

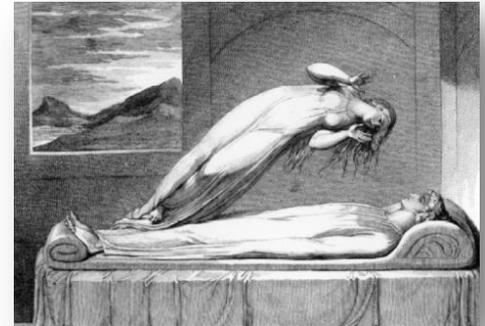
The Self-Defining Aspect of Near-Death Experiences

Helena Cassol, neuropsychologist, PhD student
ESSP 2019, Athens



Near-death experiences

- ▶ **Near-Death Experience (NDE):** Profound psychological events with transcendental & mystical self-related elements typically occurring to individuals close to death or in situations of intense physical or emotional danger (e.g., cardiac arrest, trauma)
- ▶ Recurrent “features”: feeling of peacefulness, out-of-body experiences, seeing a bright light, meeting with deceased relatives
- Classically occurring during non-ordinary states of consciousness
- 6-23% of cardiac arrest survivors
- Lead to vivid memories and a significant change in one's values





How to identify near-death experiences ?

- ▶ **Greyson NDE scale:** Scores ≥ 7 (/32) = NDE experimenter

Cognitive

- (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

- (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



How to identify near-death experiences ?

- ▶ **Greyson NDE scale:** Scores ≥ 7 (/32) = NDE experimenter

Paranormal

- (9) Were your senses more vivid than usual?
 - 0 = No
 - 1 = More vivid than usual
 - 2 = Incredibly more vivid
- (10) Did you seem to be aware of things going on elsewhere, as if by ESP?
 - 0 = No
 - 1 = Yes, but the facts have not been checked out
 - 2 = Yes, and the facts have been checked out
- (11) Did scenes from the future come to you?
 - 0 = No
 - 1 = Scenes from my personal future
 - 2 = Scenes from the world's future
- (12) Did you feel separated from your body?
 - 0 = No
 - 1 = I lost awareness of my body
 - 2 = I clearly left my body and existed outside it

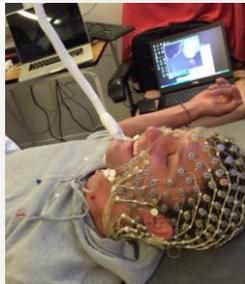
Transcendental

- (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



Near-death like experiences

- ▶ **NDE-like:** Experience that meets the criteria of a NDE (Greyson NDE scale total score ≥ 7) but following a situation with *no genuine threat* to one's life
- ▶ Epilepsy, syncope, meditation, ... or even « spontaneously »
- ▶ Provide the opportunity to reproduce a NDE (or some of its features) in laboratory settings





Near-death experience vs. self-defining memories

NDE memory

- ❑ Emotionality
- ❑ Consequentiality
- ❑ Highly detailed
- ❑ Very vivid



Self-defining memory (SDM)

- ❑ Establishment/maintenance of self-continuity
- ❑ Building blocks of our identity
- ❑ Emotionally intense
- ❑ Clear & important
- ❑ Related to lasting goals or unresolved conflicts
- ❑ Recalled a great number of times



Self-defining memories

- ▶ Four dimensions
 - **Specificity:** <24h, >24h, repeated events
 - **Affect:** triggered by the retrieval in memory
 - **Meaning making:** reflecting on implications and personal meaning of the event ⇒ // well-being
 - **Content:** “life-threatening”, “achievement”, “recreation/exploration”, “relationship”, “guilt/shame”, “drug/alcohol abuse”, “not classifiable”



Are near-death experience memories self-defining ?



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Research article

Memories of near-death experiences: are they self-defining?

H. Cassol^{1,2,*}, A. D'Argembeau³, V. Charland-Verville^{1,2}, S. Laureys^{1,2,†} and C. Martial^{1,2,†}

¹GIGA-Consciousness, GIGA Research Center, University of Liège, Liège, Belgium; ²Coma Science Group, Department of Neurology, University Hospital of Liège, Liège, Belgium; and ³Department of Psychology, Psychology and Neuroscience of Cognition Research Unit, University of Liège, Liège, Belgium

*Correspondence address. Avenue de l'hôpital 1, 4000 Liège, Sart-Tilman, Belgium. Tel: 0032 4 284 36 13; E-mail: hcassol@uliege.be.

†These authors contributed equally to this work.



Are near-death experience memories self-defining ?

Hypotheses

- ▶ **Hypothesis 1:** NDE memories are self-defining
- ▶ **Hypothesis 2:** they are more *central* to experiencers' identities and life stories than other SDMs
 - Centrality \Rightarrow extent to which an event is considered as a *reference point* and/or a *turning point* in one's life
- ▶ **Hypothesis 3:** The centrality of the NDE memory is associated to its reported intensity (Greyson NDE scale scores)



Are near-death experience memories self-defining?

Methods

▶ **48 NDE experiencers (32F)**

- Religious: 35(73%)
- Greyson NDE score: 17(5)
- Age (in years): 57(14)
- Time since (in years): 31(12-41)

▶ **23 NDE-like experiencers (18F)**

- Religious: 14(61%)
- Greyson NDE score: 15(5)
- Age (in years): 59(11)
- Time since (in years): 26(10-38)



Are near-death experience memories self-defining ?

Methods

- > SDM task \Rightarrow recall of two main SDMs
 - (1) more than 1 year old
 - (2) very clear memory of a personal and important event
 - (3) helps understanding who you are as an individual
 - (4) relates to personally significant themes/concerns, and is linked to other memories that have the same theme
 - (5) generates strong feelings, no matter the valence
 - (6) recalled a great number of times



Are near-death experience memories self-defining ?

Methods

- ▶ Are NDEs considered more central than other SDMs?
 - Centrality of Event Scale (CES)
 - › Centrality of an event to one's identity and life story
 - › 20-item scale (e.g. this event permanently changed my life; this event tells a lot about who I am)



Are near-death experience memories self-defining ?

Results

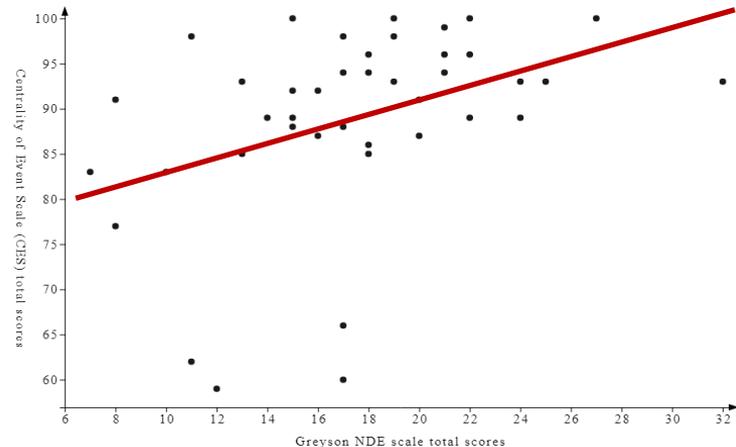
- ▶ **63%** NDE experiencers vs. **48%** NDE-like experiencers ($p=0.31$, $\phi=-0.14$)
- ▶ Experiencers who recalled their NDE:
 - More **intense** NDEs (Greyson NDE scores; $p<0.01$, $G_{Hedges}=-0.6$)
 - A larger proportion of **religious** people ($p=0.02$, $\phi=-0.29$)
- ▶ Self-defining value impacted by the **phenomenological content** rather than the context of occurrence?
- ▶ NDE memories are considered **more central** than other SDMs ($p<0.001$, $r=-0.57$)



Are near-death experience memories self-defining ?

Results

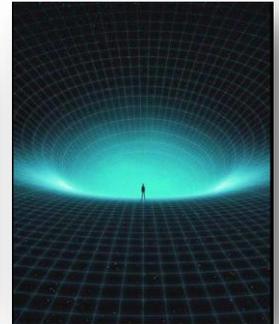
- ▶ Association between CES & Greyson NDE scale total scores ($r_s=0.48$, $p=0.001$)
- ▶ 50% of **meaning making**





Conclusions & perspectives

- ▶ Vivid and positive SDMs \Rightarrow maintenance of a coherent **sense of self-continuity**
 - \Rightarrow Positively associated to psychological adjustment
- ▶ What about **distressing NDEs** ?
 - \Rightarrow 1 to 14% NDEs are considered “distressing”
 - \Rightarrow “inverse”, “void” or “hellish”
- ▶ /!\ Highly negative and unforeseen event \Rightarrow unfavorable influence on the interpretation of other experiences / expectations about future events
 - \Rightarrow Harmful to mental health





Conclusions & perspectives

- ▶ Psychological interventions to foster the integration of NDEs into experiencers' life story
- ▶ Dissemination of practice guideline recommendations ?
- ▶ Clinical framework to prevent feelings of alienation
 - Environment in which they can share, process and integrate their NDE

James S. McDonnell Foundation



Studying Consciousness
in the electrical brain



Thank you!
Contact:
hcassol@uliege.be



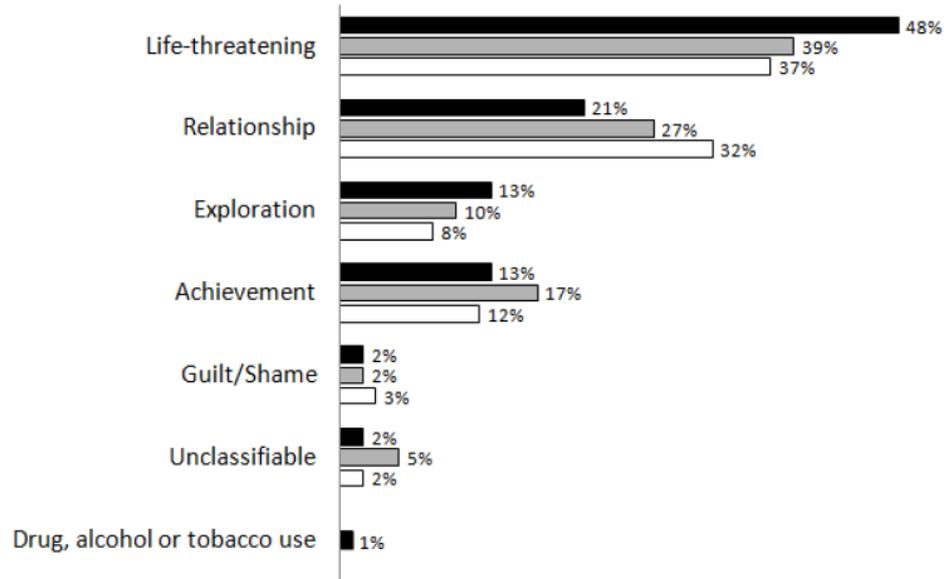


Figure 6 – Classification of self-defining memories (SDMs) within the major event categories proposed by Thorne and McLean (2001). In black: distribution of all reported SDMs (n=142). In grey: distribution of the other (non-NDE) SDM in the “NDE recalled” subgroup (n=41). In white: distribution of the SDMs in the “NDE not recalled” subgroup (n=60).