version) may be obtained through Churchill Films at 15¢ each (minimum order \$2.00).

A Lawrence Schuller film

Presented by

CHURCHILL FILMS

662 North Robertson Boulevard

Los Angeles, CA 90069



APPENDIX 3

DESCRIPTION OF NEUTRAL FILM

APPENDIX 3

DESCRIPTION OF NEUTRAL FILM

"L'evasion des carousells"

Borrowed from the Ottawa Public Library, this eight-minute color film is a fantasy without words. It begins with many-colored horses on a merry-go-round. One little girl is seen very briefly at the beginning and end. Gradually, the wooden animals turn into real horses, and fly off the machine to go running through fields and forests.

The photography is also fantasy-like, bringing the figures into relief in shifting shades of yellows, blues, greens, etc. Eventually the horses are caught by jockeys who lead them back onto the merry-go-round, where they resume their original forms. There is no commentary, so that any interpretation is left entirely to the viewer.

APPENDIX 4

COPY OF DEATH-THEME READING

APPENDIX 4

COPY OF DEATH-THEME READING

There is no doubt about it: some day I am going to die. I don't know when, or where, or how, but someday, I shall die. The actual moment of my death is absolutely unpredictable. I could live out the usual span, or I could die within a few years, or a few weeks, or a few hours. There is no way for me to know when I shall die. All that I can know for certainty is that I SHALL DIE - inevitably.

If it should happen to be by accident, then I shall be snuffed out like a candle, perhaps without even knowing it. One minute I would be active, thinking, living, loving - and the next, I would be no more, - and no more - for EVERmore ---

If my death is not sudden, then someday I shall be faced with the imminence of my own end, either by a doctor's diagnosis, or by the signs and signals of aging and deterioration in my own body. One after another of my present powers I shall have to surrender. Probably first, the power to go each day to my work, or to my leisure activities; then the power to drive my car; then the power to walk, even. And bit by bit I shall lose control over all the everyday, ordinary, public and private things which now form the warp and woof of my daily living. Other people will wash me, and feed me, and even take me to the bathroom, or bring the "bathroom" to me. Others will tell me what I can and cannot do, where I can and cannot go.

It is I who shall die; it is I who shall lose control over my movements, my actions, my body. I shall experience the gradual lessening and loss of sight, smell, taste, and even sense of touch. "They say" that the hearing usually goes last, so after I can no longer speak, or move, or give any sign of recognition, I may hear others talking around me - quite likely about me--I might even feel them touching my hands, my feet, my nose, - and commenting on how cold I am--"The extremities die first - See! - his hands are already like ice!"

Moreover, no matter how many people might at that time surround me, I shall go that way alone. I shall die ALONE.

And this will happen to ME. Whether there is an after-life or not, the "me" that I know now, - this earth-me, the only "me" that I can experience at present, and under these earthly conditions, the "me" who lives and breathes, - will die, will end, will disappear from this earth. And that, as quickly as three days following my demise - (for health and sanitary reasons!) - and the swirling mass of humanity will close in and carry on. And soon, VERY soon, I will be as unknown as I was before I was born ...

Yes, there is no doubt about it: I, me, will DIE. I cannot know at what age, in what circumstances, - where, when, of what, at what hour of the day or night, with whom --- but one thing I DO know: some day, sooner or later, I am going to die ...

APPENDIX 5

COPY OF NEUTRAL READING

APPENDIX 5

COPY OF NEUTRAL READING

When we watch the kittens with their ball, the dogs and their sham hunt, we see animals at play. It is well marked off from work, though it may be as hard; it is not mere exercise, though perhaps it exercises best; it has no serious end for the sake of which it is played, though it may be, while it lasts, most serious; it is not necessarily social, for many an animal (like many a man) seems to be quite happy playing alone; and it need not be competitive, though that often gives zest to it.

Some naturalists have thought that the play of young animals just means an overflow of vigour, energy and good spirits. This theory is simple; but it is too simple, and it breaks down. No doubt the young creature is an overflowing well of energy; but even the tired animal or child will turn from fatigue to play. It has also been pointed out that imitation counts for a great deal in animal play. The youngsters mimic in play what they see their seniors doing in earnest. There is truth in this, but it cannot be the whole truth. A kitten taken very early from its mother will play with zest, though it has no model to copy.

According to another view, there are inborn play-instincts, characteristic in form for different animals. The trigger may be pulled by overflowing energy, and imitation may have some influence, but the love of play, and the kind of play are born in the creature.

Play is justified in the business of life in at least two ways: firstly, because it is the apprenticeship of future work, the training for serious efforts, the rehearsal before the real performance; and secondly, because it gives an opportunity for sharpening wits and for learning before mistakes are too costly.

But we may go a step further. Play is more than the apprenticeship to future life and work. It is more than an opportunity for learning the alphabet of life. It is one of the few opportunities which allow new experiments to be made without too vigorous criticism. In the real business of life all sorts of novelties are very apt to be nipped in the bud. Play is Nature's device for allowing elbow-room for "new departures" which may form part of the raw materials of progress.

Animals who played best when young, worked best, lived best, perhaps loved best when they grew up, and thus through the long ages, the play-instinct has been fostered. It is very interesting also, to notice that the animals which man has succeeded in domesticating are mostly playing animals.

Play is thus a rehearsal without responsibilities, a preliminary canter before the real race, a sham fight before the real battle, a joyous apprenticeship to the business of life. Thus our study of animals playing in the summer sunshine gives a deeper meaning to the familiar saying, "All work and no play makes Jack a dull boy." May we not twist an old precept a little and say, "Let us play while we can, so that we may work well when we will?"

J. Arthur Thomson (abridged)
from "Natural History Studies"

APPENDIX 6

ABSTRACT OF

Death-Confrontation: Does It Influence Levels
of Death-Anxiety and Life-Purpose?

APPENDIX 6

ABSTRACT OF

Death-Confrontation: Does It Influence Levels of Death-Anxiety and Life-Purpose?¹

Theoretical and clinical observations in the literature propose a relationship between death anxiety and purpose in life. This study sought to validate these observations empirically, and particularly to explore the effects of death confrontation, the major hypothesis being that confrontation with death tends to lower death anxiety and raise life-purpose.

To test this hypothesis, the Death Anxiety Scale designed by Templer, and the Purpose in Life Test devised by Crumbaugh and Maholick, were administered to 209 undergraduate summer school university students, divided into groups. Two groups were exposed to structured death-confrontations (reading and film) prior to testing. Control groups were used to check for effects of treatment format (neutral film and reading, and no stimulus prior to testing).

The real-life confrontation of bereavement was compared with the structured death-confrontation and with

¹ Mary C. Brown, doctoral thesis presented to the School of Graduate Studies, University of Ottawa, Ontario, January 1975, viii-147 p.

non-bereavement, as to relationship with DAS and PIL scores (N:152).

The results of the study demonstrated a negative correlation between death anxiety and purpose in life. Bereaved persons reported lower death anxiety than the non-bereaved. The influence of the death reading on DAS scores was commensurate with that of bereavement. The death film exerted no apparent influence on death anxiety.

There was no statistical evidence of a relationship between death-confrontation and purpose in life.

Women reported higher death anxiety than men, and there were no differences in scores according to age, above and below thirty years.

Overall suggestions from the findings were:

1. There is a relationship between death anxiety and purpose in life, such that those reporting high life-purpose tend to fear death less, and vice versa.
2. Confrontation with death which is of a personal nature seems to have the influence of lowering death anxiety.
3. For this sample, death-confrontation did not have significant influence on purpose in life.