

Richard James Lucido

Richard James Lucido is an American psychologist and author with an interest in metaphysical idealism. He has carried out experiments that provide empirical support for the idea that consciousness causes the collapse of the wave function.

Career

Richard James Lucido obtained a master's degree in School and Community Psychology and a PhD in Educational Psychology from Wayne State University. He has been working in applied psychology since 2002 as both a school psychologist and behaviorist. Lucido's main research interest is consciousness studies, specifically metaphysical idealism. He is currently refining an experimental paradigm to test the [consciousness causes collapse interpretation](#) of quantum mechanics with subliminal priming.

Theoretical Foundation

In a 2005 paper, Lucido presents an ontological framework proposing the mutual dependency of consciousness and matter based on quantum mechanical principles. Lucido distinguishes between 'essential being' (matter existing solely as essence, like elementary particles defined by mass, charge, and spin) and 'existential being' (consciousness existing beyond its essence through temporal extension). He argues that elementary particles are indistinguishable and have no objective existence over time, while consciousness escapes essence through its temporally extended nature spanning approximately 100 milliseconds. The framework suggests that consistency serves as the fundamental ontological force, allowing essential matter to gain existence through entanglement with existential consciousness. Lucido contends this explains quantum indeterminacy at the micro level evolving into deterministic causation at the macro level, and demonstrates why purely existential matter would be impossible. The theory attempts to resolve quantum measurement paradoxes by positioning consciousness as necessary for matter's existence in the world.¹

Experimental Proposal

Lucido proposes an experimental design to test the Consciousness Causes Collapse (CCC) interpretation using subliminal priming methodology. The experiment would measure quantum phenomena (50% probability outcomes A/B) that trigger corresponding unconscious word primes, followed by semantically related target words requiring rapid responses. Two conditions would be compared: control (experimenter observes quantum measurement before priming) and experimental (experimenter observes measurement only after participant responds). The hypothesis predicts priming effects should occur in the control condition but not experimental condition if CCC is correct, since unobserved quantum measurements should remain in superposition, creating meaningless primes. Standard priming effects in both conditions would falsify CCC.

Lucido argues this interdisciplinary approach could empirically resolve fundamental metaphysical questions about consciousness and objective realism. The proposal predates his actual experimental implementations and represents the theoretical foundation for his subsequent empirical work testing quantum measurement interpretations through cognitive psychology methods.[2](#)

First Experimental Test

Lucido tested the Consciousness Causes Collapse (CCC) interpretation of quantum mechanics using subliminal priming methodology in 2023. Stimulus primes were derived from radioactive decay patterns measured by a Geiger counter, creating two conditions: observed (experimenter viewed primes beforehand) and unobserved (primes never consciously observed). Participants responded to numbers (1-9) by identifying them as odd or even, with reaction times measured. According to CCC theory, unobserved primes should remain in quantum superposition and thus not affect response times. Results supported this hypothesis. In the observed condition, congruent primes significantly reduced response times compared to incongruent primes ($p < 0.001$). However, in the unobserved condition, no significant difference was found between congruent and incongruent prime conditions ($p = 0.239$). Lucido argues these findings demonstrate that conscious observation, rather than mere physical measurement, causes wave function collapse, supporting the CCC interpretation over alternative quantum mechanical interpretations.[3](#)

Replication Study

In a 2024 publication, Lucido describes a replication study testing the Consciousness Causes Collapse (CCC) interpretation using subliminal priming methodology. Four participants responded to numbers (1-9) by pressing 'O' for odd or 'E' for even, with primes derived from radioactive decay patterns. The study employed observed conditions (experimenter viewed primes beforehand) and unobserved conditions (primes never consciously observed). Results showed primes affected response times in both conditions, but the effect was significantly greater in the observed condition. Congruent versus incongruent prime differences were 47.46ms (observed) versus 17.05ms (unobserved), with the between-condition difference being statistically significant ($p = 0.00014$). Unlike the original study where the unobserved condition showed no significant effect, this replication found a small but significant effect ($p = 0.023$) in the unobserved condition. Lucido suggests this may result from inadvertent wave function collapses due to the directional response modality or experimental error, supporting partial rather than complete maintenance of quantum superposition.[4](#)

Testing with Cats

In 2025, Lucido conducted two experiments using cats as observers. Primes derived from radioactive decay were divided into three conditions: human-observed, cat-observed (cat present during data collection), and completely unobserved. Six participants per experiment responded to numbers as odd/even, with Experiment 1 using verbal responses and Experiment 2 using keystroke responses with shortened

prime exposure (33ms vs 50ms). Results consistently showed human-observed primes produced significantly larger response time effects than human-unobserved conditions (44.29ms vs 20.83ms in Experiment 1 $p = 0.013$; 48.00ms vs 17.28ms in Experiment 2 $p = 0.0003$). Critically, cat-observed primes showed no significant effect on response times in either experiment, performing similarly to completely unobserved primes. Lucido argues this suggests wave function collapse requires specifically human consciousness rather than animal observation, supporting non-physicalist metaphysics and the CCC interpretation while challenging purely materialist explanations of quantum measurement.[5](#)

Overall Findings

Lucido presents a weighted analysis combining four experiments testing the Consciousness Causes Collapse (CCC) interpretation through subliminal priming. The pooled data included 2,098 participants across human-observed, unobserved, and cat-observed conditions. Results showed human-observed primes produced significantly larger response time effects (44.51ms difference between congruent/incongruent) compared to unobserved primes (20.57ms difference), with an absolute t-score difference of 4.74 ($p = 1 \times 10^{-6}$). Cat-observed primes showed minimal effects (10.83ms difference), significantly less than human-observed conditions (t-difference = 5.37, $p = 4.9 \times 10^{-8}$). The analysis excluded two unpublished experiments: one using directional arrows that showed equal effects across conditions (attributed to automatic motor responses), and another using multiple numbers that failed to produce any priming effects. Lucido argues the combined statistical power strongly supports CCC interpretation, suggesting conscious observation specifically collapses quantum wave functions while animal observation does not.[6](#)

Independent Replication

[Robert Rennie](#) conducted an independent online replication of Lucido's CCC experiment with generally similar methodology but automated procedures. The study collected 2,276 responses across observed and unobserved conditions using radioactive decay-derived primes. Results showed observed condition primes produced significant effects (25ms difference, $t = -3.14$, $p = .002$) while unobserved condition primes showed no significant effect (9ms difference, $t = -1.21$, $p = .22$). The absolute t-score difference between conditions was 1.93 ($p = .027$), indicating significantly greater priming effects in the observed condition. These findings replicate Lucido's original results supporting the CCC interpretation. The online methodology represents a procedural advancement allowing broader data collection while maintaining the core experimental design. The ongoing nature of this data collection suggests potential for larger sample sizes and increased statistical power. Rennie's independent replication provides additional empirical support for the hypothesis that conscious observation affects quantum wave function collapse.[7](#)

Existence & Consciousness

Lucido presents his ideas in a wider philosophical framework in his 2024 book *Existence & Consciousness: A Theory of Naturalistic Idealism*. His Amazon page [describes](#) it as

a sober and naturalistic attempt at conceptualizing a reality whose primary constituent is consciousness. The book presents its original insights within a broad multidisciplinary backdrop where ideas from contemporary analytical philosophy, existential philosophy, and ancient philosophy are related to empirical findings from psychology, physics, and neuroscience. Its ideas are presented plainly and are intended for a broad educated audience. No prior experience is necessary to engage with this most perplexing and fundamental question: what is the nature of reality?

Michael Duggan

Literature

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Lucido, R.J. (2025b). [Weighted Analysis of the Tests of the CCC Using Subliminal Priming](#). [Web page]

Rennie, R. (2025). [CCC Data Collection](#). [Web page]

Endnotes

Footnotes

- [1](#). Lucido (2005).
- [2](#). Lucido (2015).
- [3](#). Lucido (2023).
- [4](#). Lucido (2024).
- [5](#). Lucido (2025a).
- [6](#). Lucido (2025b).
- [7](#). Rennie (2025).

