LETTER TO THE EDITOR

A New Scale to Assess Near-Death Experiences

To the Editor:

Because the Near-Death Experience Scale (NDE Scale; Greyson, 1983) has been so widely used in NDE research, a recent article by Charlotte Martial and her colleagues (2020) is likely of significant interest to researchers in the field of near-death studies. In the article, the authors described a three-phase strategy that the Coma Science Group of the University of Liège in Belgium undertook to evaluate the NDE Scale and develop a revised scale. Several improvements were needed, for example: (a) to include content items that are now known to be characteristic of the NDE phenomenon, such as negative emotions experienced in “distressing” NDEs, the decision to come back to the body and physical life, and a gateway or tunnel; (b) to expand the number of and standardize the meaning of the Likert-type responses to each scale item; and (c) to simplify and clarify the wording of the items to make them easier to understand. The result was the Near-Death Experience Content (NDE-C) scale.

In the first phase of instrument development, the research group (Martial et al., 2020) did a psychometric evaluation of the NDE Scale using statistical and factor analysis on scores from 403 near-death experiencers (NDErs). In the second phase, the group developed the NDE-C scale based on earlier analytical studies that group members had conducted on NDE accounts. The NDE-C was reviewed, and the relevance of each scale item was rated by a panel of internationally known external experts in the field of near-death studies. Based on these experts’ relevant feedback, the group revised the scale items. The group then used NDE-C scores from 161 NDErs to validate the scale. In the final phase, the group analyzed the NDE-C for discriminant validity when applied to *other* related subjective experiences that were elicited during recreational drug use, meditation, and cognitive trance.

Whereas the NDE Scale consisted of 16 items, the NDE-C scale consists of 20. Although both scales are Likert-type, whereas the NDE Scale response range was 0–2, the NDE-C scale uses an expanded

range of 0–4. Whereas the NDE Scale used a different multiple-choice response format for each scale item, the NDE-C response range specifies the intensity and is the same for each item, ranging from 0 (Not at all) to 4 (Extremely; more than any other time in my life).

Of the original NDE Scale items, 15 are included in the NDE-C scale but are reworded to be clearer and more general. The original items #5 (Feeling of peace or pleasantness) and #6 (Feeling of joy) were considered redundant, so #6 was dropped. Conversely, the following new NDE-C items were added:

- 15. Feeling of non-existence, of being in a total void, and/or of fear.
- 17. Made the decision, or was forced, to come back from the experience.
- 18. Feeling of dying and/or being dead.
- 19. Saw or entered a gateway (for instance a tunnel or a door).
- 20. The experience cannot be described adequately in words.

Thus, whereas the range of the NDE Scale was 0–32, with a score of at least 7 indicating a bona fide NDE, the range of the NDE-C scale is 0–80, with a cutoff score of 27. In both cases, the cutoff score represents one standard deviation below the mean.

The research group found that the NDE-C scale differentiates NDEs from experiences associated with hallucinogenic drugs, meditation, and cognitive trance. However, they found that the scale does *not* differentiate NDEs that occurred in life-threatening situations from NDE-like experiences (NDLEs) that occurred in non-life-threatening situations such as falling asleep, high anxiety, fainting, or occurring spontaneously. This is the same conclusion that Charland-Verville et al. (2014) reached regarding the original NDE Scale. The features or elements in both NDEs and NDLEs appear to represent a shared common core experience. “The NDE-C scale thus aims to identify the content of an NDE, whatever the context in which it has been experienced” (Martial et al., 2020, p. 19).

We have argued elsewhere (Mays & Mays, 2015, 2017) that the Charland-Verville et al. (2014) study—and now the Martial et al. (2020) study—strongly suggest that NDEs occur completely independent of the NDEr’s specific antecedent physiological or psychological condition and, in some cases, appear to occur spontaneously, that is, with no apparent antecedent condition. These two studies’ results suggest that there is a *common proximate cause* of the experience. There may be any number of antecedent conditions that lead to or trigger a common precipitating cause—a common mechanism—that results in the NDE.

We found it noteworthy that Bruce Greyson, developer of the original NDE Scale, is a co-author of the Martial et al. (2020) article. His original scale certainly has served the field of near-death studies well—indeed, indispensably. And now his presence among the Martial et al. group seems to indicate his endorsement of the NDE-C scale.

Due to its more robust psychometrics, the NDE-C scale would now seem to be researchers' instrument of choice going forward in the field of near-death studies. However, we would caution that the new scale first needs to be validated with a Rasch analysis equivalent to the analysis done by Lange et al. (2004). The 15 scale items from the NDE Scale were reworded in NDE-C to be clearer and more general. Even though the changes were reviewed by external NDE experts and the item wording was revised, these reworded NDE Scale items should be validated that they preserve the original meaning from the NDE Scale. In particular, we would expect that the reworded scale items would preserve the *item hierarchy* shown by Lange et al. (Figure 1, p. 167). If the item hierarchy is preserved, subsequent NDE-C results can be compared with earlier NDE Scale results on the basis of the 15 common scale items.

We performed a preliminary Rasch analysis of the NDE-C results based on the data available in Supplementary Material G. Because the detailed NDEr score results were not available to us at the time, we ran the Rasch analysis on a *simulated* dataset of the Study 2 score results, using the Winsteps (Linacre & Wright, 1998) software. We validated our method of simulation by demonstrating that it generated a valid NDE Scale item hierarchy for the Martial et al. Study 1 results.

We found that several scale items shifted in item hierarchy in the NDE-C results. These shifts appear to be due to the new wording used in NDE-C. For example, NDE Scale item 14 (N14) refers to “encountering a mystical being or presence” whereas the equivalent NDE-C item C3 refers to “hearing one or several voices.” In the NDE-C results, C3 is clearly less prevalent than N14—differing by 0.45 logits from the expected value, meaning that many NDErs who reported “encountering a mystical being” on the NDE Scale did *not* report “hearing voices” on the NDE-C Scale. If the item wordings were really equivalent, one would expect equivalent prevalence in the results, because there was a 77% overlap of NDErs who were rated on *both* scales (Martial et al., 2020, p. 10). Similar notable differences in hierarchy order were found between N10 (Awareness of things going on elsewhere *that could be checked out*) and C9 (Awareness of things beyond *what your senses can usually see*), and between N9 (Your senses were *more vivid than*

usual) and C8 (You experienced *unusual sensations*—sight, hearing, smell, touch and/or taste).

These changes in wording appear to be significant changes in the *meaning* of the original NDE Scale items. The observed shifts in the NDE item hierarchy imply that these NDE-C items are not equivalent to the corresponding NDE Scale items. We would recommend revising the wording of these 3 items—and perhaps two others—and revalidating NDE-C using Rasch analysis before the scale is adopted for NDE research. Martial et al. (2020) suggested as much: “We encourage further research involving a Rasch analysis of the NDE-C scale” (p. 19).

Additional details of our analysis are presented in a commentary news article appearing on the International Association for Near-Death Studies website (<https://iands.org/1505.html>). Copies of the Martial et al. article and the NDE-C scale itself, with instructions and response modalities, may be requested from the article’s lead author or from us.

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