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Running head: NEAR DEATH EXPERIENCES

The Threshold between Life and Death

An Examination of Near Death Experiences

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**The Theshold of Life and Death- An Examination of
Near death Experiences**

Submitted by Zandra Jarl to the University of Skövde as a final year project
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I hereby certify that all material in this final year project which is
not my own work has been identified and that no work is included for
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Abstract

In studies on Near Death Experiences (NDE) data has been collected by using the recently developed scaling methods, the scale developed by Ring and the Greyson NDE Scale. In order to illustrate the problems in the empirical study of NDEs, my intention is to compare the Greyson NDE-scale with the most common theories on NDEs. After series of modifications the final scale consisted of a questionnaire consisting of sixteen different questions, that yielded into four different areas, *Cognitive components, Emotional components, Paranormal components, and Transcendental components.*

In the end the theory that has the most likely possibility to explain NDEs in the future must be the Dying Brain theory, but one should not disclose the different features of the Afterlife theory (but without the origin explanation).

Keywords: Near Death Experiences, The Dying Brain Hypothesis, The Greyson NDE- scale

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Introduction

Near Death Experiences is defined as an altered state of consciousness with different abnormal features that occur to someone who is labeled being clinically dead for a period of time. An essential part of studying Near Death Experiences (NDEs) is to formulate the importance of different views on the phenomenon. The core issue is to understand if NDEs are due to something spiritual or if they are founded in neurophysiological changes in the brain due to, e. g., cerebral anoxia (Blackmore, 1993). In order to evaluate the origin of a NDE, one needs to examine the definitions for the concept and the methods that are used for categorizing the experiences as NDEs.

In studies on NDEs data has been collected by using the recently developed scaling methods, the scale developed by Ring and the Greyson NDE Scale. For instance, the famous Dutch study by van Lommel et. al. (2001), a central reference in NDE studies, was almost entirely based on the Greyson NDE Scale. The frequency of NDE among cardiac arrest patients, (which where the study group in the Dutch study), where 10 %, and 1% among other cardiac patients (Greyson, 2003). When almost all current research on NDEs is based on the same methods, and the same premises, this creates a problem, foremost in the evaluation of whether the experiences are mental, physical or perhaps both (Keyes 2004).

In order to examine the methodological problems that creates a narrow vision of the field, the old methods need to be evaluated and compared to subjective reports of potential NDEs. It may be that the current methods do not actually measure what they are supposed to measure. For instance, the Greyson scale has been criticized for not

being able to divide nonNDE to NDE. Therefore this essay is based on the assumption that the different components of the most commonly used method; the Greyson NDE-Scale is not a sufficient measurement for NDE. There is also a possibility that methodological problems could inhibit finding where the experiences descend from, which obviously must be the purpose of measuring and generalizing the experiences. In order to illustrate the problems in the empirical study of NDEs, my intention is to compare the Greyson NDE-scale with the most common theories on NDEs. The selection of theories is based on the common view on NDE, which includes The Afterlife Hypothesis and Susan Blackmore's Dying Brain Theory. The third theory, The Archetypal Hypothesis is based on that it was created as a critique against the Dying Brain Theory. The main intention of this essay is to examine the contents of NDEs, and the empirical research methods that contribute in understanding the content. The intention is not to examine the scientific evidence as to why NDEs exist.

Criteria and Typical Features of Near Death

Experiences

The physiological criteria for having a NDE is that the EEG (if it is measured) measurement shows flat activity, and that the patient is labeled as clinically dead for a short period (Rivas, 2003). Near death experiences consist, however, of several different experiences that together can be labeled as NDE.

Anecdotal Reports

There are no NDEs that are exactly the same which makes every experience unique. That is why the researchers first started out studying NDEs with individual reports from the patients that had had Near Death Experiences. These people were mostly cardiac arrest patients, as NDEs are most common in this patient group (Lange, Greyson, Houran, 2004).

One of the first researchers to study NDEs was Raymond Moody; he published a list of typical characteristics of NDEs (1975) in his book *Life After Life*, (Bailey and Yates, 1996). Moody came up with a list of the most typical features of NDE. These features included for instance feelings of peace and quiet, noises, the dark tunnel, Out of Body Experiences (OBEs) etc. (Moody, 1975; Blackmore, 1993). In studying 150 different cases Moody (Moody, 1975; Bailey and Yates, 1996) found fifteen similar characteristics of NDEs. For instance, Ineffability, and he concluded that ordinary language is not enough to express the experience of the survivors' state during NDE. Other typical features of NDEs were that the survivors hear the news of their own death from others while they are presumably dead, and they have Feelings

of Peace and Quiet and absence of pain during the experience. The patients also hear buzzing, roaring, or banging sounds or beautiful music, and they can in some cases, see the famous Dark Tunnel with a bright light at the end. The most intriguing experience is the OBE which is characterized by the feeling of leaving your own body and to be able to watch the whole scene from above. Sometimes the only thing that connects you to your body is a string. These experiences can almost always be connected to the actual events. The survivors have furthermore reported that they viewed their whole life's knowledge passing through their eyes in a vivid form. Further, a border or a line appeared to them and if they did cross that line there was no point of return (Moody, 1975; Bailey and Yates, 1996).

A typical experience could include visions of light through darkness and also feelings of that you belong in the place where you have arrived to, whether it seems to be a real physical place or more of an idea of a place. In this place the survivor could have encountered familiar dead or living persons, and felt a wide range of peaceful feelings in this place and overall a pleasant experience. After the experience, the survivors need time to adjust to life because of the almost pleasant experience, and they often have a strong feeling of returning to that place they experienced while being clinically dead. Afterwards they often have the need to tell others about their experience, and a more philosophical view of life and also a loss of fear of death. After you came out of an experience like this you could either have an increase of positive emotions, or increased anxiety about the real life.

Often when people who have had an NDE during a suicide attempt, the experience was positive and the aftereffects show a decreasing amount of suicide attempts (Blackmore, 1993). Moody claims that the time passing have had a big

difference in the actual different experiences, and those who were in that state longer experienced more and also had more features (Moody 1975; Bailey and Yates, 1996).

Measurements of Near Death Experiences

As mentioned the first scientist that made way for a more scientific approach in this area was Raymond Moody and he developed his first conclusive ideas about NDEs in a nonscientific manner (Moody, 1975; Blackmore, 1993). Based on his work Kenneth Ring started in 1977 a systematic collection of data from people who had come close to dying (based on hospital records) without any demands on NDE-like features. He made the discovery that most of Moody's claims were true (Ring, 1991; Blackmore, 1993).

Ring's scale

Kenneth Ring (1991) described from this what he called a "Core Experience", that consisted just of five features instead of fifteen. He developed the Weighted Core Experience Index (WCEI) where the different components were assigned different weights and rated on a scale. The different components consisted of: Peace, Body separation (OBE), Entering the darkness (similar to Moody's dark tunnel), Seeing the Light, and Entering the Light (Ring, 1991).

His scale was later first revised by Kohr who made it into a simpler version that was easier to evaluate and did also confirm Moody's findings (Blackmore, 1993).

The Greyson scale

Later on Ring's scale was also criticized by Bruce Greyson who in the light of Ring's scale developed a more valid and reliable scale. In his research Greyson eventually came up with eighty different features, which included all the main features that were encountered in the previous studies by Moody and Ring (Lange,

Greyson, Houran, 2004). After series of modifications the final scale consisted of a questionnaire consisting of sixteen different questions (see Appendix, p 26), that yielded into four different areas, Cognitive components, Emotional components, Paranormal components, and Transcendental components (Greyson, 1983).

Bruce Greyson (Lange, Greyson, Houran, 2004) evaluated his own evaluation scale, with the conclusion that the method does not account for the whole phenomena, but it does provide a powerful aid in pursuing the core issues of NDEs.

The Different Components of Greyson's NDE-Scale

The Greyson NDE-scale (Greyson, 1983) consists of four different areas that together are meant to capture the "Core" of the NDEs (see Appendix, p 26). The first component is the Cognitive component, which includes the perception of time, which is, either speeded up or slowed down. It also addresses if the person experienced scenes from his or her passed life, and if they suddenly seemed to understand everything which counts for a holistic cognitive component.

The second is the Affective Component, which focuses on the emotional response to the experience, like if there were feelings of peace and pleasantness, and joy. It also accounts for more extraordinary emotions like a sense of harmony and unity with the universe, and also feelings that were connected to being surrounded by a brilliant light. The following are the Paranormal components which include features of sensory perceptions, such as whether the sensations were more vivid than normally, and whether they felt that they knew that things were going on elsewhere by, e. g., Extra Sensory Perception (ESP). Paranormal components also include features such as whether the body felt like it were separated from the self, and also if there were scenes from the future (Greyson, 1983).

The fourth component is the Transcendental, and it has features such as if they felt as if they entered another unearthly place, and if they encountered a mystical being or presence, or if they heard an unidentifiable voice. In this part the features of seeing or meeting a dead relative or other deceased relatives are accounted for. It also includes if the person can report if he or she came to a point of no return where they could choose to come back or not (Greyson, 1983).

Theories of Near Death Experiences

The Afterlife Hypothesis

The Afterlife hypothesis is mainly based on the idea that NDE is basically a view or a threshold into a life after death. The commonly experienced tunnel serves a crucial part in this theory, as it is viewed as the passage to that other world, and the light at the end of the tunnel is viewed as that world or some form of a heaven. In this theory the soul is thought to be separate from the body, and this journey is exclusively made by the soul that survives the mortal body (Blackmore, 1993).

According to Blackmore (1993), there are four different arguments that speak for this view. The first argument is the “Consistency argument” that states that all NDEs are similar around the world and throughout our history, and that this proves that NDEs are a journey to a common place. The second one is the “Reality argument” which entails that NDEs feel so real that they simply must be real, and that anyone who has had one knows these other dimensions as true because they have been there. This means that feelings of reality are equal to evidence about the reality.

The third argument is about “Paranormality” and concludes that the paranormal events that are included in NDE cannot be explained by science, and are

in that sense facts that prove that NDEs include other dimensions. They cannot be explained or reached by a materialistic view. The last argument the “Transformation argument” states that people are changed by their experience, sometimes dramatically for the better and this proves that they have had an encounter with another world.

Critique against the Afterlife Hypothesis

The Afterlife -theory of NDEs is the most accepted one but it is also the one that we are the least likely to find hard scientific evidence for. This makes this approach to NDEs very problematic in an empirical sense. The exception to that is that theories of a religious manner actually could be viewed in an empirical sense, because the whole theory stands on the idea that a higher power exists. Hence if you can find empirical evidence that this power doesn't exist then the theory would be false, and it is just that at this moment there are no empirical methods for dismissing this way of reasoning. The problematic fact to this conclusion is that it do not exist any methods for proving this theory either.

The validity in the theory can be met if you compare it to the different components of Greyson's NDE scale. In comparison to the cognitive component where features like life review are included, it could be explained with the assumption that the cognitive aspects could be a proof that the higher power creates a reasonable ending for the individual before he or she leaves their earthly lives. When regarding the affective component it could be viewed as a glimpse of God or feelings that prepare the person for the afterlife, which means that the person comes to a better place.

The paranormal component is not a clear connection to the theory, with regarding ESP. Although OBE is more clearly linked to that the body is separated from the soul and lives past the body, and could probably be one of the strongest evidence for the theory. The Afterlife theory states that the paranormal is beyond the scope of science, and considering that this component cannot be accounted for in this context.

In examining the transcendental component with the theory it could be seen as a clear form of evidence to this theory, which could be explained in regarding with that you then view creatures and phenomenon's that exist in the afterlife.

The scientific evidence that speaks for this theory is somewhat nonexistent, and the arguments that support the theory are mainly founded in the absence of such findings. The findings done by Britton and Bootzin (2004) who investigated patients which reported having a transcendental experience during a life-threatening event that were associated with positive after effects. Their results revealed both that these patients (compared to a control group) had more temporal lobe epileptiform EEG activity and more temporal lobe epileptic symptoms; they also had altered sleep patterns (a shorter duration of sleep and REM sleep). These results suggest that the temporal lobe is involved in NDE, and that it differs from the rest of the population.

. The scientific evidence that is more ambiguous in the context is the findings of both van Lommel et al. (2001) and Parnia and Fenwick (2002), that came to the conclusion that something more is needed to explain NDEs, and maybe it will in this context be the unexplained.

Blackmore's Dying Brain Hypothesis

The Dying Brain hypothesis (Blackmore, 1993) states that all the different qualitative features of a NDE are just a product of a dying brain and that all that activity eventually stops when the brain dies. The NDE is merely a collection of diminishing mental activity. There are two main arguments that are used in favor for this theory.

The first one is the consistency argument that entails that NDEs are similar across the world and in history, and the reason for this is that everyone has a similar brain, hormones and nervous systems, and thus has similar experiences when the system fails. The second argument is the "just like hallucinations" argument, and it explains that all the different features of NDE can occur under other circumstances than NDE, and are therefore not unique to a near death situation.

Furthermore, Blackmore (1993) suggests reasons as to why NDEs have just a physical basis, mainly which the experiences are due to different types of Cerebral Anoxia (lack of oxygen in the brain). Because of the different types of anoxia, the experiences vary individually. The most important feature of Blackmore's hypothesis is that NDEs under anoxia only of activation occur when there is an intermediate speed of oxygen. This is explained by Blackmore (1996) in the following way: the inhibitory functions decrease during anoxia and the excitatory functions are increased, which makes the cells fire at a faster rate, and leads to a global spread across the brain in different areas. This is called in this context as cerebral excitation. Another part of Blackmore's theory is that it explains the perceived NDE as triggered by anxiety of dying, and NDEs are therefore a denial approach and a form of isolation.

Critique against the Dying Brain Hypothesis

The Dying Brain Hypothesis is a theory that states that the NDE is just merely evidence that comes from oxygen deprivation and that the brain therefore is in a dying state. The theory also links NDE in having similar characteristics of dreaming; therefore it is just a different brain state.

When comparing this theory with firstly the cognitive component it could only be explained by that it is just outcomes of the lack of oxygen in the brain or it depends upon the limbic activity (Blackmore, 1996). All these symptoms' like altered time perception and visions of one's past life is linked to the brains malfunctioning, and the theory don't explain the symptoms separately but dismissing them.

With the affective component the explanation for why they can exist in the experience, and be a part of this theory is that it is a product of activating those specific brain areas that are involved in emotional reactions. The paranormal component is in regards to this theory not wholly explained or present, both the OBEs and ESP are not explained and understood in their traditional conception, and therefore not actually a part of this theory. As for the transcendental component and visions of the afterlife it could probably be explained in this manner by that it has similar characteristics as dreaming has, and that those features are more or less meaningless. Overall this theory has more trouble in fitting in with the scales component mainly because there is not sufficient evidence that the brain actually respond in this way in its final existence.

When comparing this theory to the scientific findings there are a few findings that speak for it, for instance the findings by Britton and Bootzin (2004) where they both found that NDErs had altered activity in the temporal lobe which could be

explained by that it is something merely biological. Furthermore Britton and Bootzin found that these patients had altered sleep patterns and less REM sleep and shorter sleep overall.

This suggests that it is similar to dreaming and also that it could have something to do with altered sleep patterns, that the patients are lacking something that also creates less sleep. What goes against this theory is firstly that it doesn't consider the fact that almost everyone has a NDE during their lifetime, which makes it harder to find evidence for this theory and that it has to do with an abnormal state. Another problem with the theory is that in order for NDE to occur the EEG activity must be flat and hence the brain can't produce any activity probably not even if it's dying. According to Moody (Blackmore, 1993) the intensity of the phenomenon increases with time, and by then the activity has been flat for a while.

The Archetypal Hypothesis

The Archetypal hypothesis is a theory that is based on a monotheistic belief like the Blackmore's theory that the mind and the body are two parts of the same entity. The archetypal hypothesis is a proposal that emphasizes the importance of the aesthetic nature of NDEs, and that NDEs are aesthetic because they express both beauty and sublimity, according to its founder Charles D Keyes (2004). The archetypal theory was originally constructed as a critique against Blackmore's theory, and it includes three different arguments.

Firstly, Blackmore's neurobiological model can be challenged by other equally monistic models, and secondly, the spiritual significance of something cannot be reduced to naturalistically originated states. The final argument includes the idea that the aesthetic component of NDEs creates a better explanation for the phenomenon

than the Dying Brain -argument. Keyes (2004) furthermore states that Blackmore compares her monotheistic theory with the dualistic theory “The Afterlife Hypothesis” and that she could more efficiently compare it with another monotheistic theory to get a more desirable result. Keyes refers to his theory that the archetypal components of NDE could explain the meaning of resurrected life, and that it is about faith and not science. NDEs furthermore disclose the basic symbols for life and the values of life in this life or the next (Keyes, 2004).

Critique against the Archetypal Hypothesis

The Archetypal Hypothesis is a theory that states the importance of the aesthetic nature of NDEs and that the spiritual components cannot be reduced to something naturalistic. This is the difficult part of the theory that it in some ways dismisses empirical research which makes it hard for comparisons in this context and further on not accepted with regards of credibility.

When comparing it to the cognitive component the explanation for that connection would probably be that the cognitive experiences is the patient’s own subjective experiences and can therefore not be explained in an objective manner, and is not a matter for scientific investigation. In regarding the affective component it can be viewed as a proof of the aesthetic nature of the experience, in terms of that the feelings of a bright light could be a spiritual component. When regarding the paranormal component it really is an explanation for that NDEs cannot be reduced to something naturalistic, because it clearly entails components that are very hard to explain in that manner.

The transcendental component which includes features like encountering mystical beings which explains the aesthetic nature, and entering an unearthly place which again makes claims for the spiritual features that the theory takes great importance in. Furthermore this theory fits poorly with the NDE scale and its components, because the main part of the theory is to explain the subjectiveness of the experience and mostly the positive parts of the theory. But according to the research (Blackmore, 1993; Greyson, 2006; Greyson, 2005) NDEs are not only a pleasant experience it could even be a very traumatic event, both after and during the experience.

According to the related research there are very few findings that speak for this theory, but a few states that this could be a possible explanation. Firstly both Parnia, Spearpoint, and Fenwick (2007) and van Lommel (2001) states that NDEs need something more than just the common methods for explaining it, in order to account for all of the features. Bruce Greyson (2006) found an interesting fact that NDEs foster a general spiritual growth which is not bound to a specific tradition, but merely a general increase compared to before the experience. There are much more evidence that speaks against the theory, for instance the findings by Britton and Bootzin (2004), that NDEs could be related to activity in the right temporal lobe. According to Blackmore's theory (1996) she explains the phenomenon as a result of lack of oxygen to the brain. The biggest problem with the theory is that it explains itself as a monotheistic theory but still claims to separate the spiritual from the physical which creates a paradigmatic view.

Discussion

In comparing the NDE scale components with the theories about the phenomenon the issue that arises is which of them is sufficient enough and not sufficient enough and all of the theories are include features that are not entirely correspondent with NDEs. In evaluating them it would therefore be more efficiently to separate them.

Concerning the NDE scale and whether it is a sufficient measurement for NDE e.g. captures the core of the experience from different individuals and can report the results from them. In favor of the scale is that it is in fact a well tested and used method for investigating NDEs, and that it is a favorable method because it tries to standardize the experience and hence make it a matter for science. The negative aspects of the scale according to science are that it only accounts for some parts of the experience that not necessarily would be typical for the experience. During the later research years Greyson (1983) found that e.g. the famous dark tunnel were not sufficient criteria for NDEs, and hence there would logically be other parts that are not sufficient enough or part that have not been accounted for. Therefore mostly because of the age of the scale new methods should be investigated and studied.

When comparing the scale to the different theories with regards to the credibility of the scale as a sufficient measurement, the construct of the scale could be slightly ambiguous. When comparing the scale to the Afterlife theory there are many elements that match in a theoretical foundation, and that makes the comparison problematic in the sense that this theory is not scientific and the result of that would be that the scale is not a scientific method.

The reason for this conclusion could also depend on the fact that the concepts themselves cannot be explained wholly in a scientific manner, but the way the scale measure them is scientific. With the Dying Brain Hypothesis the problem is a bit different, because it is a scientific theory but there is no match with the clearly nonscientific concepts (paranormal, transcendental) in the scale. The question arises by whether the scale entails for these concepts in a scientific manner, because it will not match with a scientific theory. The Archetypal Hypothesis is not a good match with the scale at all. If that is depending on flaws in the scale then it probably depends on that the scale are missing some important qualities of the experiences or it could depend on the perspective it has. Overall it doesn't seem that the theories undermine the scale completely, it possibly only needs to be revised in some aspects.

When regarding the theories and if they are a sufficient concept in figuring out the nature and explanation of the experience, the main focus should be in how they stand against each other and against the scientific findings or the NDE scale.

The theories have different aspects to them that are not wholly compatible with each other, but the main focus should be how well they can be scientifically explained. The best theory that can do this is of course Blackmore's Dying Brain theory which has a scientific ground; it is also quite well compatible with the NDE scale. The downside of it is that it refers to theories that haven't been scientifically tested and are therefore not entirely scientific, and would probably be hard to test in the future as well. The Afterlife theory is the most commonly accepted but also the one that are most likely to contradict and find evidence against. Mostly because it creates a circularity and predicts itself, but it was still the theory that matched best with the scale. That does not make this theory scientific, just because it includes all the same elements, because the explanation is still in a nonscientific manner. The

theory that is the least scientific must be the Archetypal Hypothesis theory, it don't fit well with the scale and have no actual scientific evidence to support it. In the end the theory that has the most likely possibility to explain NDEs in the future must be the Dying Brain theory, but one should not disclose the different features of the Afterlife theory (but without the Godlike features).

The biggest problem when conducting science about NDEs is that the experiences include many features that is very hard or almost impossible to explain by empirical methods. This is probably one reason why the area have not had a scientific standard and that the researchers have had a hard time trying to publish their studies as well as getting funding's. Without these components it is very hard to conduct reliable and promising research. This is probably one of the main reasons why there is an inhibitory culture that is standing away of the research and why it has not developed enough during the last years. Another problem more linked to the actual research is that the groups of patients that are usually studied by their NDEs are mostly cardiac arrest patients. That is probably due to a set of different reasons, and mainly because these patients are more frequently resuscitated and are easier to predict in forehand that they are going to encounter this experience. They are also more closely monitored and easier to get crucial information from. This creates a problem because the group itself has certain distinctive features that may affect the outcome of the results. Although the research is limited by the surrounding culture it could also be limited by its own one-sidedness, therefore there is not just one way in looking at this research situation.

Conclusions

In concern of the measurement methods that are currently used, because it is created in a limited research environment, they could be revised in order to properly function. Concerning the theories and why they are lacking in so many accounts depends on the limited research and more theories will probably develop in the future as the research develops.

The main purpose for further research should be to do as many studies as possible, that is preferably based on surveys in order to find the best method for examining the experiences. They should furthermore focus on studying as many different categories of subjects as possible, so that the experience won't be tainted by the study group.

In the end NDE is still a solely subjective experience and the question is whether it ever will be wholly rationalized and proved biologically. Even if it would be does that take away what the individuals subjective experience? The question is whether NDEs can be measured at all.

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2 Appendix

2.1 The NDE-scale

The NDE Scale is comprised of four sets of four questions, which identify cognitive, affective, paranormal, and transcendental NDE features. The four sets of questions and possible responses are:

Cognitive Components:

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

Affective Components:

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-felt no longer in conflict with nature
2-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

Paranormal Components:

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 facts have not been checked out

2-yes, and facts have been checked out

11. Did scenes from the future come to you?

0-no

1-scenes from personal future

2-visions of the world's future

12. Did you feel separated from your body?

0-no

1-lost awareness of body

2-clearly left the body and existed outside it

Transcendental Components:

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-heard a voice I couldn't identify

2-encountered a definite being, or a voice clearly of mystical or unearthly origin

15. Did you see deceased or religious spirits?

0-no

1-sensed their presence

2-actually saw them

16. Did you come to a border or point of no return?

0-no

1-came to a definite conscious decision to "return" to life

2-came to a barrier that I was not permitted to cross; or "sent back" to life against my will

The sum of the 16 responses comprises the total NDE Scale score, from zero to a maximum of 32. (*Again, for research purposes, the minimum score is 7.*)