

Notes from Bruce Greyson, *After: A Doctor Explores What Near-Death Experiences Reveal About Life and Beyond*, New York, NY: St. Martin's Press, 2021

$\frac{3}{4}$ of NDEers report a change in time sense, $\frac{1}{2}$ a "sense of timelessness"

Most report "clearer, faster thinking" (the opposite of a dream state)

$\frac{2}{3}$ report that their senses – vision, hearing, etc. – are more vivid

$\frac{1}{4}$ of Greyson's NDEers reported a "life review"; $\frac{3}{4}$ of those who had a life review said it changed their perspective of what matters in life; $\frac{1}{2}$ of those who reported a life review said it included a sense of judgment, usually by themselves of themselves, and more than $\frac{1}{2}$ of those who reported a life review also reported seeing each event not just through their own eyes, but through the eyes/experience of the others involved in the experience.

~10% of patients resuscitated following a cardiac arrest reported NDEs.

~80% of NDEers reported that they went outside their body (out-of-body experience, or OBE); of these, about 50% reported seeing their bodies and events happening around their bodies – usually seen from above. This transition was reported as "easy, painless, and instantaneous."

Cites a paper by Jan Holden (pg. 27) – among 93 NDE reports of out-of-body observation, subsequent medical review found that 92% were completely accurate as to external facts, 6% had "some error", but only 1% were "completely erroneous"

For most NDEers, the NDE becomes a central focus of their life going forward, but not regarded as negative.

About 20% of people who "come close to death" (from all causes?) report an NDE.

Among those who "came close to death", those that report an NDE had less emotional distress on subsequent psych evaluation.

NDEs do not fade over time, but retain their richness and detail over decades. Follow up assessments more than 2 decades later find no significant discrepancies in reported details.

After their NDE, NDEers had (usually measured via validated psych assessment tools):

- An enhanced sense of meaning and purpose in their lives
- Increased joy in everyday things
- Decreased fear of death
- A greater sense of the interconnectedness among all people
- Were more altruistic and compassionate towards others
- Less struggle with day-to-day life

Greyson notes that all of these attributes are opposite for those who struggle with mental illness.

NDE accounts are reliable over time – even decades – showing no modifications or enhancements.

71% of NDEers report that their NDE was “more real” than regular life; only 3% said their NDE was less clear / less vivid than their real life experiences.

Within 6 to 7 seconds of blood flow from the heart stopping, measured electrical brain activity begins to decline; after 10 to 20 seconds, there is no measureable electrical activity in the brain.

Many NDEs happen in people under general anesthesia, where – by definition and medical observation – no REM (dreaming) activity can or empirically does occur.

90% of NDEers report a “sense of peace”

~70% report a feeling of “oneness” or “cosmic unity”

~75% report entering some unfamiliar region or dimension (some label this “heaven”)

All say that the experience was “unmistakably real”, “hyperreal”, with a better ability to think and reason – this is very different from what people with hallucinations report.

86% of NDEers report a pleasant experience, 8% report an unpleasant experience, and 6% explicitly report that the experience was neither pleasant nor unpleasant (Greyson notes that a bad experience may lead an NDEer to be unwilling to share it with others = not reported at all, potential for bias from missing data)

Found no association between experience type and whether the NDEer was perceived as “saintly” versus “bad” by outsiders or the person themselves

In Greyson’s experience, for those with a bad/unpleasant experience, reluctance to face frightening NDEs may lead to long-lasting emotional trauma, and are often interpreted as a message to “turn their life around”.

Many NDEs that start as frightening turn around and become peaceful.

~50% of NDEers could not find words to describe their experience – “beyond words”.

~50% of NDEers reported that they had “no sense of place” during their NDE; of the places that were described, no patterns emerged.

From one NDE report: “I learned that at our deepest level of consciousness we are energy beings of pure love and light who are temporarily residing in physical bodies”.

“The evidence suggests that after we die, some of us find ourselves still conscious – at least for a while.”

~70% of NDEers encounter at least 1 other person; of these ~70% say they encountered a “deceased” person.

~90% of NDEers report that they encountered a divine or God-like being; consistently, this was the most meaningful part of the NDE.

Of those who encountered a divine being, about 1/3 anchored the experience in their background religious / cultural beliefs, while ~2/3 said they could not specifically identify the being; most felt "God" was an adequate / the best term.

Regardless of initial belief structures, most NDEers then believe in something sacred / divine. ~80% report a belief in a higher power, a sense of divine presence in all of us.

Very clearly, NDEs transform the people who experience them – partial list of long-term impacts:

- I no longer feared dying (markedly lower anxiety about death compared to those who came close to death but didn't report an NDE; 86% of all NDEers had markedly lower fear / anxiety about death)
- I know why I am alive (those who experience NDEs have about a 100-fold increase in "my joy in living")
- I will persist after death

Things that were associated with decreased fear of death following an NDE:

- Meeting a divine being
- Meeting loved ones
- Seeing a brilliant light
- Feelings of joy
- Feelings of being "one with the universe"

- Experience of leaving the body was not associated with decreased fear of death after the experience

Most NDEers also got a sense of meaning, life purpose.

Among those who had attempted suicide (but were resuscitated), about 25% reported an NDE. Those who experienced an NDE became significantly less suicidal afterwards, compared to those who didn't report an NDE. The "post suicide NDEers" reported that they were "part of something greater than themselves" and that "life has a purpose"; life becomes more valuable and precious.

Losing fear of death was strongly associated with "losing fear of life" – "live each day to the fullest; nurture relationships and express love to those around you"

For ~90% of NDEers, the NDE changed attitudes and beliefs:

- ~70% reported improved mood, felt better about themselves
 - ~75% reported being more calm, and more likely to help others
- 1) New or strengthened belief in life after death
 - 2) Feeling of being loved / valued by a higher power
 - 3) Increased self esteem
 - 4) New sense of mission / purpose
 - 5) "We are all part of something greater" leading to MUCH higher levels of compassion and concern for others; this is associated with a desire to serve others, leading to increased altruistic behavior, decreased desire to get personal gain (personal gain is no longer relevant, especially at someone else's expense), and greater feelings of understanding, acceptance, and tolerance

These effects are significantly greater than similar measures among people who came close to death, but who didn't report an NDE.

These effects persist over decades, and even strengthen over time. In 1 formal study, follow-up repeat formal measurement more than 20 years later showed no change – these personality shifts persisted.

Cites Ken Ring's Life Changes Inventory

NDEers are left with a conviction that loving and caring for others is of primary importance (which gives their lives, going forward, inspiration, meaning, and purpose).

Among those persons who came close to death, those who reported an NDE measurably had:

- A more satisfied life
- More openness to positive new directions
- More positive relationships with other people
- More personal strength
- Greater appreciation for life
- Felt they had undergone great spiritual growth
- A paradoxical decrease in devotion to any one religion – believed that the core of all religions is essentially the same
- This sense of spiritual growth was greatest in NDEers who were materialistic before their NDE

Had a focus on connecting with something greater than ourselves and an emphasis on loving and caring for others.

See the Golden Rule not as a moral guideline, but as a “law of nature as inescapable as gravity”.

~33% of NDEers changed their profession as a result of their NDE; this was most dramatic among those who initially in violent professions, such as the military or the police. They found they could no longer function in those roles.

~75% report a “marked change in lifestyle and activities” – especially from very competitive activities / professions (“be the winner”); links to the idea of (as expressed by one NDEer): “What’s the purpose of the talents and skills that I’ve been given?”

NDEers sometimes experience a personal downside:

- 1) Anger at being forced to come back; wanted to stay in the “better” NDE world with more mental capacity / clarity
- 2) Confusion – struggled to understand what had happened to them
- 3) Dealing with the personality changes that an NDE often produces. NDEers tend to have decreased personal boundaries which can lead to problems; sometimes family and friends have trouble adapting to and accepting their changed attitudes and related behaviors. For example, NDEs often led to marital problems – ~65% of NDEers experience divorce due to now dissimilar goals, problems in communicating their experience and new beliefs, and disagreement around roles.
- 4) Ridicule and threats around perceived mental problems, particularly from health care professionals (who, in the past, tended to react poorly to NDE reports)

Most NDEers regard their NDE experience as profound – almost holy. They tend to hesitate to share those experiences for that reason, plus fears that they will be perceived as somehow crazy or mentally deficient. This is particularly true when sharing their experiences with perceived authority figures (like physicians and nurses).

Greyson's final summary conclusions:

- 1) *NDEs are common experiences that can happen to anyone.*
 - 10 to 20% of people who come close to death report NDEs
 - This translates to about 5% of the general population, who experience NDEs across a lifetime
 - Despite decades of research, there is no factor that has ever been identified that is associated with an NDE experience – for example, not age, gender, cultural background, or anything else

- 2) *NDEs are normal experiences that happen to people in exceptional circumstances.*
 - Memories of NDEs look and function like memories of real events (on things like fMRI); in this, they differ dramatically from things like hallucinations or dreams. NDEers experience them as “hyper-real”, with increased (not decreased) levels of mental function.
 - There is no link between NDEs and mental illness. In fact, the data suggest that experiencing an NDE protects against mental illness.

- 3) *NDEs usually lead to a number of profound, long-lasting aftereffects.*

- 4) *NDEs reduce fear of death; also, paradoxically, they produce a reduced “fear of living”.*

- 5) *NDEs lead experiencers to live more fully in the present moment.*

- 6) *NDEs raise questions about the relationship between minds and brains.*

- 7) *NDEs raise questions about the continuation of consciousness after death.*

“The evidence that under extreme conditions we can perceive beyond what our physical senses see and hear, and that we can remember things that our physical brains have not processed, comes not just from NDEs but from a variety of other research avenues.”

This is a book written for the general lay public, recounting Greyson's experience as a scientist investigating the phenomenon of NDEs. At the end of the book, under Notes, he includes citations of major papers for each of the major points he makes in the text.

Greyson's NDE Scale

Professor & psychiatrist [Bruce Greyson](#) developed this scale to measure the depth of an individual's near-death experience. The following is a copy of the scale as presented in an article entitled "[Altered States](#)" by Lee Graves in the Summer 2007 edition of the University of Virginia Magazine.

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 many 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

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 extrasensory perception (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 "sent back" against my will.

A score of 7 or higher is considered a NDE for research purposes. The mean score among a large sample of near-death experiences is 15.

The following appendage on scoring was not included in the above article - see references listed below.

SCORING:

Sum of all 16 items = total NDE Scale score

Among a criterion group of NDErs, the mean score on this scale was 15 with a standard deviation of 7.84; we therefore use a score of 7 or greater (1 standard deviation below the mean) as the cut-off point for identifying an experience as an NDE.

Sum of items 1-4 = cognitive component

Sum of items 5-8 = affective component

Sum of items 9-12 = paranormal component

Sum of items 13-16 = transcendental component

SCORING TYPE OF NDE:

Cognitive type = cognitive component score 5 or higher

Transcendental type = cognitive component score less than 5 and transcendental component score 5 or higher

Affective type = cognitive and transcendental component scores each less than five, and affective component score 5 or higher

Paranormal type = cognitive, transcendental, and affective component scores each less than 5, and paranormal component score 5 or greater

Unclassifiable = no component score 5 or greater

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