

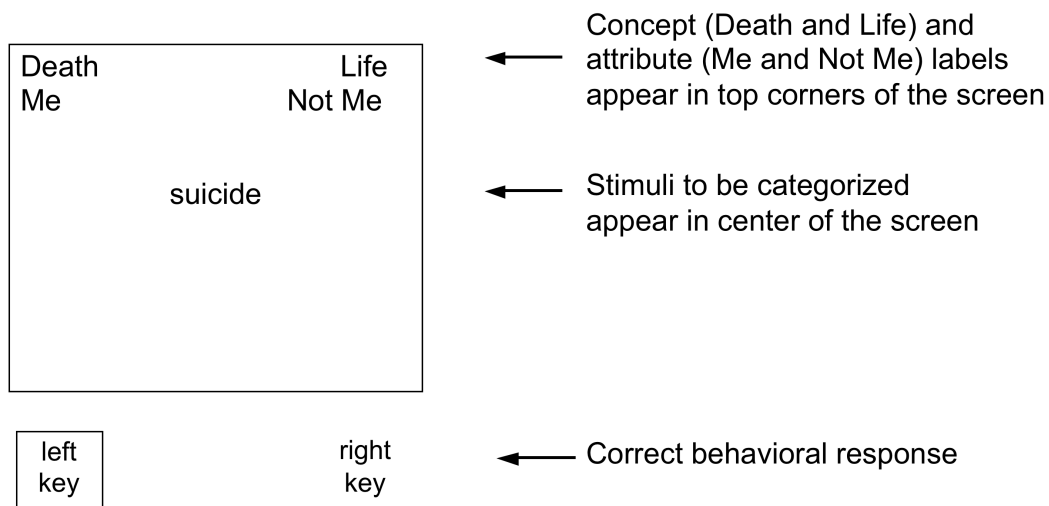
Supplemental Information for: Price et al, “Effects of Ketamine on Explicit and Implicit Suicidal Cognition: A Randomized Controlled Trial in Treatment-Resistant Depression”

Methods: Implicit Association Test

The Implicit Association Test (IAT; {Greenwald, 1998 #19}) assesses the relative speed with which individuals classify words when the same manual key response is required for two constructs. Words appear one at a time in the center of the screen and must be classified as belonging to a concept (e.g., death/life) or attribute (e.g., me/not me) listed at the upper right of the screen (right key press) or at the upper left of the screen (left key press; see Figure S1 below). The critical comparison in behavioral performance is made when the concept-attribute pairing (e.g., “me” and “death”) is swapped (such that “me” and “life” now require the same key press). If such a swap in pairings results in decreased efficiency on the task in a given participant, the implication is that the second concept-attribute pairing is less strongly associated than the first.

Figure S1.

Schematic of Implicit Association Task



In the current study, two variants of the IAT were used to behaviorally assess the strength of association between “Escape” words and “Me” words (Escape=Me IAT) and between “Death” words and “Me” words (Death=Me IAT). IATs were administered and scored in accordance with recommended procedures^[31] and as described in our previous report^[12]. Reaction times (RTs) were recorded for each word. If an incorrect key response was made, a red X appeared on the screen above the word, and the current trial continued until the participant made a correct response. D-scores were calculated for each

participant, for each IAT, where $D = \frac{(\text{mean RT during Escape=Me [or Death=Me] block}) - (\text{mean RT during Stay=Me [or Life=Me] block})}{(\text{SD of RT across all trials})}$. Thus, for example, faster responses when “death” words and “me” words both required a left finger response, relative to when “life” words and “me” words both required a left finger response, indicated an implicit association between death and me, and resulted in a positively valenced D-score.

The following word stimuli were used for the Death=Me and Escape=Me IAT variants.

(1) Death = Me IAT: Does the participant associate Death with the Self?

DEATH	LIFE	ME	NOT ME
Suicide	Alive	I	They
Die	Live	Myself	Them
Dead	Survive	My	Their
Deceased	Thrive	Mine	Other
Lifeless	Breathing	Self	Theirs

(2) Escape = Me IAT: Does the participant associate Escape with the Self?

ESCAPE	STAY	ME	NOT ME
Exit	Continue	I	They
Quit	Remain	Myself	Them
End	Hold on	My	Their
Leave	Persist	Mine	Other
Depart	Endure	Self	Theirs