Bruce Greyson

Emeritus Professor of Psychiatry and Neurobehavioral Sciences at the University of Virginia, and a leading researcher on near-death experiences.

Summary

Bruce Greyson is Emeritus Professor of Psychiatry and Neurobehavioral Sciences at the University of Virginia. He is also the former director of the <u>Division of Perceptual Studies</u> at the Department of Psychiatry and Neurobehavioral Sciences at the University of Virginia. His work has focused on understanding <u>the near-death experience</u>, particularly the long-standing changes on personality and outlook. He developed the Greyson NDE Scale as a measure of the depth of a near death experience, which is widely used. More recently he has become interested in the veridical aspects of such experiences.

Greyson has published widely and is frequently interviewed on the subject of near-death experiences. He was editor-in-chief of the *Journal of Near Death Studies* from 1982 to 2007. He is co-author of *Irreducible Mind* (2007).

NDEs During Attempted Suicide

In an early investigation, Greyson reviewed studies of NDEs among attempted suicide survivors. Usually those who attempt suicide are more likely to succeed in subsequent attempts. However, Greyson reports that suicide attempts where NDE-like phenomena are reported are markedly less likely to be followed by successful suicide. He hypothesized that this is because of the highly lucid, transcendental nature of near death experiences, in which a greater understanding of self-destructive urges emerges. 1

In a follow-up investigation, Greyson investigated 61 hospital suicide admissions in which 16 reported NDEs, an indication that such experiences are relatively common. $\underline{2}$

For a comparative study, Greyson created two groups: 151 people who reported NDEs and 43 people who had come similarly close to death without experiencing a NDE, and asked each to rate twelve anti-suicide attitudes. Those attitudes that were endorsed significantly more often by near-death experiencers were found to be those that relate to transpersonal or transcendental beliefs. And in a comparison of 151 people who reported NDEs and 43 people who had come similarly close to death without NDEs, in which both groups rated twelve anti-suicidal attitudes thought to result from NDEs, the attitudes endorsed significantly more often by near-death experiencers were those that related to transpersonal or transcendental beliefs. 4

Greyson's NDE Scale

In 1983, based on the reports of 74 individuals who experienced full-blown NDEs, Greyson collated a 33-item scaled-response questionnaire, drawn from an initial pool of 80 commonly reported characteristics. He then clustered the data to create the sixteen-item NDE Scale, including: items regarding changes in cognitive processes (such as accelerated thought processes and distortions in the sense of time); changes in affective processes (such as intense feelings of peace and joy); paranormal processes (such as a sense of leaving the physical body and being aware of events at a distance from the body); and experiences of transcendence (such as encounters with divine entities and with some other realm or dimension of existence). 5

Subsequent research validated the scale as being consistent and able to distinguish genuine near-death experiences from more spurious accounts, such as druginduced delusional experiences and those produced by organic brain diseases, and from close brushes with death without an NDE. The NDE Scale has high internal consistency, split-half reliability, and test-retest reliability over a 6-month period and over a 20-year-period. Lange et al. (2004). A Rasch rating scale analysis established that it provides a reliable measure of core NDE elements.

Fantasy-prone Personalities

In an early study, Greyson tested the sceptical hypothesis that fantasy-prone personalities are more likely to experience NDE-type phenomena than people without this predisposition. This hypothesis was investigated in three groups: those who reported a NDE, those who came close to death but didn't report any NDE imagery, and those who had never experienced a medical emergency. All groups completed several questionnaires and psychological measures. The pattern of relationships from these measures confirmed that fantasy-proneness was related to having a near death experience. However, the authors warn against sceptical conclusions, as such a relationship might be a result of a genuine near death experience rather than its cause.

Biosociological Approach

Greyson developed a biosociological approach based on information and systems theories to discern the anomalous experiences of the NDE and its psychological after-effects. He tabulated aspects such as a sense of timelessness, ineffability and an experience of cosmic unity, including paranormal phenomena. The later impact of the NDE included both positive and negative aspects, including profound value change and decrease in both death anxiety and suicidality among those who attempted suicide. Greyson describes these phenomena within a biosociological model that makes testable predictions about near-death experiences. 9

More recently, he participated in a multinational study comparing semantic similarities between accounts of NDEs accounts of psychedelic drug-induced experiences, but cautioned that the semantic similarity of NDEs and certain drug experiences does not establish a neurochemical cause for NDEs, since the drug-induced experienced seemed to be a mere 'reflection' of authentic NDEs.10 He has

also delineated clear-cut criteria to differentiate psychiatric disorders from NDEs and other mystical states of consciousness. <u>11</u>

Distressing Near-Death Experiences

Greyson points out that the majority of reported near-death experiences include profound feelings of peace, joy and cosmic unity. But he also describes lesser known reports of those that are unpleasant, frightening or hellish. They are of three types: those whose phenomenology is similar to that of peaceful near-death experiences but interpreted as unpleasant; a sense of non-existence or eternal void; and a graphic hellish landscape featuring demonic entities. Counterintuitively, the aftereffects of hellish experiences are often as positive as those of positive ones. 12

NDEs and Survival of Death

Assessing the near-death experience as evidence of some kind of post-mortem survival, Greyson describes three features that can be interpreted as supporting the survival hypothesis: enhanced mentation, the experience of seeing the physical body from a different position in space, and paranormal perceptions. Greyson then describes seven published cases and seven unpublished cases in the collection held by the Division of Perceptual Sciences that contain all three. These lack a rigorous standard of reporting, but at least suggest the kind of evidence that might be convincing. 13

Greyson has also presented as evidence for post-mortem survival cases of the so-called Peak in Darien type, in which experiencers encounter deceased individuals who were not yet known to have died.14

Electromagnetic Effects

Greyson and colleagues studied the electromagnetic after-effects that are sometimes reported to follow a near-death experience: an involuntary tendency to influence electronic devices and an extreme sensitivity to the electromagnetic environment. They investigated such effects among three groups: 216 near-death experients, 54 people who had been close to death without reporting a NDE, and 150 individuals who had never been close to death. The NDE experients reported both types of electromagnetic effects to a higher degree than either of the other two groups. It was also found that NDErs who scored higher on the Greyson Scale reported more electromagnetic after-effects. 15

Dissociation and Near-death Experiences

A common experience during a NDE is a sense of detachment from the body, the earthly environment and ultimately from the ego and sense of self. This has close similarities to the psychological classification of dissociation. To quantify this relationship, Greyson explored the frequency of dissociative symptoms in people who had come close to death. Ninety-six individuals who reported a near death experience, together with 38 individuals who had come close to death but had not had a NDE, completed a questionnaire that included a measure of the depth of the

NDE using the Greyson Scale and a measure of dissociative symptoms. Greyson found that those who reported NDEs also reported significantly more dissociative symptoms than those in the non-NDE comparison group. Within the NDE group, the depth of the NDE correlated significantly with their dissociation scores, although the level of dissociation was far too low to be considered pathological. Greyson concludes that the pattern of dissociative symptoms reported by those who have had NDEs is consistent with a non-pathological dissociative response to stress, rather than a pathological disorder. 16

Attitude Changes After NDEs

Greyson has studied a variety of attitude changes that typically follow NDEs, including personal values that increase or decrease after the event; 17 decrease in the fear of death; 18 and in death threat; 19 and post-traumatic growth. 20 He has documented increased spirituality after NDEs, including positive spiritual transformation, 21 spiritual well-being, 22 and daily spiritual experiences. 23 He updated Kenneth Ring's Life Changes Questionnaire, a standard measure of attitude change after NDEs, 24 and documented in a longitudinal study that these life changes do not diminish in intensity over a period of 20 years. 25

NDE Testimony Over Time

Sceptics suggest that near-death accounts tend to be embellished over time, as individuals are influenced by the cultural tropes they are exposed to and retrofit their original experience into a standard NDE. To test this assertion, Greyson arranged for 72 patients who had near-death experiences in the 1980s and had completed the Greyson NDE Scale, to do so for a second time. He found that the scores changed little over two decades and that there was a tight correlation between the two scale measures (p = 0.001), affirming the validity of near death accounts. $\underline{26}$ To help clarify this further, Greyson and colleagues subsequently developed a scale of core NDE features. $\underline{27}$

Terminal Lucidity

Greyson has also investigated terminal lucidity, a paradoxical return of mental clarity and memory occurring in patients suffering from severe psychiatric and neurologic disorders, shortly before their decease. (This phenomenon has been sporadically reported over the last few centuries, but only seriously studied in recent years). Building on previous publications 28 of cases of terminal lucidity in the context of neurologic and psychiatric disorders, Greyson and Michael Nahm highlight the same phenomenon in individuals with mental disabilities. One particularly noteworthy case, meticulously recorded at the time, concerns Anna Katharina Ehmer, a 26-year-old woman with severe mental disabilities who lived in an institution and allegedly never spoke a single word throughout her entire life, but was reported to have sung songs for a half hour before she died. Despite the difficulty of authenticating such historical accounts, the phenomenon bears a striking similarity to more contemporaneous accounts, challenging the orthodox neurological model of the brain. 29

More recently, Greyson participated in a government white paper on the topic, 30 as well as publishing a survey of terminal lucidity among nursing home patients with dementia. 31

Normal Functioning in the Context of Brain Abnormalities

In a 2017 paper, Greyson and colleagues examine cases in which serious brain deficiencies and abnormalities are discovered in apparently normally-functioning individuals. For example, in some people, the presence of brain dysplasia and brain lesions is not accompanied by any concomitant loss of cognitive function. The existence of such cases seems to question the seemingly well-defined role of cerebral structures thought necessary to enable cognitive functioning. In their overview, the authors cover noteworthy aspects of hydrocephalus, hemihydranencephaly, hemispherectomy, and certain abilities of 'savants'. Taking all these phenomena into account, they suggest that the standard neurological model is challenged even if it is accepted that neuroplasticity might offer a partial explanation. 32

Greyson and colleagues also published a thorough review of the medical records of a patient who described a profound NDE while in a documented deep coma incapable of sustaining consciousness. 33 He has written extensively of the failure of materialistic etiological models of NDEs, based on analogies to neurochemical or neuroelectrical changes in the brain, to come to terms with how the complex consciousness of NDEs can occur under conditions in which current neurophysiological models deem it impossible, such as under conditions of general anesthesia and cardiac arrest. 34

Distant Healing

Greyson has also carried out experimental tests of psi phenomena. In one test, he investigated the therapeutic effect of distant healing as a supplement to standard anti-depressant medication for forty depressed patients. Both the healing and control groups received standard treatment for depression; in addition, the experimental group received distance healing for six weeks from healers trained in a meditation technique. Results suggested a non-significant trend for patients in the healing group to show greater improvement than control subjects for depressive symptoms. Among the healing group, outcomes were significantly correlated with the healer ratings of the strength of the healing sessions, and also the number of sessions.35

Michael Duggan

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Endnotes

Footnotes

- <u>1.</u> Greyson (1981).
- <u>2.</u> Greyson (1986).
- <u>3.</u> Greyson (1992b), 3.
- 4. Greyson (1992a).
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- <u>13.</u> Greyson et al. (1998).
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- 18. Pehlivanova et al. (2022), 30.
- 19. Greyson (1992a), 31.
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- 21. Greyson & Khanna (2014), 33.
- 22. Khanna & Greyson (2014), 34.
- <u>23.</u> Khanna & Greyson (2014), 35.
- <u>24.</u> Greyson & Ring (2004), 36.
- <u>25.</u> Greyson (2022), 37.
- <u>26.</u> Greyson (2007).
- <u>27.</u> Lange et al. (2004).
- <u>28.</u> Greyson et al. (2011)
- 29. Greyson & Nahm (2013).
- 30. Mashour et al. (2019), 24.
- 31. Batthyány & Greyson (2021), 25.
- <u>32.</u> Greyson et al. (2017).
- 33. Khanna & Greyson (2015), 27.
- <u>34.</u> Greyson (2021), 28.
- <u>35.</u> Greyson (1997).
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