

**Fidelity Versus. Validity Using Anendophasia as an Example: Commentary on Nedergaard
and Lupyan (2024) and Lind (2025)**

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Abstract

Nedergaard and Lupyan (2024) presented four studies aimed at validating anendophasia (experiencing no inner speech). However, Lind (2025) held that no one (including Nedergaard and Lupyan) has demonstrated that anendophasia exists. Both papers support their positions using the findings of descriptive experience sampling. Here, I show that descriptive experience sampling is a fidelity-aspiring method; I highlight the distinction between fidelity and validity (an important distinction for psychological science in general and for anendophasia in particular.) Anendophasia is an experiential phenomenon, not a construct, and therefore requires incorporating fidelity-based investigations. Nedergaard and Lupyan (2024) treated anendophasia as a construct (providing validity-based investigations) but drew phenomenon-based conclusions. I distinguish between completely and mostly anendophasic individuals, noting that, in practice, that distinction might be impossible to make. I suggest that anendophasic (or at least mostly anendophasic) individuals do in fact exist (probably frequently) and are worthy of fidelity-based (as well as validation) investigations.

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Fidelity vs. validity using anendophasia as an example: Commentary on Nedergaard and Lupyan (2024) and Lind (2025)

Nedergaard and Lupyan (2024; hereafter N&L) coined the term *anendophasia* to describe individuals who experience no inner speech¹; they presented a series of validating experiments. Lind (2025; hereafter Lind) examined N&L's studies and concluded that neither N&L nor anyone else had presented compelling evidence for the existence of anendophasia.

Both N&L and Lind credited descriptive experience sampling (DES) as providing “the most high-resolution and reliable data available about spontaneous inner experience (including inner speech)” (Lind, p. 2). I am the originator of DES and take this occasion to highlight what my 50 years of DES explorations suggest that anendophasia scientists should consider. Points 1–13 develop the distinction between fidelity and validity; points 14–18 apply this distinction to anendophasia.

1. Inner speaking (the lack of which is termed anendophasia) is a directly apprehended (inner) phenomenon.
2. Inner speaking is *not* a construct², process, or cognitive structure. (Constructs, processes, or structures may underlie inner speaking.)

¹ Hurlburt (2011) prefers *inner speaking* to *inner speech* because *speaking* is a (usually spontaneous) action that we *do* (a verb); a *speech* is a (usually preplanned) thing that we *employ* (a noun).

² “A construct is some postulated attribute of people” (Cronbach & Meehl, 1955, p. 283). Constructs (e.g., extraversion, ego strength, executive function) are therefore theoretical and

3. *Fidelity* considers whether a phenomenon is apprehended and described as it was originally experienced. *Validity* considers whether measurements of constructs, processes, or structures cohere in specified ways and/or predict specified outcomes.
4. Anendophasia is a claim about phenomena (or lack thereof) and therefore requires fidelity-based investigation.
5. DES is a fidelity-aspiring method (Hurlburt et al., 2022). Think of DES as Hurlburt and colleagues doing their best across 50 years to develop and apply a principled method that incorporates science's results (memory, eyewitness testimony, clinical interviewing, phenomenology, meditation, etc.) to help people describe their inner experiences with fidelity.
6. DES investigations are skill-requiring and time-consuming and do not guarantee high-fidelity descriptions, but that does not reduce the importance of fidelity considerations.
7. DES finds that many, perhaps most, people are substantially ignorant about the characteristics of their own everyday inner experience. That is, people's expressed opinions (regardless of their confidence) about their own experiential phenomena are generally of low fidelity (Hurlburt, 2011).
8. The validity of a questionnaire does not necessarily imply the fidelity of the questionnaire responses. For example, N&L used the Internal Representations Questionnaire (IRQ; Roebuck & Lupyan, 2020), a validated measure with items such as "I hear words in my 'mind's ear' when I think" (p. 2056). IRQ validity does *not* imply that people who

measurable but not directly apprehendable. One *directly apprehends* (privately, to be sure) inner speaking; one *infers* extraversion.

endorse “I hear words...when I think” actually hear words when they think. IRQ validity implies a non-trivial correlation between such endorsement and other questionnaires or behavioral tasks thought to involve inner words, regardless of whether the endorsed statements reflect experienced phenomena.

9. The discrepancy between validity-based results and fidelity-aspiring results about inner experience can be huge. For example, Hurlburt et al. (2022) showed that questionnaire-reported frequency of inner speech averaged about 70% across participants, whereas those same participants’ DES-described inner-speech frequencies averaged less than 20%.
10. I do not disparage validity-based tools (such as questionnaires). For example, N&L’s IRQ (regardless of the fidelity of its items) did predict behavioral results.
11. However, many researchers make unwarranted fidelity-requiring claims based on validity-based results (e.g., questionnaires). For example, N&L frequently wrote fidelity-requiring statements such as “participants with *less inner speech*...” (N&L p. 2, emphasis added) when they have warrant to write only validity-based statements such as “participants who *score low on the IRQ*....”
12. It is indeed awkward to write, repeatedly, statements such as “participants who scored low on the IRQ.” However, such repetition might be necessary to avoid drawing unwarranted implications such as N&L’s conclusion: “We found that people who *experience less inner speech* were worse at making rhyme judgments” (p. 16, emphasis added).
13. The inner speaking produced when demanded by an experimenter, or that might occur when an experiment presents single words separated by unnatural time intervals (as did

N&L, Fig. 1), is probably *not* the same phenomenon as the inner-speaking that naturally occurs in the everyday environment (Hurlburt et al., 2016).

14. I am confident, based on my DES fidelity-aspiring investigations of 500ish persons, that many people never or almost never innerly speak in everyday situations. Many others never or almost never innerly speak except while reading or writing (actions that are explicitly driven by words)³. One could fairly describe either as being at least mostly anendophasic. That is, anendophasia as a phenomenon exists and is worthy of investigation.
15. People who have the ability to speak aloud but *never* innerly speak could be called *completely* anendophasic. I suspect such people exist, but DES is sampling based and therefore cannot prove completeness.
16. At the current (and perhaps future) state of the art (including DES and questionnaires), I see no way of reliably distinguishing between completely and mostly anendophasic individuals.
17. I suspect that bright-line distinguishing between completely and mostly anendophasic is no more useful than distinguishing between a destitute person who has no money and a destitute person who has one penny.
18. Inner phenomena are important aspects of humans. I think DES explorations have demonstrated the possibility of apprehending and describing inner phenomena with fidelity. I am confident that DES (and doubtless other methods) can reliably distinguish

³ However, contra their own confidently held opinions, many (perhaps most) people when reading do *not* innerly speak (or hear) the words they are reading (Brouwers et al., 2018).

between individuals who nearly always, sometimes, rarely, or almost never experience inner speaking; exploring such distinctions would likely be a scientific and humanistic contribution. The required fidelity-based investigations are skill-requiring, time-consuming, and open to legitimate criticism (Hurlburt, 2011; Hurlburt & Schwitzgebel, 2007). If experiential science is to be productive, it must (a) systematically and methodologically distinguish between fidelity and validity; (b) develop principled methods to investigate phenomena with fidelity; (c) establish procedures to evaluate those methods; and (d) invest in scalable fidelity-based explorations of inner phenomena; and (e) include fidelity-based investigations where scientifically appropriate.

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