Measuring Self-Discrepancy: A Critical Review and Comparison of Three Psychological Scales Identifying the Gap Between Actual Self and Ideal Self

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Introduction

In the 24th year of *Mulholland Drive*, people are still haunted by the gap between Diane Selwyn's Hollywood aspirations and the tragic reality. This gap between one's ideal self and actual self, known as self-discrepancy, has been widely researched in psychology. Since self-discrepancy can induce negative emotions (e.g., dejection) and even physical pain, it is essential for psychologists to accurately measure self-discrepancy and provide coping strategies to mitigate its negative consequences based on validated research findings. This paper reviews three psychological measurements of self-discrepancy from different time frames with respective strengths and limitations, aiming to provide application advice in different populations and contexts based on each's reliabilities and validities.

Self-Discrepancy: An Overview

Higgins (1987) defined self-discrepancy as the incongruity between individuals' desired and actual selves. For instance, individuals can experience a discrepancy between their desired appearance (e.g., a good-looking model) and actual appearance (e.g., an average-looking face). Mandal et al. (2017) further identified three resources of self-discrepancies: 1) One's self-concepts such as appearances and intelligence; 2) Social comparison with someone with superior skills or more ideal social relationships; and 3) Inferior social group status that one belongs to compared with other social groups.

Self-discrepancy can result in negative psychological consequences such as dejection, anxiety, and disappointment (Packard & Wooten, 2013). Specifically, Higgins et al. (1985) found that while the ideal self-discrepancy (i.e., failing to become one who aspires to be) causes dejection, the ought self-discrepancy (i.e., failing to become one who believes they are

obligated to be) tends to result in anxiety. The psychological symptoms can also trigger physical pain through neural activity in the dorsal anterior cingulate cortex (Randles et al., 2013). Thus, it is essential to adopt more accurate measurements of self-discrepancy in clinical research, as this can contribute to a better understanding that informs effective strategies to alleviate self-discrepancy and enhance well-being. It is worth noting that compensatory consumer behavior (e.g., buying high-status products when feeling less powerful than others) can serve as an informed coping strategy for self-discrepancy (Mandal et al., 2017). Thus, self-discrepancy measurements with high reliability and validity are also important beyond clinical research since this not only guides psychologists to better formulate coping suggestions but also facilitates marketers to tailor strategies based on consumers' psychographic traits. The following sections compare three different self-discrepancy measurements and provide recommendations on their applications.

Measurement 1: Selves Questionnaire

As the pioneer in self-discrepancy research, Higgins et al. (1985) developed a questionnaire to assess self-discrepancy from six concepts. Specifically, the questionnaire is split into two sections representing associated attributes from both individual perspectives and significant others' views (e.g., parents). Each section is divided into three domains: The "actual" self (i.e., the attributes individual or important others believe one possesses), the "ideal" self (i.e., the attributes individual or important others believe one wants to possess), and the "ought" self (i.e., the attributes individual or important others believe one should possess). Participants are asked to list ten attributes for each domain, constituting sixty attributes with potential overlaps (e.g., when the actual self matches ideal self attributes). The

self-discrepancy score is then calculated by subtracting the number of actual-ideal/ought self-matched attributes from the number of actual-ideal/ought self-mismatched attributes.

The Selves Questionnaire has revealed relatively strong interrater and test-retest reliabilities. Specifically, Higgins et al. (1985) reported interrater reliability of .80 for the questionnaire, while Scott and O'Hara (1993) reported .94 for ideal self-discrepancy measurement among clinically anxious and depressed university students. These may imply that the Selves Questionnaire measurement of self-discrepancy can be reliably applied in both clinical and non-clinical settings. Furthermore, Higgins (1987) reported a test-retest correlation of .65 for ideal self-discrepancy over two months in subsequent studies, reflecting a relatively consistent observation at different times. The Selves Questionnaire also possesses strong predictive power since Scott and O'Hara (1993) have found that while depressive participants had significantly higher ideal self-discrepancy, anxious participants were more likely to be associated with ought self-discrepancy. This indicates that the measure can be used to anticipate outcomes based on the types of discrepancies reported.

Nevertheless, several pieces of evidence suggested that the Selves Questionnaire may have weak measurement validities. First, though it was well applied in both clinical and non-clinical settings, it may still risk relatively low generalizability since prior research has reported that only 4.3% of participants reported self-discrepancy in a specific study (Boldero & Francis, 2000), indicating that the findings may not reflect the experiences of more diverse populations. Besides, prior studies that adopted this measurement convergently used undergraduate student samples, which could limit the external validity of the questionnaire across different ages, cultures, or socioeconomic backgrounds. Second, the measurement may

risk low internal validity since it automatically introduces confounding variables such as participants' verbal ability to generate trait words. Participants who had difficulties generating trait words may randomly fill out the questionnaire with biased results. Last but not least, the measurement is also threatened by participant fatigue since generating sixty attributes can result in less patience and lower self-report qualities for later items. This can further result in weaker internal and convergent validity of the measurement.

Measurement 2: Integrated Self-Discrepancy Index (ISDI)

Based on Higgins' Selves Questionnaire, Hardin and Lakin (2009) introduced the Integrated Self-Discrepancy Index (ISDI), which features several advantages compared with the Selves Questionnaire. First, the Selves Questionnaire is criticized for its ambiguity in distinguishing the ideal self and the ought self to participants (Tangney et al., 1998). ISDI provides more accurate instructions to help participants understand the differences between the ideal and ought selves with sophisticated examples, aiming to generate higher construct validity. Second, ISDI adopts a similar idiographic component in the Selves Questionnaire to ask participants to list attributes for each domain, while cutting the required number of attributes from ten to five for each domain. This can effectively mitigate potential participant fatigue and better ensure the response quality by lessening the burden. Apart from the idiographic report of attributes, ISDI also provides participants who have difficulties generating five or more attributes with a list containing 100 trait words to facilitate generation and modification. This can help mitigate participant fatigue and increase internal validity by alleviating the confounding effects of participants' limited vocabulary. Lastly, after listing attributes, ISDI also asks participants to indicate how much they think each listed attribute

actually describes their ideal/ought self through a five-point Likert scale (1 = completely applies, 5 = does not apply at all). The self-discrepancy scores are therefore calculated by averaging the ratings of the five attributes for each self-discrepancy domain, with higher ratings indicating more discrepancies (i.e., these attributes are more likely not to apply to the actual self). This computation method provides more objective and quantifiable data for researchers to counterbalance potential interpretation biases derived from confusion.

ISDI also features high internal consistency since Cronbach's alpha reliabilities for self-discrepancy measures in Study 1 and Study 2 range from .71 to .81, suggesting that the items on the ISDI consistently measure the same underlying construct. It also reveals high construct validity. Specifically, measures describing the same construct were strongly correlated with each other (e.g., ideal self-own and ideal self-other to measure ideal self-discrepancies). Pearson's r ranges from .66 to .92, indicating high convergent validity. On the other hand, it also displays moderate discriminant validity since Pearson's r for measures describing different constructs were all lower than .5. The results also align with established theoretical predictions (i.e., ideal self-discrepancy associated with depressive symptoms, while ought self-discrepancy associated with anxiety), confirming that the measure effectively captures the intended constructs.

However, ISDI still has several limitations. First, like most research on self-discrepancy, it may risk low external validity since it only uses undergraduates as participants. Thus, its reliability and validity in a more diverse population (including clinical patients) remains unknown. Second, it lacks supportive evidence on its test-retest reliability. Lastly, the feelings of distress caused by the discrepancies may confound the relationship

between these discrepancies and their impacts on depression or anxiety.

Measurement 3: Self-Discrepancy Scale (S-DS)

Philippot et al. (2018) proposed the Self-Discrepancy Scale (S-DS) with a more simplified and comprehensive measurement based on ISDI. Specifically, S-DS deleted attributes from significant others' views, while placing the trait word list before asking participants to list attributes. These can further reduce the completion burden for participants to prevent fatigue and ensure response quality. It also measures participants' undesired traits since the negative formulation can contribute to a more comprehensive discrepancy perception. Lastly, apart from using the Likert scale to measure participants' overall discrepancies, it adopts a percentage scale (i.e., ask participants the extent to which each trait is matched) to reflect participants' self-discrepancies more precisely and flexibly.

S-DS has overcome some limitations of ISDI. First, it uses a community sample (N = 218) from different channels (e.g., community research volunteers, snowball samples) with diverse backgrounds (e.g., age, occupations), as well as a clinical sample (N = 60) in a subsequent study. Specifically, both samples showed expected directions in self-discrepancy's impacts on depression and anxiety, indicating an improved external validity since the measurement can be applied to a broader context. Second, the test-retest reliability of S-DS in the community sample was near .70 for a six-week interval and ranged from .72 to .91 over one week in the clinical sample, showing relatively strong consistency in response. Lastly, S-DS added a 7-point Likert scale to measure distress after the overall discrepancy scale, and it successfully concluded the confounding effects of distress elicited by self-discrepancy on participants' depression and anxiety. Specifically, while distress did not confound ideal self-

discrepancy's impact (i.e., no difference in variance explained), it explains about three times more than ought self-discrepancy's impact on depression and anxiety, indicating that individuals may feel more pressured by societal standards than by their ideals. A possible limitation of S-DS could be the convergent focus on self-concepts as the only self-discrepancy source. Future research can consider different sources of self-discrepancies in scale development, such as discrepancies derived from social comparison and group status.

Conclusion: Recommendations on Measurement Applications and Considerations

Based on the review above, the Selves Questionnaire is best suited for clinical settings and research on emotional disorders given its strong interrater reliability and predictive power. Nevertheless, its generalizability and construct validity may be limited due to participant fatigue and verbal ability biases. The Integrated Self-Discrepancy Index (ISDI) is ideal for undergraduate samples and experimental studies (e.g., self-discrepancy's impacts on academic performances) given its strong construct validity in this specific sample. However, its findings may not apply broadly to clinical samples and older adults due to limited external validity. The Self-Discrepancy Scale (S-DS) is applicable across diverse populations, including clinical and non-clinical (e.g., students, consumers) settings given its strong external validity. It is also suited for longitudinal studies based on its test-retest reliability. Future research can adopt cross-validation by employing different measures to validate findings across different scales and strengthen the reliability of conclusions. It will also be beneficial to consider more comprehensive sources of self-discrepancy by including interpersonal comparison and social group dynamics in future scale development.

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