The Self-Defining Aspect of Near-Death Experiences

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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

Facco, Agrillo & Greyson, 2015; Greyson 2000; Noyes, 1980; Parnia et al., 2001; Sabom, 1999; Schwaninger et al., 2002; Moore & Greyson, 2017
How to identify near-death experiences?

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

### 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 universe
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

Greyson, 1983
How to identify near-death experiences?

- **Greyson NDE scale**: Scores $\geq 7$ (/32) = NDE experiencer

Paranormal

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

<table>
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<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Score</th>
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<tbody>
<tr>
<td>13. Did you seem to enter some other, unearthly world?</td>
<td>0 = No, 1 = Some unfamiliar and strange place, 2 = A clearly mystical or unearthly realm</td>
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<tr>
<td>14. Did you seem to encounter a mystical being or presence, or hear an unidentifiable voice?</td>
<td>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</td>
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<tr>
<td>15. Did you see deceased or religious spirits?</td>
<td>0 = No, 1 = I sensed their presence, 2 = I actually saw them</td>
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<td>16. Did you come to a border or point of no return?</td>
<td>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</td>
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Greyson, 1983
Near-death like experiences

- **NDE-like**: Experience that meets the criteria of a NDE (Greyson NDE scale total score $\geq 7$) 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

Beauregard et al., 2009; Charland-Verville et al., *in prep*; Facco & Agrillo, 2012; Hoepner et al., 2013; Lempert et al., 1994
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

Blagov & Singer, 2004; Martial et al., 2017
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

Blagov & Singer, 2004; Singer & Bluck, 2001; Thorne & McLean, 2001
Memories of near-death experiences: are they self-defining?

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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 ⇔ 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)

Cassol, D’Argembeau, Charland-Verville, Laureys, & Martial (2019)
Are near-death experience memories self-defining?

**Methods**

- SDM task ⇒ 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

Cassol, D’Argembeau, Charland-Verville, Laureys, & Martial (2019)
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)

Cassol, D’Argembeau, Charland-Verville, Laureys, & Martial (2019)
Are near-death experience memories self-defining?

Results

- 63% NDE experiencers vs. 48% NDE-like experiencers (p=0.31, φ=-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, φ=-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)

Cassol, D’Argembeau, Charland-Verville, Laureys, & Martial (2019)
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

Cassol, D’Argembeau, Charland-Verville, Laureys, & Martial (2019)
Conclusions & perspectives

- Vivid and positive SDMs ⇒ maintenance of a coherent **sense of self-continuity**
  ⇒ Positively associated to psychological adjustment

- What about **distressing NDEs** ?
  ⇒ 1 to 14% NDEs are considered “distressing”
  ⇒ “inverse”, “void” or “hellish”

- \(!/!\) Highly negative and unforeseen event ⇒ unfavorable influence on the interpretation of other experiences / expectations about future events
  ⇒ Harmful to mental health

Berntsen et al., 2003; Cassol et al., 2019; Chandler et al., 2003; Charland-Verville et al., 2014; Greyson & Bush, 1992
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
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).