

Lindenwood University

Digital Commons@Lindenwood University

---

Theses

Theses & Dissertations

---

5-2000

## A Study of Death Anxiety and the Near Death Experience

Wanza J. Borgmeyer

Follow this and additional works at: <https://digitalcommons.lindenwood.edu/theses>



Part of the [Social and Behavioral Sciences Commons](#)

---

# **A STUDY OF DEATH ANXIETY AND THE NEAR DEATH EXPERIENCE**

**Wanza J. Borgmeyer, B.A.**

**An Abstract Presented to the Faculty of the Graduate School of Lindenwood University in Partial Fulfillment of the Requirements for the Degree of Master of Arts May, 2000**

**A STUDY OF DEATH ANXIETY AND THE NEAR DEATH  
EXPERIENCE**

Wanza J. Borgmeyer, B.A.



A Thesis Presented to the Faculty of the Graduate School of Lindenwood  
University in Partial Fulfillment of the Requirements for the Degree of Master of  
Arts May, 2000

Dedication

This thesis is dedicated to my loving family, my husband John, my sons Chris and John Michael, and my daughter Melanie, who all made great sacrifices while I spent many hours away from them during my studies. I am truly thankful for their support and encouragement throughout my education, especially during the research and preparation of this work. Thank you all for believing in me and in my work.

## Acknowledgments

I would like to acknowledge my Mother and Father, (Lowell & Marie Holland), my Sister and her husband (Sylvia and Larry Turnbough), my Brother and his wife (Ron & Sherry Holland), who all gave me moral support and encouragement throughout my learning experience. Special thanks to my friend, Tara Thater, who gave me support and assistance in obtaining some of the materials I could not access on my own.

In addition, I would like to take this opportunity to thank a very special friend and fellow student/associate, Patricia Brown, without whose empathy, support, and encouragement I could not have realized my academic success. She demonstrates all that friendship should mean.

Finally, I would like to acknowledge the staff of Lindenwood University for their dedication to their students and their support and encouragement throughout the Counseling Program. I, among many, have succeeded through the benefit of their professional and academic expertise.

## Table of Contents

I. Introduction .....	1
Purpose .....	3
Hypothesis.....	4
II. Literature Review .....	5
Aftereffects .....	6
Negative Effects.....	8
Four Types of Near-Death Experience .....	10
Disclosure .....	10
Reduced Death Threat .....	12
Death Anxiety.....	13
NDEs and Death Anxiety .....	15
III. Method.....	19
Participants .....	19
Instruments .....	19
Procedures.....	24
IV. Results.....	27
V. Discussion.....	29
Conclusions .....	29
Limitations of the Study .....	30
Recommendations for Future Research .....	30
Appendix A: Cover Letter .....	32

Appendix B: Demographic Information..... 33

Table of Contents (Continued)

Appendix C: Templer Death Anxiety Scale (TDAS)..... 34

Appendix D: The Near Death Experience Scale..... 35

References..... 37

## List of Tables

Table 1: Education Level .....	25
Table 2: Marital Status .....	26
Table 3: T-test .....	27



## Chapter 1

### Introduction

According to Maloney and Kranz (1991) the dictionary defines anxiety as “a state of being uneasy, apprehensive, or worried about what may happen; concern about a possible future event” (p. 16). They also state that anxiety is sometimes tied to a particular future event such as preparing to begin a paper or thesis. Sometimes it is tied to an imagined future event, such as a young girl who worries about being old and alone. Sometimes anxiety is experienced as just a general state of unease, such as when a person feels worried for no good reason.

Fear of death, the ultimate source of anxiety, is essential to human survival. Confronting death can give the most positive reality to life itself. Left uncontrolled, anxiety can become an unbearable problem, but disregarded entirely, it can become the source of unalterable despair (Beres, 1999). Rollo May (May, 1977) proposed that a theory of anxiety be founded on the definition that anxiety is the experience of Being affirming itself against Nonbeing. The latter would be that which would reduce or destroy Being, such as aggression, fatigue, boredom, and ultimately death.

While fear and anxiety are often used one for the other, Karen Horney (Horney, 1937) distinguishes between the two in the following manner: “fear is a reaction that is proportionate to the danger one has to face, whereas anxiety is a disproportionate reaction to danger, or even a reaction to imaginary danger” (p. 22). According to May (1977), some of the related symptoms of anxiety include:

nightmares, insomnia, nervousness, physical twitches, overeating, loss of appetite, irritability, anger, bitterness, indecisiveness, inability to concentrate, exhaustion, suspiciousness, lack of trust in self or others, rapid pulse, high blood pressure, intensity of pain, paranoia, worry, hypertension, chronic upset stomach, depression, etc. Obviously, anxiety can make one very sick.

The focus of this study was on Death Anxiety and the Near-Death Experience (NDE). Historically, religious and cultural teachings and traditions have been used to explain the experience of death and dying. These teachings and traditions have also been a source of reduction of the fear of death, dying, and the unknown of after-death (San Filippo, 1997). Death used to be a conscious part of life and was not denied or hidden. Most people died at home in the presence of family and other loved ones. However, in modern society, death is often denied. The subject is rarely discussed openly and many people are confined to hospitals and/or nursing homes to die. This loss of intimacy with death has left many people poorly-equipped to deal with death and dying (San Filippo, 1997).

The phenomenon known as the near-death experience may have a profound effect on the way one deals with death and dying. Recent reports of the phenomenon of near-death experiences have provided support for many after-death beliefs.

Greyson (cited in Pacciolla, 1996) defines the near-death experience as:  
a conviction that one did indeed die; an impression of

being outside the physical body; an impression of passing a dark, enclosed space; apparent extrasensory phenomena; apparent encounters with persons not physically present; and a review of past events, or panoramic memory (p. 114).

Studies have shown that there is no significant evidence that NDEs exist. Neither have studies shown any significant evidence that death anxiety is more intense in those who have not experienced a NDE. However, further research and advancement in technology may some day be able to assist researchers to reach more conclusive results.

#### Purpose

The purpose of this study was to compare the level of death anxiety displayed by people who have experienced NDEs to the level of death anxiety displayed by people who have not experienced NDEs. The Near-Death Experiencers were drawn from members of the International Association for Near-Death Studies (IANDS) and from referrals by others who know experiencers personally. These subjects were requested to complete the Near-Death Experience scale developed by Dr. Bruce Greyson (Greyson, 1983) as well as the Templer Death Anxiety Scale (TDAS) developed by Donald I. Templer (Templer, 1970). Completing the Near Death Experience Scale helped to identify the subjects in the NDE group. The second group of this study was drawn from the general population of two counties of a large city in a mid-western state. These subjects were requested to complete only the TDAS.

## Hypothesis

The current study hypothesized that individuals who experienced NDEs would score significantly lower on the Templer Death Anxiety Scale than individuals who have not experienced a NDE.

## Chapter II

### Literature Review

A 1992 Gallup Poll survey estimated that thirteen million Americans had experienced the near-death phenomenon but better resuscitation methods and more effective medical care have expanded that original estimate. Today, it is estimated that between forty to forty-five percent of those resuscitated in a hospital environment may claim to undergo the experience (Atwater, 1996).

According to Atwater (1996), anyone can have a near-death experience. Religion or culture makes no difference, neither does age. Atwater claims that children, even tiny babies, can have one, remember it, and when they are old enough to be proficient at language tell their parents and their story will match the adult experience, though seldom will you hear children mention past-life reviews or concerns about this-life problems. When both adults and children draw pictures of what happened to them, the subject matter they illustrate is virtually the same.

The phenomenon itself consists of a universal and consistent pattern of components which can include a sensation of floating out of one's body and existing apart from it, accelerating through a dark tunnel, ascending toward and entering into a bright light at the end of the tunnel. Many individuals claim they are met in the light by angelic beings or loved ones previously dead, and conversation ensues. This dialogue, which seems more telepathic than verbal, can involve questions about life and its meaning or perhaps revelations about

personal issues. Many report a review of the life just lived followed by an assessment of gains and losses made during the life. Seldom do experiencers want to leave the light-filled world they discovered on the other side of death, but eventually they are told to leave or sense they must. Reviving is not always pleasant. Although it is rare for any single report to include all the elements possible with the phenomenon, most cases do encompass about half of them (Hoffman, 1992).

Atwater (1996) admits that no serious researcher has yet been able to disprove the near-death phenomenon, although many have tried. Popular arguments are that the tunnel described by many experiencers is a symbolic replay of their birth. However, studies have found that there is no statistical difference between those born vaginally and those born cesarean in reports of the tunnel effect. Others argue that the phenomenon may be induced by drugs. However, in cases where drugs had been administered, most of those were drugs known not to cause hallucinations. Only a relatively small percentage could have been drug related. Some claim it is caused by being deprived of oxygen. Almost all reports of near-death experiences are consistently clear, coherent, and very detailed. Often information gained during the experience which could not have been known before have been later verified as accurate. Some reports have come from people who were dead for over an hour, even from some individuals who were pronounced clinically dead and taken to a morgue.

### Aftereffects

According to Atwater (1996), it is not the episode itself but the aftereffects that determine value and meaning from a near-death experience. Anyone can have a vision that seems to duplicate the scenario's imagery, but the universal pattern of changes that happen to experiencers afterward indicate that something very real and dynamic has occurred. There are both positive and negative aspects to the aftereffects. Passing through death's door seems to be only the first step. Integrating the experience is the real challenge, making what was apparently learned real and workable in everyday life. Since there are no instructions regarding how to accomplish this, bouts with depression can occur.

Atwater (1996) observed that it seemed to take a minimum of seven years for most experiencers to integrate the aftereffects, although, an individual can delay the onset of them or deny their existence. Seven major elements comprise a universal pattern; unconditional love, lack of boundaries, timelessness, psychic phenomena, reality switches, and recognizing the soul as self.

Near-death experiences are thought to be profound subjective events with transcendental or mystical elements that are reported by about one third of people who have been close to death (Gallup & Proctor, 1982). These experiences typically include enhanced cognitive functioning, including a life review; strong positive affect, often associated with an encounter with ineffable light; apparent paranormal elements, including an out-of-body experience (OBE); and a sense of being in an unearthly realm or dimension of being (Greyson, 1983). Though their

etiology has yet to be established conclusively, NDEs have been shown to precipitate a wide variety of pervasive and long-lasting personality transformations (Flynn, 1982).

It is indicated that not just the psyche is affected by the near-death phenomenon. A person's body and the very way life is lived may also undergo changes. Ordinary chores can take on surrealistic dimensions. The more typical physiological aftereffects include substantially altered energy levels, hypersensitivity to light and sound, unusual sensitivity to chemicals and pharmaceuticals, lower blood pressure, etc. Additionally, latent talents may surface, there may be a heightened desire for knowledge, and inner child issues may surface. (Atwater, 1988).

Although most of the stories one hears about NDEs tell of a wonderful bright light and warm loving feeling, studies have shown that not all NDEs are pleasant ones. Many have been plagued by hell-like visions and disturbing silence and/or noise.

Negative Effects. P. M. H. Atwater describes many of the unpleasant effects that NDEs have had on her and other people. She is outspoken about NDEs' severe psychological disturbances on people. For instance, she found that many people, following a NDE, seem to drift, finding it difficult to be committed to relationships and a vocation. Thus, many people experience family problems, divorce, and the inability to hold a job (Yamamoto, 1992).



While most people have heard about the bright light and wonderful feeling of intense joy brought about during a NDE, there are also negative NDEs that bear no resemblance of these heavenly visits. Greyson and Bush (1992) recently completed a descriptive study of 50 terrifying cases they collected over the past years. Others whose work has acknowledged the existence of such experiences include British researcher Margot Grey (Grey, 1985) and sociologist Charles Flynn (Flynn, 1986). Cardiologist Maurice Rawlings and P. H. M. Atwater, however, have actively pursued near-death reports of a hellish nature since the very beginning of their involvement in the field.

Rawlings (1978) focused on his observations of people in the process of being resuscitated after clinical death. He reported many incidences of near-death experiencers describing unpleasant or threatening scenarios, being surrounded by grotesque human and animal forms, hearing other people moaning and in pain, violence and demonic types of torture. He was present when the phenomenon actually occurred, therefore he felt he was able to obtain pure and unrepressed reports. This led him to develop his theory that at least half of the near-death cases begin as hell-like, then become heaven-like as the episode proceeds, with the average individual able to remember only the heavenly part once revived.

Atwater (1996) states that her first introduction to the NDE was in a hospital room listening to three people describe what they had seen while technically dead. Each spoke of grayness and cold, and about naked, zombie-like

beings just standing around staring at them. All three were profoundly disturbed by what they had witnessed.

In order to investigate the differences between Hellish and Heavenly NDEs Atwater's (1996) original study examined the language experiencers used to describe what they encountered. Although there were consistent settings and elements, there were obvious contrasts in detail. In Heaven-like cases, there were reports of friendly beings, beautiful and lovely environments, conversations and dialogue, total acceptance and an overwhelming sensation of love, as well as a feeling of warmth and a sense of Heaven. In the Hell-like cases, experiencers reported lifeless or threatening apparitions, barren or ugly wide open spaces, threats, screams, silence, danger and the possibility of violence and torture, and a feeling of extreme cold/heat, and a sense of hell.

Four Types of Near-Death Experience. According to Atwater (1996), There are four types of near-death experience. The first is the Initial Experience. This type of NDE reportedly involves elements such as a loving nothingness or the living dark or a friendly voice. It is suggested that this is experienced by those who seem to need the least amount of evidence for proof of survival, or who need the least amount of shakeup in their lives. Often, this becomes a see experience or an introduction to other ways of perceiving and recognizing reality.

The second type is an unpleasant and/or Hell-like experience. This type of NDE reportedly involves an encounter with a limbo, or hellish purgatory, or scenes of a startling and unexpected indifference, or even hauntings from one's

own past. It is suggested that it is experienced by those who seem to have deeply suppressed or repressed guilts, fears, and angers, and/or those who expect some kind of punishment or accountability after death.

Also reported is the pleasant and/or Heaven-like experience. This type of NDE reportedly involves heaven-like scenarios of loving family reunions with those who have died previously, reassuring religious figures or light beings, validation that life counts, affirmative and inspiring dialogue. It is suggested that it is usually experienced by those who most need to know how loved they are and how important life is and how every effort counts.

Finally, the Transcendent Experience is also reported. This type of NDE reportedly involves exposure to otherworldly dimensions and scenes beyond the individual's frame of reference, and sometimes includes revelations of greater truths. It is suggested that it is usually experienced by those who are ready for a mind-stretching challenge, and/or who are most apt to use the truths that are revealed.

Dr. Melvin Morse (Morse & Perry, 1990) wrote:

The near-death experience is the first psychological experience to be located within the brain.... By locating the area for NDEs within the brain, we have anatomy to back up the psychological experience. We know where the circuit board is. I have reexamined a generation of scientific research into higher brain function and have found that the soul hypothesis explains many

unexplained events. It explains out-of-body experiences, the sensation of leaving the body and accurately describing details outside of the body's field of view. Events such as floating out of the physical body and giving accurate details of one's own cardiac arrest—things a person couldn't see even if their eyes were open—are virtually impossible to explain if we do not believe in a consciousness separate from our bodies that could be called a soul (p. 170).

Disclosure. According to Hoffman (1995), because of their controversial and intimate nature, NDErs hesitate to speak about their experiences to others. This can cause problems as a NDE is powerful and transformative and leaves behind many aftereffects. Hoffman also states that decisions to talk about or hide significant life experiences have implications for our physical as well as psychological well-being.

Once having had a NDE, the person needs and wants to tell someone about what they have experienced. Due to listener reactions, however, they often hesitate to do so. Negative responses may range from outright rejections to indifference to superficial curiosity. These reactions hone the experiencer's awareness of his or her own disclosure needs and motives. NDErs begin to look for certain qualities in listeners which guide their disclosure decisions. These qualities are expressed through questions such as, is this person willing to think seriously about death and beyond, does this person have a closed mind on these

matters, will they respect the experiencer's sincerity, and/or will the value of what has happened to the experiencer be appreciated. According to Pennebaker (1990), studies have shown that NDErs want very much to talk about their experience, but they do not very often because they fear the listener will not be genuine. Additionally, Pennebaker (1990) states not talking about significant life events appears to act as a cumulative stressor affecting one's psychological and physical well-being.

Reduced Death Threat. According to Moody (1975), the attitude changes most consistently reported after NDEs have been dramatic reductions in death anxiety and fear of death. In coining the term near-death experience, Moody stated that almost every near-death experiencer (NDEr) had expressed in some form or another the thought of being no longer afraid of death. Moody attributed this nearly universal decrease in fear of death to NDErs' letting go of the concept of death as annihilation, and thinking of death as a transition to another state of being.

#### Death Anxiety

According to Neimeyer, (Neimeyer et al., 1995), death anxiety can be defined as a negative emotional reaction provoked by the anticipation of a state in which the self does not exist. Neimeyer found that there was no clear or strong relationship between age and death anxiety. Additionally, some evidence indicated less fear of death in older adults than in middle age or young adults. Some of the evidence suggested a steady decrease of death anxiety with age

starting in adolescence, while other evidence suggested more of a curvilinear relationship, with death anxiety peaking in middle age. In both cases, there was nothing such as a systematic increase in death anxiety from young age to old age. Similarly, relationships between death anxiety and health status seemed to be complex, however, one cannot generalize that more severe illness was always associated with increased death anxiety (Neimeyer, Moore & Bagley, 1988).

Three ways in which death anxiety may be provoked is by past-related regret (the perception of not having fulfilled basic aspirations), future-related regret (the perceived inability to fulfill basic goals in the future), and meaningfulness of death (the individual's conceptualization of death as positive or negative). Ultimately, a person will experience high death anxiety when he or she feels much past and future-related regret and/or perceives death as meaningless (Tomer & Eliason, 1996). Tomer & Eliason also found that a large discrepancy existed between the actual and the ideal self and this was found to be related to higher death anxiety.

Greenberg, (1992) found that a relationship between self-esteem and death-related anxiety was demonstrated. In one study, the researchers manipulated self-esteem by providing feedback to subjects concerning their personality. Subjects who received positive feedback showed less anxiety in response to a death video. Additionally, they found that subjects high in self-esteem had less need to deny that they might be vulnerable to a short life

expectancy. These results were consistent with other studies indicating a positive correlation between low self-esteem and death anxiety (Davis, et al., 1983).

The concepts of life review and reminiscence and the concept of biography construction were introduced in reference to important developmental processes that take place as the individual examines his or her past. More specifically, they can be viewed as means of coping with death anxiety. Life review was considered to be particularly important in old age, or with the terminally ill when it is prompted by the realization of approaching death (Butler, 1963).

Tomer & Eliason (1996) stated that processes of identification with one's culture are included as one way of coping with death anxiety. This is accomplished via their effects on self-esteem and self-concept as well as on one's view of the world.

Shumaker, et al. (1988) compared death anxiety ratings as measured by the Templer Death Anxiety Scale in 121 Japanese and 139 Australian subjects. Japanese subjects had significantly higher death anxiety scores than their Australian counterparts. This would suggest that death anxiety is managed at both the individual and cultural levels. According to Berger (1967), it is a primary role of any culture to provide its members with a barrier against the knowledge of fear of death. This barrier is a composite of learned meanings and beliefs, many of which are traceable to conventional religious dogma and related ritual. Florian and Snowden (1989) theorized that the interaction of culture and

religion are key components of the process by which the reality of death is avoided or redirected in productive ways. However, Kubler-Ross (1975) observed that cultures differ greatly in their ways of explaining and giving meaning to death. McMordie & Dumar (1984) found evidence that suggests that people from various Eastern cultures tend to have less measured death anxiety than their Western counterparts

NDEs and Death Anxiety. Greyson (1983) finds that NDEs are reported by about one third of people who have been close to death. The majority of communication about NDEs suggest a positive experience with the experiencer not wanting to return to the earthly plane. However, Greyson's (1983) research has not indicated whether this is because the majority of NDEs are positive or because those with negative experiences tend not to recount their experience to anyone. Clearly, more research is needed regarding this subject.

According to Greyson (Greyson in Neimeyer, 1994) the attitude changes most consistently reported after NDEs have been dramatic reductions in death anxiety and fear of death. Moody coined the word "near-death experience" and in doing so wrote that almost every near-death experiencer had expressed in some form or another the thought of being no longer afraid of death. Moody attributed this decrease in fear of death to NDErs' letting go of their (pre-experience) concept of death as annihilation, and adopting a model of death as transition to another state of being.



In other studies, Noyes (1980) found that reduction in fear of death was the most striking effect of NDEs and wrote that it seemed to contribute to the NDErs' subsequent health and well-being. Noyes' subjects described a resignation that facing death after the NDE frequently brought a sense of peace and tranquillity. They claimed a greater awareness of death and felt their NDEs brought death closer and also integrated it more fully into their lives and that the increased awareness of death added zest to life. Ring (1984) reported that 80% of 49 NDErs claimed to have a decrease or total loss of fear of death as a result of their NDE. Ring's subjective impression from these interviews was that loss of fear of death was one of the strongest effects separating NDErs from nonNDErs. Additionally, Sabom (1982) did a study of patients who had had a life-threatening cardiac arrest. Sabom noted that those whose arrest precipitated a NDE lost much of their fear of dying immediately after the event, in contrast to those who did not have NDEs.

San Filippo (1997) states that many interpretations of these near-death experiences are that death is not a fearful event. Many near-death experience reports are similar to religious teachings of immortality after death. San Filippo posits that the awareness of near-death experiences may provide a bridge for individuals looking for a connection between their beliefs about death, and the disclosures of modern concepts concerning death and dying, and their personal expectations of what to expect during the dying process and after-death.

There are several views people can take about death. According to Berger & Berger (1995) the finalistic view involves thinking that nothing happens after death. The finalistic view is that the human body is but a by-product of the brain and nervous system and so is completely dependent on them for survival. When one dies and the brain and nervous system are disintegrated, then we can no longer exist.

Berger & Berger (1995) bring up the point in the finalistic view that people considering suicide may be deterred by wishing to exist a little longer even if life is less than tolerable for them, or they may take the finalistic view that suicide will relieve them of their pain and they will no longer have to worry about existing. One of the most common ways to deal with death is the survival view. Taking this view means that one hopes, imagines, or believes that death does not need to be the end, but instead only the springboard for continuing life of the individual beyond the grave. The naturalistic continuance view means that people go on past death in naturalistic or indirect ways. Considering human genes and characteristics are transmitted through children and grandchildren and generations of descendants can give one a feeling of biological continuance which may lessen the urge to fight against one's mortality. This view also considers that those who have left literature and other types of art behind can feel they can face death readily and cheerfully because they are leaving something of themselves behind to live on with those left. The personal continuance view takes the angle that there is something in human beings that separates itself from the dead

physical body to survive death. Religion teaches people that there is a soul that lives on after death and is promised life after death. The personal continuance view is concerned more about how long the soul can survive than how long a future life may extend (Berger & Berger, 1995).

Human beings are met with different concepts of death. Since that concept of death can affect how one lives and conducts oneself in life, it would seem important to study the possibilities of how humans view death as having an impact on living (Berger & Berger, 1995).

San Filippo (1997) found that elderly people have less fear of death and dying than younger people. However, many elderly do fear death, dying and the unknown of after-death. Dr. Filippo contends that to reduce these fears, near-death experience reports can provide a description of dying and after-death, to prepare the individual for these events.

People reporting near-death experiences come from all walks of life as does the number of people who report having a degree of death anxiety. The current study contains a variety of ages, ethnicity, religions, educational backgrounds, etc. However, whether the experience of a NDE has an effect on the degree of death anxiety is yet to be factually decreed.

## Chapter III

### Method

#### Participants

The sample of the study contained 60 individuals divided into two groups; thirty who had experienced a NDE and thirty who had not experienced a NDE regardless of age, ethnicity, educational background, gender, religious affiliation, or socioeconomic status.

Subjects for this study were selected from the population of members of the International Association for Near-Death Studies (IANDS) and others were selected by referral who had had near-death experiences. Subjects for the comparative group were drawn from the general area of two counties of a mid-western state. Subjects varied in age, ethnicity, educational background, gender, religious affiliation, and socioeconomic status.

#### Instruments

The Templer Death Anxiety Scale (TDAS) is designed to measure respondents' anxiety about death. The TDAS is a true/false instrument and includes a broad range of items. It was developed from an original pool of 40 items and has been found to be relatively free of response bias and social-desirability response set. The TDAS has been tested with a variety of samples including males and females, adolescents and adults, psychiatric patients, and a number of occupational groups. Respondents total in the several thousands. Norms for some groups have been reported: means of "normal" respondents vary

from 4.5 to 7.0 with TDAS scores being higher for females and psychiatric patients. For a cross-sectional sample of middle class people, the means reported were: 7.50 for youths, 7.25 for young adults, 6.85 for middle-aged, and 5.74 for elderly respondents.

There is no required training to administer the TDAS nor to score it. The TDAS is scored by assigning a score of one to each item answered according to the following: 1=T, 2=F, 3=F, 4=T, 5=F, 6=F, 7=F, 8-14=T, 15=F, and then totaling across items. The higher the score, the higher the degree of death anxiety.

The TDAS has fairly good internal consistency, with a Kuder-Richardson formula coefficient of .76. It also has good stability, with a three-week rest-retest correlation of .83. In addition, there is good concurrent validity, correlating .74 with the Fear of Death Scale. It also has demonstrated good known-groups validity, distinguishing significantly between a group of psychiatric patients who verbalized high death anxiety and a normal control group.

The TDAS is very easy to administer and score. The items contained in this instrument relate directly to the current study. It's reliability is not exceptionally high, however, it is a good bit above average. Additionally, the fact that the instrument distinguished between known-groups, showing a difference between scores of psychiatric patients and scores of a control group, is very encouraging.

The Near-Death Experience Scale was developed by Greyson (1983). The purpose of this scale is for investigative and clinical quantification of near-death experiences. The Near-Death Experience Scale is a 16-item instrument. These 16-items are grouped into clinically meaningful clusters. The four clusters are: cognitive component, affective component, paranormal component, and transcendental component. Each item asks the subject to choose one of three responses (0, 1, or 2) which best fits their answer to the question. This instrument is easy to administer and requires no training to do so. The scoring procedure can seem a bit complicated, but is not as overwhelming as it appears. The sum of all 16 items equals the total NDE Scale score. The sum of items 1-4 equals the cognitive component, item 5-8 equals the affective component, 9-12 equals the paranormal components, and 13-16 equals the transcendental component. To be considered a Cognitive type, one must score 5 or higher on the cognitive component questions, for a Transcendental type, one must score 6 or higher on the cognitive component questions and 5 or higher on the transcendental component questions. The Affective type of NDE requires scores of less than 5 on each of the cognitive and transcendental component questions and an affective component score of 5 or higher. For a Paranormal type, the cognitive, transcendental, and affective component scores must each be less than 5 with a paranormal component score of 5 or greater. The Unclassifiable NDE would be given to one whose scores reveal no component score of 5 or greater.

of these reliability coefficients

Norms were derived from subjects who claimed to have had near-death experiences as described in the phenomenological literature and who were selected from among members of the International Association for Near-Death Studies, an association for the promotion of research into NDEs.

The internal consistency of the NDE Scale was maximized by the inclusion in the scale of only those items with acceptable item-component and item-scale correlations. Internal consistency of the resultant scale was evaluated by the determination of Kronbach's coefficient alpha (K-R20). Alphas for the entire NDE Scale was .88; for the Cognitive Component alone, .75; for the Affective Component, .86; for the Paranormal Component, .66; and for the Transcendental Component, .76.

Error variance due to content sampling was assessed by determination of the split-half (odd-even) reliability. Mean scores on the two halves were  $7.64 + 4.22$  and  $7.38 + 3.94$ ; the resultant Pearson product-moment reliability coefficient was .84, with the Spearman-Brown corrected value at .92.

Error due to time sampling was assessed by having 50 subjects complete the NDE Scale a second time, 2 to 6 months later. The reliability coefficient between these two sets of scores was .92 for the entire NDE Scale; for the Cognitive Component, .79; for the Affective Component, .88; for the Paranormal Component, .72; and for the Transcendental Component, .95. The time interval between the two scale completion dates was not significantly correlated with any of these reliability coefficients.

Face validity of the NDE Scale was maximized by the process by which the questionnaire items were derived, and by refining the selection of items through pilot studies with persons who had come close to death, the population for which the NDE Scale is intended to be used.

Criterion validity of the NDE Scale was evaluated by determining its correlation with Ring's Weighted Core Experience Index (WCEI), and by examining the scores of the criterion sample who claimed to have had NDEs. NDE Scale scores were highly correlated with the modified WCEI ( $r = .90$ ), as were scores on each of the four components, but to a lesser degree (all  $p < .0001$ ). The Transcendental Component was most highly correlated ( $r = .83$ ) and the Cognitive Component least highly correlated ( $r = .63$ ). Although the construct validity of the WCEI has not been thoroughly determined it is the most adequate and most widely used instrument available for the quantification of NDEs. Data on the construct validity and predictive validity of the NDE Scale are currently being collected in longitudinal studies.

An initial list was compiled of 80 manifestations described prominently in the phenomenological literature as characteristic of NDEs. These 80 elements included 21 affective states (e.g., a feeling of peace), 11 items of thought content (e.g., life review), 11 items of thought process (e.g., thinking unusually fast), 10 items of perceptual content (e.g., hearing music), 7 features of perceptual processing (e.g., colors seeming unusually vivid), 5 bodily sensations (e.g., sense of weightlessness), and 16 miscellaneous items (e.g., seeming to enter a tunnel-



like dark region). From this list of 80 items, a true-false questionnaire was developed containing the 40 items most commonly mentioned, including all the criterion items of Noyes and Slymen's three factors and of Ring's WCEI. It should be noted that the lack of correlation between NDE Scale scores and subjects' age, sex, and elapsed time since the NDE, as well as the low correlation between NDE Scale items and depersonalization symptoms on the preliminary questionnaire, support the discriminative validity of the scale (Greyson, 1983).

### Procedures

The study was a descriptive research study. There have been other studies done on the subject of Anxiety, Death Anxiety, and the Near Death Experience. However, research on the Near Death Experience is relatively recent and comparatively sparse.

The subjects were selected via convenience sampling. A questionnaire was distributed through personal connections of the author to the sample for this study who live predominantly in a bi-state area of the mid-west. The same questionnaire along with an additional questionnaire regarding the Near Death Experience was submitted to members of the International Association For Near Death Studies (IANDS) who claim to have had a NDE and other experiencers were found via referral. These IANDS members were selected from the same bi-state area as well as broader regions of the United States as necessary to obtain the required sample size. The additional questionnaire for the NDE experiencers was used to assist in identifying those who were experiencers of NDEs.

Survey questions for subjects drawn from the IANDS membership were distributed and collected by officers of the IANDS organization and others were distributed and collected by the referring entities. For the subjects who had not had a near-death experience, study materials were hand delivered to willing participants and mailed to potentially willing participants with incentives to aid in obtaining adequate and prompt responses.

Replies from participants were divided into two groups; participants who have not experienced a NDE and participants who have experienced a NDE. All data was assessed and a comparison made to find out if having had a NDE has a significant impact upon the level of death anxiety as opposed to death anxiety levels in those participants who have not experienced a NDE.

The group of participants who did not have a Near-Death Experience was comprised of 15 males and 15 females. The group of participants who did have a NDE was comprised of 12 males and 18 females.

Of the 30 participants who had NDEs, 23 were Caucasian, 2 were Hispanic, 3 were Black, 1 was Asian, and 1 was Russian. Of the non-experiencers, 24 were Caucasian, 1 was Hispanic, and 5 were Black.

An analysis of educational level was also done. Those results are detailed in Table 1.

Table 1

Educational Level

Level of Education	NDE		Non	
	Experiencers	%	Experiencers	%
High School Diploma	4	13.3	15	50.0
Less Than High School	13	43.3	2	6.7
Some College	1	3.3	5	16.7
Associate Degree	3	10.0	1	3.3
Undergraduate Degree	5	16.7	5	16.7
Graduate Degree	4	13.3	2	6.7
Total	30		30	

The mean age of experiencers of a NDE was 40.1667, with a standard deviation of 14.7065. The mean age of non experiencers was 40.1667, with a standard deviation of 18.4710.

Religious orientation was also considered important to the study. Of the participants who had experienced a NDE, 19 were originally members of an organized religion and 11 were not. Of the participants who did not have a NDE, 24 were members of an organized religion and 6 were not. There was only one participant who was originally a member of a non-denominational organization and that participant also had a NDE. Following a NDE, only 12 remained members of their previous religion, 18 were no longer practicing their previous religion.

As far as marital status, participants for the study ranged from single to married, widowed, divorced, or cohabiting situations. The breakdown of marital status of the participants is detailed in Table 2.

Table 2

Marital Status

Marital Status	Near-Death Experiencers		Non Experiencers	
		%		%
Married	13	43.3	14	46.7
Single	5	16.7	5	16.7
Divorced	6	20.0	5	16.7
Widow(er)	0	0.0	4	13.3
Cohabit	<u>6</u>	20.0	<u>2</u>	6.7
Total	30		30	

## Chapter IV

### Results

Greyson's (1983) NDE scale was used to determine the type of NDE each experiencer had. The four types of NDEs possible were; cognitive, transcendental, paranormal, and affective. Of the 30 NDE participants, 4 (13.3%) had cognitive-type NDEs, 10 (33.3) had transcendental NDEs, and 16 (53.3) were unclassifiable. It is interesting to note that slightly more than half of the NDEs were unable to be classified into any of the four types.

Templer's (1970) Death Anxiety Scale was completed by all 60 participants. For the 30 participants who had experienced a NDE, the mean score was 3.1 out of a possible 15. For the 30 participants who did not experience a NDE, the mean score was 5.7 out of 15 (See Table 3).

The results support that non-NDE subjects reported a significantly higher degree of death anxiety compared to NDE subjects;  $t=4.63$ ,  $p<0.001$ .

Table 3

#### T-Test

	N	M	SD	t
NDE Experiencers	30	3.10	1.37	
Non-Experiencers	30	5.67	2.70	4.63

\* $p<0.001$

While there was a significant difference in the mean scores of the two groups, it is important to note that all the scores were very low, suggesting an overall low degree of death anxiety for both groups.

Differences in the mean score of the TDAAS as compared to the TDAAS-NEH, and the null hypothesis was rejected. One must still consider the fact that all scores were very low. The TDAAS has a possible score of 0-17, the higher the score, the higher the death anxiety level. There was a restricted range in the scores on the Temporal Death Anxiety Scale, with a great majority scoring very low. Therefore for low scores, those who had a NEH had a lower degree of death anxiety.

Results of the educational data indicate that there were more highly educated participants who did not experience a NEH than those who experienced a NEH. Over 94% of the non-experiencers had a high school diploma or above, in fact, 43.3% of the NEHs had less than a high school diploma. One may only speculate that perhaps the higher the educational level, the lower the incidence of NEHs, or perhaps those with more education are less likely to believe they may have experienced such phenomena. On the other hand, one could also make an assumption that merely those with the lowest level of education believe in the phenomena.

### Conclusions

The present study, while suggesting a significant difference in death anxiety level between NEHs and non-NEHs, is by no means conclusive. There

## Chapter V

### Discussion

Although there was a significant difference in the mean score of the NDErs as compared to the non-experiencers, and the null hypothesis was rejected, one must still consider the fact that all scores were very low. The TDAS has a possible score of 0-15; the higher the score, the higher the death anxiety level. There was a restricted range on the scores on the Templer Death Anxiety Scale with a great majority scoring very low. Despite the low scores, those who had a NDE had a lower degree of death anxiety.

Results of the educational data indicate that there were more highly educated participants who did not experience a NDE than those who experienced a NDE. Over 94% of the non-experiencers had a high school diploma or above, while only 87% of the NDErs reported having a high school diploma or above. In fact, 43.3% of the NDErs had less than a high school diploma. One can only speculate that perhaps the higher the educational level the fewer the incidences of NDEs, or perhaps those with more education are less likely to believe they may have experienced such phenomena. On the other hand, one could also make an assumption that mainly those with the lowest level of education believe in this phenomena.

### Conclusions

The current study, while suggesting a significant difference in death anxiety level between NDErs and non-NDErs, is by no means conclusive. There

remains that fact that science has not yet found a way to prove or disprove the experience of the near-death phenomena. As science becomes more and more technologically acute, perhaps the existence or absence of a true Near-Death Experience will be defined. However, until that time, more studies need to be undertaken.

#### Limitations of The Study

Sampling bias is traditionally inherent in studies utilizing volunteers as subjects. For some people, the thought of near-death studies causes them alarm and/or disbelief. Due to this type of reaction, volunteers may only include subjects who had positive Near-Death Experiences which can skew the results of the ultimate comparison of death anxiety in non-experiencers to death anxiety in experiencers. There is no way to avoid this type of nonresponse and still maintain the validity and scientific dignity of the study. Other sampling bias could result due to the sample of volunteers who were predominantly mid to upper middle-class society white subjects. A majority of available subjects were of the Catholic faith along with some Protestants, some agnostics, and some who claimed to be atheists. Any of these characteristics could play an important part in the results of the study.

#### Recommendations For Future Research

Future researchers may wish to use a larger sample of both experiencers and non-experiencers to obtain more conclusive results than those of the current study. Additionally, a more diverse population would help to increase the



generalizability of the findings. Future researchers might want to be sure they have access to samples that are more evenly balanced in terms of religious types, educational levels, and age groups.

Further research and more education about the NDE is needed to assist those in the helping professions get a better perspective of the positive impact that NDEs and their descriptions can have on anxiety experienced by those who fear death and/or the dying process. Counselors who have been educated in the aspects of the positive NDE can also better serve clients who develop grandiose attitudes about life and who, as a result, tend to abandon their lives and loved ones in the process of the after affects of such an experience. On the other hand, when a counselor is knowledgeable about the NDE he/she is better prepared to address the issues presented by clients who believe they have experienced negative NDEs as well.

Sincerely,

William J. Bergerson

## Appendix A

## Participant Cover Letter

Dear Participant:

My name is Wanza Borgmeyer and I am a graduate student majoring in professional counseling at Lindenwood University in St. Charles, Missouri. I am in the process of writing my thesis to fulfill one of the major requirements for graduation. My thesis is a research study involving the study of death anxiety.

In order to complete my study I need volunteers who are willing to complete a death anxiety scale and a near-death experience scale. Only those who have had a near-death experience will need to complete the NDE scale. These scales are short, simple, and can be completed in just a few minutes of your time.

The studies done for writing a thesis are supervised by counseling professors at the University. As with any counseling issue, any and all responses will be held in strictest confidence. No names of participants will ever be released. The reporting is done in such a way that no individual could be recognized from the information and the manner in which it is discussed.

Your participation in this study is very important and greatly appreciated. Please complete the following Demographic Data Sheet, the Templer Death Anxiety Scale, and (if you are a NDE experiencer) the Near-Death Experience Scale and return them in the self-addressed stamped envelope enclosed with these materials.

As with all studies of this type, responses are urgently needed, therefore, please complete and return the study materials no later than one week from the receipt of this request. I have included a small token of my appreciation as a thank you for your time and effort in making my study a success.

Sincerely,

Wanza J. Borgmeyer

## Appendix B

## Demographic Information

The following information is required in order to produce results from the study. However, all information will be kept confidential and all reporting will be done in terms of groups only. Absolutely no names will be used in the writing of the thesis, or the reporting of statistics.

**Sex:** Male \_\_\_\_\_ Female \_\_\_\_\_

**Marital Status:** Married \_\_\_ Single \_\_\_ Divorced \_\_\_ Widowed \_\_\_ Cohabit \_\_\_

**Present Age:** \_\_\_\_\_

**Ethnicity:** Caucasian \_\_\_ American Indian \_\_\_ Hispanic \_\_\_ African American \_\_\_  
Asian \_\_\_ Other \_\_\_ (specify/optional) \_\_\_\_\_

**Educational Background:**

home schooled	_____	some college	_____
completed grade school	_____	associate's degree	_____
completed high school	_____	undergraduate degree	_____
GED	_____	graduate degree (+)	_____

**Religiosity:** Do you participate in organized religion? \_\_\_\_\_  
(Go to church, synagogue, chapel, etc.) Yes No  
If yes, what denomination? (e.g., Catholic, Protestant, Jewish, etc.)  
\_\_\_\_\_

Did you participate in such organized religion before having a NDE?

*(For Near-Death Experiencers only)*

If you do not participate in any of the more commonly known religions, such as the Catholic Church, Baptist, Methodist, Presbyterian, Jewish, Christian Science, etc., do you practice your faith in a Non Denominational capacity; at a "church" worshipping with others who believe in God, but do not claim a certain denomination of religion.

Yes

No

or

\_\_\_\_\_ Are you an **Agnostic**? (One who, without denying the existence of God, believes that there is no evidence in man's experience to prove that God exists.)

or

\_\_\_\_\_ Are you an **Atheist**? (One who believes that there is no God)

## Appendix C

## TDAS

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."

- T F 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 a 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.

Appendix D  
Near Death Experience Scale (NDE Scale)

1. Did time seem to speed up or slow down?  
0 = No  
1 = Time seemed to go faster or slower than usual  
2 = Everything seemed to be happening at once; or time stopped or lost all meaning
2. Were your thoughts speeded up?  
0 = No  
1 = Faster than usual  
2 = Incredibly fast
3. Did scenes from your past come back to you?  
0 = No  
1 = I remembered my past events  
2 = My past flashed before me, out of my control
4. Did you suddenly seem to understand everything?  
0 = No  
1 = Everything about myself or others  
2 = Everything about the universe
5. Did you have a feeling of peace or pleasantness?  
0 = No  
1 = Relief or calmness  
2 = Incredible peace or pleasantness
6. Did you have a feeling of joy?  
0 = No  
1 = Happiness  
2 = Incredible joy
7. Did you feel a sense of harmony or unity with the universe?  
0 = No  
1 = I felt no longer in conflict with nature  
2 = I felt united or one with the world
8. Did you see, or feel surrounded by, a brilliant light?  
0 = No  
1 = An unusually bright light  
2 = A light clearly of mystical or other-worldly origin

## Appendix D (Continued)

9. Were your senses more vivid than usual?  
0 = No  
1 = More vivid than usual  
2 = Incredibly more vivid
10. Did you seem to be aware of things going on elsewhere, as if by ESP?  
0 = No  
1 = Yes, but the facts have not been checked out  
2 = Yes, and the facts have been checked out
11. Did scenes from the future come to you?  
0 = No  
1 = Scenes from my personal future  
2 = Scenes from the world's future
12. Did you feel separated from your body?  
0 = No  
1 = I lost awareness of my body  
2 = I clearly left my body and existed outside it
13. Did you seem to enter some other, unearthly world?  
0 = No  
1 = Some unfamiliar and strange place  
2 = A clearly mystical or unearthly realm
14. Did you seem to encounter a mystical being or presence, or hear an unidentifiable voice?  
0 = No  
1 = I heard a voice I could not identify  
2 = I encountered a definite being, or a voice clearly of mystical or unearthly origin
15. Did you see deceased or religious spirits?  
0 = No  
1 = I sensed their presence  
2 = I actually saw them
16. Did you come to a border or point of no return?  
0 = No  
1 = I came to a definite conscious decision to "return" to life  
2 = I came to a barrier that I was not permitted to cross; or was "back" against my will.

## References

Atwater, P. M. H., (1988). Coming back to life: The after-effects of the near-death experience. New York City: Dodd, Mead & Co.

Atwater, P. M. H., (1996). Future memory: How those who see the future shed new light on the workings of the human mind. New York City: Birch Lane Press.

Beres, L. R. (1996). No fear, no trembling Israel, death and the meaning of anxiety [On-line]. Available: [http://freeman.io.com/m\\_online/feb96/beresn.htm](http://freeman.io.com/m_online/feb96/beresn.htm).

Berger, P. (1967). The sacred canopy: Elements of a sociological theory of religion. Garden City, NJ: Doubleday.

Butler, R. N. (1963). The life review: An interpretation of reminiscence in the aged. Psychiatry, 26, 65-76.

Davis, S. F., Bremer, S. A., Anderson, B. J., & Tramill, J. L. (1983). The interrelationship of ego strength, self-esteem, death anxiety and gender in undergraduate college students. Journal of General Psychology, 108, 55-59.

Florian, V., & Snowden. L. R., (1989). Fear of death and positive life regard: A study of different ethnic and religious-affiliated American college students. Journal of Cross-Cultural Psychology, 20, 64-79.

Flynn, C. P. (1982). Meanings and implications of near-death experiercer transformations. Anabiosis, 2, 3-14.



## References (Continued)

- Flynn, C. P. (1986). After the beyond: Human transformation and the near-death experience. Englewood Cliffs, NJ: Prentice-Hall.
- Gallup, G., & Proctor, W. (1982). Adventures in immortality: A look beyond the threshold of death. New York: McGraw-Hill.
- Greenberg, J. (1992). Why do people need self-esteem? Converging evidence that self esteem serves an anxiety-buffering function. Journal of Personality and Social Psychology, 63, 913-922.
- Grey, M. (1985). Return from death: An exploration of the near-death experience. London, England: Arkana.
- Greyson, B. (1983). The near-death experience scale: Construction, reliability, and validity. The Journal of Nervous and Mental Disease, 171, 369-375.
- Greyson, B. (1994). Death anxiety handbook. In R. A. Niemeyer (Ed.), Reduced Death Threat in Near-Death Experiencers. (pp. 169-177). Washington, DC: Taylor & Francis.
- Greyson, B. & Bush, N. E. (1992). Distressing near-death experience. London, England: Arkana.
- Hoffman, E. (1992). Visions of innocence: Spiritual and inspirational experiences of childhood. Boston, MA: Shambhala.



## References (Continued)

- Hoffman, R. M. (1995). Disclosure habits after near-death experiences: Influences, Obstacles, and Listener Selection. Journal of Near-Death Studies, 14, 1.
- Horney, K. (1987). Final lectures. New York, NY: W. W. Norton & Company.
- Kubler-Ross, E. (1975). Death: The final stage of growth. Englewood Cliffs, NJ: Prentice-Hall.
- Maloney, M. & Kranz, R. (1991). Straight talk about anxiety and depression. New York, NY: Facts On File.
- May, R. (1977). The Meaning of Anxiety. New York, NY: W. W. Norton & Company Inc.
- McMordie, W. R., & Kumar, A. (1984). Cross-cultural research on the Templer/McMordie death anxiety scale. Psychological Reports, 54, 959-963.
- Moody, R. A. (1975). Life after life. Covington, GA: Mockingbird Books.
- Morse, M. and Perry, P. (1990). Closer to the light: Learning from the near-death experiences of children. New York, NY: Villard Books.
- Neimeyer, R. A., Moore, M. K., & Bagley, K. (1988). A preliminary factor structure for the threat index. Death Studies, 12, 217-225.

## References (Continued)

- Neimeyer, R. A. (1994). Death attitudes in adult life: A closing coda. In R. A. Neimeyer (Ed.), Death Anxiety Handbook, (p. 263-277). Washington, DC: Taylor and Francis.
- Neimeyer, R. A., Van Brunt, D. (1995). Death anxiety. In H. Wass, & R. A. Neimeyer (eds.), Dying: Facing the facts (3rd ed., p. 49-88). Washington, DC: Hemisphere.
- Noyes, R. (1980). Attitude change following near-death experiences. Psychiatry, 43, 234-242.
- Pacciolla, A. (1996, Spring). The near-death experience: A study of its validity, Journal of Near-Death Studies, 14(3), 179-184.
- Pennebaker, J. W. (1990). Opening up: The healing power of confiding in others. New York, NY: Morrow.
- Rawlings, M. (1978). Beyond death's door. Nashville, TN: Thomas Nelson.
- Ring, K. (1984). Heading toward omega: In search of the meaning of the near-death experience. New York: Coward, McCann & Geoghegan.
- Sabom, M.B. (1982). Recollections of death: A medical investigation. New York: Harper & Row.
- San Filippo, D. (1997). The value of near-death experience reports on reducing the fear of death for the elderly person <http://www.lutz-sanfilippo.com/lsfvaluesofndes.html>.

## References (Continued)

Shumaker, J. F., Barraclough, R. A., & Vagg, L. M. (1988). Death anxiety in Malaysian and Australian university students. Journal of Social Psychology, 128, 41-47.

Templer, D. I. (1970). The construction and validation of a death anxiety scale. Journal of General Psychology, 82, 165-177.

Tomer, Adrian and Grafton Eliason (1996). Toward a comprehensive model of death anxiety. Death Studies, 20, 343-365.

Yamamoto, J. I., (1992). The near-death experience, part two: Alternative explanations. Christian Research Journal, Summer 1992 (p. 14).