

**TEACHING ABOUT NEAR-DEATH EXPERIENCES:
THE EFFECTIVENESS OF USING *THE DAY I DIED***

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ABSTRACT

In this article, we reviewed results of research on near-death experiences (NDEs) over the past 3 decades and examined the effect of viewing the hour-long 2002 BBC documentary *The Day I Died: The Mind, the Brain, and Near-Death Experiences* on accurate knowledge about near-death experiences among advanced undergraduates at a southwestern university. In a quasi-experimental research design, the experimental group completed a 20-item questionnaire before and after viewing the documentary ($n = 66$; 45 females, 21 males), and the waitlist control group completed the questionnaire as pre- and posttest before viewing the documentary ($n = 39$; 36 female, 3 male). The two groups' scores at pretest were not significantly different ($p > .05$). Group by occasion repeated measures ANOVA revealed the experimental group's posttest scores moved significantly in the direction of correctness with a large effect size ($p < .001$; $\eta^2 = .56$), whereas waitlist control group posttest scores remained similar to pretest scores. We discuss two exceptions to the effectiveness of the documentary and recommendations for educators using it as well as for future research.

In a recent analysis of publications on near-death experiences (NDEs) from the time the field of near-death studies formally began in 1975 through 2005, analysts found that “at least 55 researchers or research teams in North America, Europe, Australia, and Asia published at least 65 research studies involving nearly 3,500 [near-death experiencers (NDErs)] addressing the experience, its aftereffects, or both” (Holden, Greyson, & James, 2009a, p. 7; see, for example, Fenwick & Fenwick, 1995; Ring, 1980, 1984; Ring & Cooper, 1999; Rommer, 2000; Sabom, 1982; Sartori, Badham, & Fenwick, 2006; van Lommel, van Wees, Meyers, & Elfferich, 2001). In the source book of that analysis (Holden, Greyson, & James, 2009b), leading figures in the field of near-death studies provided comprehensive, critical reviews of those research studies with regard to a variety of subtopics pertaining to NDEs. For readers not familiar with the current state of research findings on NDEs, the following section provides a summary of conclusions from Holden et al. (2009b).

SUMMARY OF RESEARCH FINDINGS ON NDEs

NDEs are “profound psychological events with transcendental and mystical elements, typically occurring to individuals close to death or in situations of intense physical or emotional danger” (Greyson, 2000). Descriptions of NDEs appear consistently in literature throughout history, from ancient Egyptian, Tibetan, Greek, and Christian texts through contemporary publications (Holden et al., 2009a). Due to advances in resuscitation technology, reports of these experiences appear to have increased in the last half century, spawning the field of near-death studies.

Unlike the case with experiencers of other altered states of consciousness in which the experience may feel real while it is occurring but not retrospectively upon returning to normal waking consciousness, NDErs almost always report retrospectively that the experience was as real or more real than normal waking consciousness (Holden et al., 2009a; Zingrone & Alvarado, 2009). NDErs nearly always report a sense of their minds functioning apart from their physical bodies. Although every NDE is unique in its structure and contents, an examination of a number of such experiences reveals a deep structure that the experiences have in common; this structure further differentiates NDEs from experiences of other altered states of consciousness such as hallucinations and dreams. Though the deep structure reveals several components that tend to appear in a particular order, any one NDE may include anywhere from one to all of the components in any order (Zingrone & Alvarado, 2009).

NDEs can be categorized into material and trans-material phases in which, respectively, experiencers perceive phenomena in the material, earthly domain and/or a trans-material, unearthly domain. Experiencers have reported components in only one phase or the other or in both sequentially, intermittently, and/or simultaneously. In the material phase of the experience, NDErs reportedly

perceive material phenomena usually from an elevated position such as the ceiling of a hospital room. In the trans-material phase, phenomena can include scenes of preternatural beauty or places of nondescript emptiness or darkness and can include encounters with deceased loved ones and/or with spiritual entities such as beings of light or identifiable religious figures. NDErs report trans-physical perceptual and mental abilities during the experience, such as exponentially greater clarity and rapidity of thought, the ability to both see and see through walls, and the ability to communicate mind-to-mind with spiritual entities. A minority of NDErs—perhaps 25%—report a life review in which, typically, they instantaneously reviewed and re-experienced every moment of their lives and simultaneously experienced being everyone on the receiving end of their actions. A minority also reports acquiring knowledge of their personal and/or the global future. NDErs often, but not always, report having encountered a boundary beyond which they would be unable to return to earthly existence. NDErs report having returned to their physical bodies either by choice, against their wills, or suddenly with no sense of choice or even forewarning or awareness until they regained normal consciousness. Some NDErs recall a process of re-embodiment, and others do not (Zingrone & Alvarado, 2009). In order from most to least frequently reported, NDE components include: profound peace and calm and presence of unearthly light; perception of the material world, rapid movement through a tunnel or void, and encountering non-material entities; beautiful landscapes and/or darkness; a boundary; and entering an all-knowing and -loving being of light, life review, personal or global scenes of the future, scenes of past lives, and places that are repositories of all knowledge (Holden, 2008; Zingrone & Alvarado, 2009).

The majority of studies of NDEs have been retrospective, yielding an incidence of about 35% of people who survived a close brush with death; a minority of studies have been prospective, yielding an incidence of about 17% (Zingrone & Alvarado, 2009, p. 36). Thus, it appears that approximately one-quarter of survivors report having experienced an NDE, and three-quarters report no memory, during the close brush with death or other extreme condition. Whereas the majority of NDEs are dominated by pleasurable emotions such as profound peace, well-being, safety, and ecstasy, a minority are dominated by distressing emotions such as terror, horror, or guilt (Bush, 2009; Zingrone & Alvarado, 2009). Researchers have not yet clearly established what proportion of NDEs is distressing: in 20 studies, distressing NDE incidence ranged from 0% to 50% of survivors (Bush, 2009). A common estimate has been 10% of reported NDEs, though this figure remains to be refined by further research.

Numerous research studies have established typical NDE aftereffects that range in intensity among NDErs; typically, the greater the number and depth of NDE components, the more intense the aftereffects. The great majority of NDErs report having been profoundly transformed by the experience in ways that persist even in decades-later follow-up (Holden, Long, & MacLurg, 2009;

Noyes, Fenwick, Holden, & Christian, 2009). Regarding psychological after-effects, almost all pleasurable NDEs report a complete loss of fear of death, whereas distressing NDEs may report either a temporary or chronic increased fear of death. Both types of NDEs typically report changes in values, including decreased materialism and concern for wealth or fame and increased motivation to be of service, sense of self-worth, and sense of meaning and purpose in life. Spiritual aftereffects include an ongoing sense of connectedness to a transcendent power, deeper spiritual and possibly religious faith, and increased paranormal experiences such as profound empathy, telepathic experiences, and precognition. Physical aftereffects include changed bodily functions such as need for sleep and need to increase particular nutrients or avoid particular foods or chemicals; NDEs also report increased malfunctioning of electrical devices in their vicinities (Nouri & Holden, 2008). Social aftereffects include shifts toward service-oriented careers and relationship distress and dissolution related to the array of biopsychospiritual aftereffects (Noyes et al., 2009).

Regarding characteristics of NDEs, people of both sexes and of all ages, races, socioeconomic statuses, levels of education, religious affiliations/non-affiliation, levels of religiosity, sexual orientations, physical abilities/disabilities, occupations, marital statuses, life histories (prosocial/antisocial), and cultures have reported NDEs (Holden, Long, & MacLurg, 2009). An analysis of non-Western NDEs established some components of the experience to be universal, such as the presence of an otherworldly physical and social environment that includes the presence of deceased and/or spiritual entities; other features, such as the experience of movement through a tunnel or void and the life review, remain to be established as universal (Kellehear, 2009). Scriptures of all the major world religions make reference to NDE features and to valuation of typical NDE aftereffects (Masumian, 2009). United States NDEs reflect the same mental health statuses as the population at large. Though some NDEs evidence increased levels of a few psychological features, such as absorption, it is not yet known whether those increased levels preceded the NDEs or resulted from them. Research also has not revealed differences between people who report pleasurable or distressing NDEs. At this time it is probably most accurate to say that NDEs are an equal-opportunity transpersonal experience: of all people who survive a close brush with death or other extreme physical or psychological circumstance, research has not yet enabled prediction of who will or will not recall an NDE nor, among those who do, whether the experience will be pleasurable or distressing nor what specific components will be present or absent or will occur in what order.

Seeking to understand the nature of NDEs, researchers and scholars have focused on the phenomenon of veridical perception and on explanatory models. In apparently non-physical veridical perception (AVP), NDEs perceive phenomena in the material world during their NDEs that they could not have known from sensory or logical processes yet that are later corroborated as accurate

(Holden, 2009). For example, in a cardiac-arrest-related NDE during surgery following a serious car accident, the NDEr reported having left her body, moved through the halls of the hospital, and witnessed her step-father, a “health nut” whom she had never seen consume refined sugar, vend a candy bar from a vending machine; her mother later confirmed that her step-father had, at one point during the surgery, left the waiting area and returned eating a candy bar (Holden, 2009). Although analysis of 107 AVP anecdotes revealed substantial evidence of their validity, researchers attempting to capture cases of AVP in five different hospital studies have failed to do so (Holden, 2009). Meanwhile, scholars have proposed psychological, physiological, and transcendental theories to explain NDEs. Psychological and physiological models have failed to account for all features of NDEs and their aftereffects (Greyson, Kelly, & Kelly, 2009). Mainstream scientists, who believe the brain somehow produces the mind, have not yet embraced a transcendental model that NDEs suggest. According to this model, mind transcends brain functioning; that is, mind sometimes functions, often exceptionally well, when brain is disabled, and mind is primary whereas brain, like a cell phone, receives and transmits mind, and “some level of reality transcends the ordinary physical world” (Greyson et al., 2009, p. 228).

TEACHING ABOUT NDEs

One conclusion that death educators can draw from Holden et al. (2009) and the source body of research on which their book is based is that NDEs are pervasive and rich phenomena that provide unique information and provoke unique controversy regarding the nature of death and its meaning for life and how healthcare providers can best serve NDErs’ physical, emotional, and spiritual health needs. Thus, NDEs appear to be an important topic in any course on death education.

Indeed, in another review in that book (Foster, James, & Holden, 2009), the authors noted publications over the past 25 years in which instructors teaching about NDEs in a variety of educational venues reported their needs assessments, experiences, curriculum recommendations, and/or effectiveness research. These venues included high school (Richardson, 1979), undergraduate education (Flynn, 1986; Ring, 1995), and several post-baccalaureate settings including medical school (Moore, 1994; Sheeler, 2005), nursing school (Barnett, 1991; McEvoy, 1990), mental health professional training programs (Walker & Russell, 1989), and schools of theology (Bechtel, Chen, Pierce, & Walker, 1992). In one study (Hayes & Waters, 1989), researchers found that whereas 75% of their physician, nurse, and clergy participants wanted more information about NDEs, the topic was rarely addressed in secondary, undergraduate, or graduate healthcare educational settings. The extent to which educators might now more frequently address the topic of NDEs is unknown.

To the extent that NDEs are not addressed in a variety of educational settings, educators might be challenged to teach the subject in an efficient and effective way. One aspect of this challenge is limited time: NDEs typically constitute one of several topics educators need to address in their curricula. Another aspect of this challenge is how to present the topic in a way that captures both the experiential feel of NDE narratives, which viewers often find emotionally and conceptually provocative (Foster et al., 2009, p. 254), and the didactic complexity of the now-extensive research addressing the experience, its aftereffects, and its implications for NDErs' healthcare and for understanding the nature of consciousness.

One promising resource is the hour-long British Broadcasting Corporation (BBC) documentary, *The Day I Died: The Mind, the Brain, and Near-Death Experiences* (Broome, 2002). Among its strengths (Holden, Maclurg, & James, 2006) are that it includes extensive narratives of the NDEs and aftereffects of a diverse group of NDErs, interviews with medical professionals on the forefront of NDE research representing a variety of viewpoints about NDEs, and coverage of perhaps the most compelling issue NDEs raise: Does the brain produce consciousness such that when the brain dies, consciousness ends; or is the brain "merely" a receiver of independently-existing consciousness such that when the brain dies, consciousness continues?

When this BBC documentary became available, the Board of Directors of the International Association for Near-Death Studies considered it the single best introduction to NDEs yet produced (Holden et al., 2006). Reviewers of the NDE education literature asserted that

to the present authors' knowledge, [the BBC documentary] is the only NDE-related teaching resource to date that includes an instructor's guide (Holden, 2005) and that health professionals have reviewed with special attention to its possible inclusion in general professional preparatory and educational settings (Holden et al., 2006). The value of this particularly promising resource remains to be established through future research. (Foster et al., 2009, p. 255)

In this article, we describe research we undertook to assess the educational value of *The Day I Died*. More specifically, our purpose was to investigate the extent to which viewing this documentary enhanced knowledge about NDEs among advanced undergraduate students. In this exploratory study, we expected that there would not be a significant difference in NDE knowledge between two groups of students before viewing the documentary. On the other hand, and speaking to the impact of the film, we expected a significant improvement in NDE knowledge in the experimental group of students after they had seen the film, whereas we expected no such changes in a control group of students who had not seen the film. Findings could help determine whether or not a recommendation to use this resource in an undergraduate educational setting, and possibly other settings, is warranted.

METHOD

We used a quasi-experimental pretest-posttest design to evaluate the efficacy of the documentary *The Day I Died: The Mind, the Brain, and Near Death Experiences* to enhance accurate knowledge about NDEs. Participants ($n = 105$) were recruited from two advanced undergraduate level classes at a southwestern university. Students in an undergraduate psychology of death and dying class comprised the experimental group ($n = 66$; 45 females, 21 males), and students in an undergraduate counseling class comprised the waitlist control group ($n = 39$; 36 females, 3 males).

Instrumentation

We developed a 20-item NDE Questionnaire to examine participants' knowledge about NDEs. The primary author is an expert in the field of near-death studies, and the second and fourth authors are also familiar with the current literature regarding NDEs. We wrote the 20 items to reflect major findings about NDEs from a recent comprehensive, critical review of all NDE research through 2005 (Holden et al., 2009b). To control for response bias, half the items were stated in accordance with current findings, whereas the other half were stated in contradiction to current findings.

The 20 items were:

1. During an NDE, people often experience a deep level of peacefulness.
2. During an NDE, people often experience their thinking to be slower and less clear.
3. During an NDE, people often experience making a decision whether or not to come back to their bodies.
4. Cardiac arrest patients are not good subjects for the study of NDEs because they do not exhibit all the symptoms of being clinically dead.
5. It is common for people who have experienced an NDE to be more interested in prestige and fame after their NDE.
6. Some researchers believe that NDEs are explainable as being hallucinations produced by brain function and chemistry.
7. People have reported seeing and hearing things during their NDEs that occurred in the operating room while they were unconscious, such as in a coma or deeply anesthetized.
8. People who experience NDEs often become more competitive after their experience.
9. There is no scientific evidence to date that consciousness may be able to exist outside of the body.
10. The vast majority of people who experience NDEs are profoundly changed for decades after the experience.

11. It is unusual for people who experience NDEs to have a profound sensation of unconditional love during their NDE.
12. Individuals' values before an NDE are usually compatible with their values after the NDE.
13. People blind from birth have reported visual impressions for the first time during their NDEs.
14. Research on NDEs has supported the theory that mind and brain are not the same thing.
15. Researchers have found at least one person who has reported coherent perception and memory during an NDE that clearly occurred while the person was clinically dead.
16. It is common for people who have experienced an NDE to be less materialistic after their NDE.
17. It would be unusual for someone to change their career in the aftermath of an NDE.
18. It is common for people who have experienced an NDE to have no fear of death.
19. During an NDE, many people feel the effects they have had on other people throughout their lives.
20. NDEs occur in both men and women and in people of all races.

We considered that students' knowledge of NDEs was likely not to be certain and, therefore, did not warrant dichotomous yes/no responses to the items, but rather that it was continuous, representing varying degrees of certainty in response to the items. Thus, for each item, we asked participants to indicate on a 7-point Likert scale the point that best represented their degree of disagreement or agreement with the statement, from 1 Strongly Disagree to 7 Strongly Agree. Thus, responses of 1 to items that contradicted current knowledge of NDEs and 7 to items that accorded with current knowledge represented the most correct answers. For the purpose of analysis, scores on contradictory items were reverse coded so the most correct answer on all items was 7.

Based upon pretest scores for the waitlist control group, Cronbach's Alpha for the NDE knowledge measure was moderate at best (.63), indicating the students' knowledge of NDEs varied by the nature of the content specific to an item. In this respect, though an alpha of .63 is moderate, the conceptual basis for Cronbach's alpha is the expectation that respondents' answers should be consistent. However, there is no reason to assume that a respondent who knows one fact about NDEs would necessarily know another. Thus, we considered that test-retest would be a more valid indication of instrument reliability. The test-retest coefficient with control group data was .83, reflecting the fact that knowledge of NDEs did not change substantially over a four-day wait period. Thus, the instrument assessed that knowledge with high reliability.

Procedure

This study was approved by the university's Institutional Review Board. For both the experimental and waitlist control groups, participation in the study spanned two sequential 50-minute class periods. At the beginning of each group's first class period, all students in attendance gave consent to participate in the study and completed the 20-item NDE Questionnaire as a pretest. The experimental group then viewed most of the documentary, whereas the waitlist control group participated in regular class activity not related to NDEs. The experimental group at their second class period viewed the remainder of the documentary, completed the NDE Questionnaire as a posttest, and participated in NDE-related discussion for the remainder of the class. The waitlist control group at their second class period completed the posttest NDE Questionnaire; they then viewed as much of the documentary as time allowed and, in a third class period, viewed the remainder of the documentary and participated in NDE-related discussion for the remainder of the class.

RESULTS

Whereas comparisons of experimental and control groups at pretest were based upon 105 cases, the repeated measures analysis was based upon 102 cases with complete data at both pretest and posttest. Thus, the differential loss of participants over time was minimal.

Our first question was whether NDE knowledge differed between students in the experimental group upper level undergraduate death and dying course and the control group upper level undergraduate counseling course. Findings from a two-tailed independent samples *t*-test supported the expectation of no significant difference in NDE knowledge scores between the experimental and control groups at pretest ($t_{103} = .72, p > .05, \eta^2 = .063$). At pretest, the experimental group's NDE knowledge ($M = 4.77, SD = 1.36$) was equivalent to that of the control group ($M = 4.69, SD = 1.28$). In addition, there were no gender effects for NDE knowledge scores ($F < 1, p > .05$). These findings argue against self-selection bias as an influence on the differential impact of *The Day I Died* on participants.

In this light, importantly, we predicted a significant improvement in the experimental group's NDE knowledge mean scores between pretest and posttest, relative to those of the waitlist control group. The results of a 2 (group) by 2 (occasion) ANOVA supported this hypothesis wherein the group by occasion interaction was statistically significant and yielded a large effect size ($F_{1, 100} = 129.67, p < .001, \eta^2 = .56$; experimental group $M_{pre} = 4.77, SD = 1.36; M_{post} = 5.79, SD = 1.21$); by contrast, there was virtually no change in the control group's NDE knowledge scores between pretest and posttest ($M_{pre} = 4.69, SD = 1.28; M_{post} = 4.71, SD = 1.31$). Thus, students in the waitlist control group and the experimental group demonstrated equivalent knowledge of NDEs at pretest, and

whereas waitlist control group knowledge of NDEs remained stable between pre- and posttest, experimental group knowledge increased significantly at posttest after viewing *The Day I Died*.

DISCUSSION

This study evaluated the impact of *The Day I Died* on students' knowledge about NDEs, and findings clearly supported the educational benefits of viewing it. Thus, this documentary appears to be effective in teaching advanced undergraduate students about the characteristics and aftereffects of NDEs, the circumstances under which they occur, and the diversity of people who experience them. Indeed, the very large effect size of .56 indicates that the analysis here strongly supports the use of this 1-hour documentary as a very effective way to substantially increase advanced undergraduate students' accurate knowledge of NDEs via a relatively short investment of class time. It remains for future researchers to determine whether other pedagogical approaches to teaching about NDEs can yield an equal or larger effect within the timeframe of a two-class intervention.

Despite the effectiveness of this instructional intervention, two limitations of the documentary are worth noting. First, a post hoc inspection of the data on an item-specific basis indicated that the experimental group's posttest scores moved in the direction of the correct score on all questions after viewing the documentary with the exception of item 15 (see Figure 1). In contrast, the waitlist control group's posttest scores on all items, including item 15, remained similar to those of the pretest (see Figure 2). Participants in the experimental group tended to answer question 15 even less accurately at posttest ($M = 1.59$) than at pretest ($M = 3.16$). This result may be due to ambiguous information presented in relation to a reenactment in the documentary, wherein item 15 assessed participants' knowledge of whether researchers have found at least one person who has reported coherent perception and memory during an NDE that clearly occurred while the person was clinically dead.

The documentary producers presented a case of an NDE that occurred while the experiencer was in a coma, but the narrator pointed out that the exact time of the experience could not be established. English psychologist and physiologist Susan Blackmore then clarified the problem:

Blackmore: One of the things that's always fascinated me is when does the near-death experience actually occur? Because the common story is that you go nearly dead, your brain's not active any more, you flatline or whatever, and you're having this experience while the brain's dead, and then you wake up and remember it. But actually it's very, very difficult to pin down the time it happened. I think it's much more likely that the experience is happening actually both when you're going into

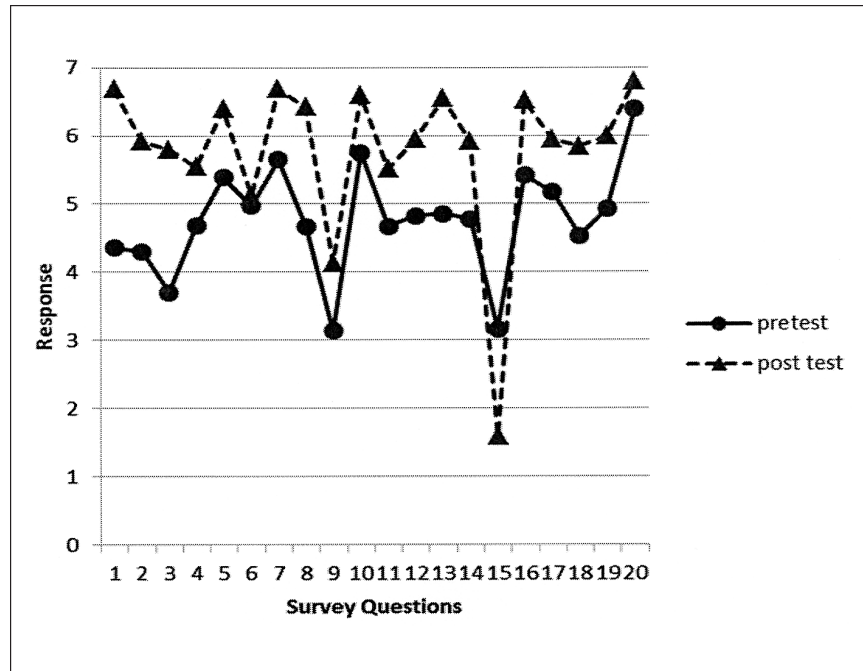


Figure 1. Experimental group item-specific findings.

unconsciousness and when you're coming out, in those borderline states in which we know all sorts of strange hallucinations and peculiar feelings happen anyway, and that it's not happening right in the middle when people are clinically dead. Now, to find out the answer is very difficult. We need to have some kind of timing mechanism for the experience. Now that means catching somebody describing something happening at a specific time and that we know what was happening in their brain at the time. That's very difficult to arrange. So for the moment, we don't know. And my strong betting is that all of the experiences are happening at the beginning and the end in that borderline state.

Narrator: For experts like Dr. Blackmore, no one near-death experience has ever been recorded with irrefutable clinical evidence to support the idea that the mind can live on after the brain has stopped functioning—after death. But in Atlanta, Georgia, one particular case was about to astonish experts and doctors.

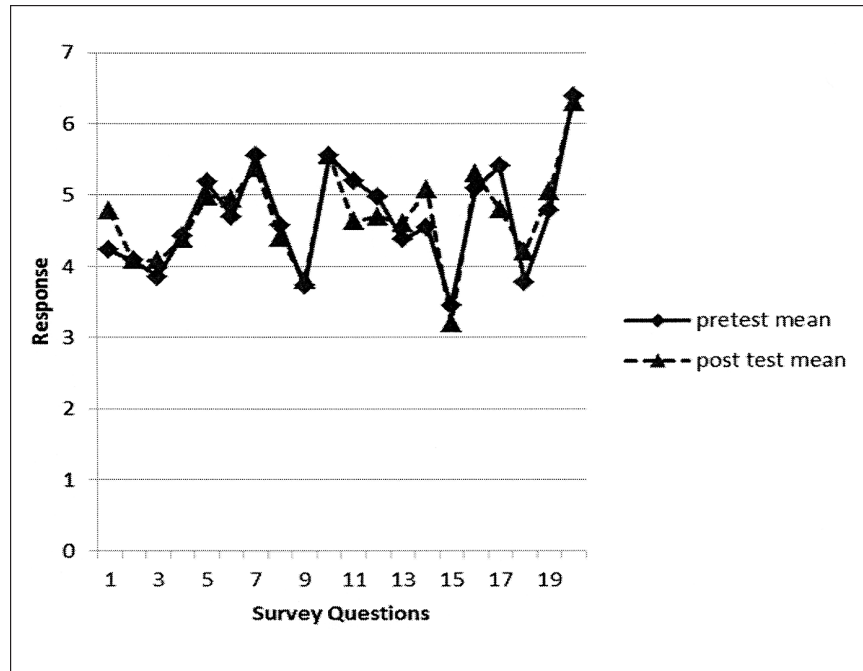


Figure 2. Waitlist control group item-specific findings.

This use of the word “but” implies that the case the producers were about to present *did* provide such evidence. In Pam Reynolds’ case, she had a brain aneurysm located such that her only option was a radical surgery. In that surgery, her body would be cooled to about 60 degrees Fahrenheit, her heart would be stopped, and the blood would be drained from her head—during which hour metabolic activity in her brain would presumably stop and she would show no measurable signs of brain activity. The producers proceeded to depict the case accurately, including that Ms. Reynolds’ verifiable perceptions occurred after she was fully anesthetized with eyes taped shut and ears plugged with clicking devices that presumably would have made physical perception impossible—but before the surgical procedures leading to her temporary clinical death. However, the narrator concluded, “Pam’s case points to the fact that somehow she was able to retain coherent perception and memory whilst clinically dead. This suggests the possibility of some kind of mind/brain separation.” Thus, the producers conveyed an inaccurate conclusion that, as our study confirmed, leaves viewers with the erroneous impression that researchers have found at least one case in which an

NDEr has reported verifiable perceptions that occurred while the NDEr was clinically dead.

Because of this erroneous impression, we urge educators to address the details of this case in post-viewing discussion so students hopefully leave class with two important understandings:

1. that the Reynolds case does refute Dr. Blackmore's claim that NDEs occur when people are losing and regaining consciousness—Ms. Reynolds's occurred while she was stable in deep anesthesia; and
2. that researchers have not yet reported a case of verifiable perception during clinical death (Holden, 2009, p. 209).

A second limitation of *The Day I Died* is that it addresses only pleasurable NDEs—those dominated by emotions such as peace, joy, and love. The phenomenon of distressing NDEs is an important issue in NDE literature and research that was not addressed in the documentary nor assessed in the questionnaire. In a comprehensive, critical review of the published NDE literature through 2005, Nancy Bush (2009) noted that “some NDEs are marked by intense terror, guilt, panic, loneliness, [and] despair” and that “distressing NDEs may produce long-lasting emotional and psychospiritual trauma” (p. 81). Out of 21 studies she reviewed, she found that “although 9 studies with 459 [near-death] experiencers found no accounts of distressing NDEs (0%), 12 other studies involving 1,369 experiencers produced the accounts of 315 people (23%) who reported NDEs ranging from disturbing to terrifying or despairing” (p. 70); thus, distressing NDEs and their aftereffects characterize a substantial minority of NDErs. To accurately introduce students to the complete range of current knowledge about NDEs, educators would need to supplement information from the documentary with additional information about distressing NDEs.

Since the term and phenomenon of NDEs first became widely known 35 years ago, the topic has received increasing media coverage, exposing much of the U.S. population to NDE-related information. In light of that exposure, the extent to which the general population holds accurate knowledge of NDEs is unknown. Consequently, an interesting question is the initial degree of accuracy of NDE knowledge in this sample. Findings indicated that such knowledge ranged widely: Answers to all participants' pretest items ranged from 1 to 6 or 7. Such knowledge also was, on average, only somewhat more accurate ($M = 4.74$) than the expected average of 4.00 if respondents had been guessing on all items and well below a perfect average score of 7.00. Results of this study indicate that, at least among this sample of advanced undergraduates, popular media has likely contributed in only a limited way to accurate knowledge of NDEs. Nevertheless, at least in this sample, accuracy of NDE knowledge was amenable to change and did increase as a result of viewing *The Day I Died*. Methodologically, it is worth noting that higher pretest scores would have attenuated the changes in knowledge that viewing the documentary produced in this study.

A possible limitation on the generalizability of the findings of this study is the non-randomization of group participants. Although not supported by the fact that pretest scores were equivalent across groups, it still may be that experimental and control participants were differentially sensitized to respond to the film, which may account for the knowledge gains observed here among those who viewed *The Day I Died*. As participants could not be randomly assigned to experimental or control groups, this possibility could not be evaluated in this study.

Despite the above-noted exceptions regarding misleading and absent information regarding NDEs in *The Day I Died* and the possible sampling limitation of the study, viewing *The Day I Died* significantly increased accurate knowledge of NDEs among this sample of advanced undergraduate psychology students. Replication of this study with other student samples would clarify the generalizability of our findings. In addition, the acquisition of knowledge about NDEs could be beneficial for healthcare providers, both practicing and in preparation, including those in medical, psychological, social, and spiritual fields who work with and study survivors of close brushes with death. Furthermore, survivors of near-death episodes, their intimate partners and friends, as well as educators themselves may also benefit from this knowledge. Thus, further research is necessary to document the efficacy of *The Day I Died* with these populations; such work could be of value to NDErs, the health practitioners who serve them, and researchers in the field of near-death studies.

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