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Research Paper

Generational Impulsivity Scale (GIS-20): Development and Psychometric Validation

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ABSTRACT

The purpose of this study was to develop and validate the Generational Impulsivity Scale (GIS-20), a 20-item instrument designed to assess levels of impulsivity across four generational cohorts (Baby Boomers, Generation X, Millennials, and Generation Z). A total of 550 adults participated in the validation study. Exploratory analyses indicated strong internal consistency (Cronbach's alpha = .89), and split-half reliability (Guttman coefficient = .88). Criterion-related validity was demonstrated via a significant correlation (r = .74) with the Barratt Impulsiveness Scale (BIS-11). Generational norms were established for each cohort, supporting the scale's sensitivity to variations in impulsivity across age groups. These findings suggest that the GIS-20 is a reliable and valid measure for research and clinical assessment of impulsivity.

Keywords: *Impulsivity, Assessment, Scale Development, Reliability, Validity, Generation*

Impulsivity broadly refers to a tendency to act on urges or desires without adequate consideration of the consequences (Costa & McCrae, 1992; Whiteside & Lynam, 2001). It is a multidimensional construct pertinent to a range of mental health conditions, including substance use and personality disorders (American Psychiatric Association [APA], 2013). While existing measures such as the Barratt Impulsiveness Scale (Patton et al., 1995) are widely used, there is a need for an instrument that accounts for generational nuances in impulsive behavior.

Conceptual Background of Impulsivity

Researchers often delineate impulsivity into multiple facets, including negative and positive urgency, lack of premeditation, lack of perseverance, and sensation seeking (Whiteside & Lynam, 2001). These domains help explain why certain individuals engage in risky behaviors or struggle with inhibitory control (Meda et al., 2009). Impulsivity may manifest differently across the lifespan, influenced by sociocultural factors, technology, and shifting societal norms (Cyders et al., 2007).

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Rationale and Objectives

This research aimed to:

- Develop a 20-item Generational Impulsivity Scale (GIS-20).
- Establish reliability (internal consistency and split-half reliability).
- Test criterion-related validity by correlating scores with the Barratt Impulsiveness Scale.
- Provide generationally stratified norms.

METHODOLOGY

Participants and Design

A simple random sampling design was used. A sample of 550 participants, spanning four generational cohorts, was recruited through offline and online forms. Participants ranged in age from 18 to 75 years (Baby Boomers n = 73, Generation X n = 132, Millennials n = 129, Gen Z n = 216). The sample comprised 229 males and 321 females.

Instrument Development

- **Item Generation:** Hundred preliminary items were drafted based on literature reviews and expert consultation.
- **Content Validity:** A panel of psychologists evaluated item clarity and relevance, resulting in 20 final items.
- **Response Format:** Items were scored on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), yielding total scores from 20 to 100.

Data Collection Procedure

Data were collected via online and paper-based questionnaires. Participants first gave informed consent. They completed demographics, the GIS-20, and the Barratt Impulsiveness Scale (BIS-11).

Data Analysis

- **Descriptive Statistics:** Means, standard deviations, and score ranges were calculated for total and generational subsamples.
- **Reliability Analyses:** Cronbach's alpha and Guttman split-half coefficient were computed.

Validity:

- **Criterion Validity** with BIS-11 was tested via Pearson's correlation.
- **Item-Total Correlations** and preliminary factor structures were also assessed.
- **Norms:** Generational and gender-based norms were derived, with means and standard deviations for each demographic category.

RESULTS

Descriptive Statistics

Table 1 presents the maximum, minimum, mean, and standard deviation for total GIS-20 scores across the full sample (N = 550). Mean total score was 51.83 (SD = 16.86).

Table 1 Descriptive Statistics for GIS-20 Scores

	Min	Max	Mean	SD
Overall (N=550)	20	100	51.83	16.86
Baby Boomers	20	96	41.22	15.79
Generation X	20	100	46.29	16.40
Millennials	20	100	52.80	17.19
Gen Z	24	100	58.22	14.28

Reliability

Cronbach's Alpha: .89 for the GIS-20 total scale, indicating strong internal consistency.

Split-Half Reliability: The Guttman coefficient was .881, suggesting a high level of consistency between scale halves.

Table 2 Reliability Statistics of GIS- 20

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.855
		N of Items	10[a]
	Part 2	Value	.861
		N of Items	10[b]
	Total N of Items		20
Correlation Between Forms			.787
Spearman-Brown Coefficient	Equal Length		.881
	Unequal Length		.881
Guttman Split-Half Coefficient			.881

The items are: I1, I2, I3, I4, I5, I6, I7, I8, I9, I10

The items are: I11, I12, I13, I14, I15, I16, I17, I18, I19, I20

Validity

Criterion-Related Validity: The GIS-20 significantly correlated with BIS-11 ($r = .74$, $p < .001$).

Table 3 The validity between the Generational Impulsivity Scale and Barratt Impulsiveness Scale (BIS-11)

		BIS 11	**GIS-20**
BIS 11	Pearson Correlation	1	.740**
	Sig. (2-tailed)		.000
	N	100	100
GIS-20	Pearson Correlation	.740**	1
	Sig. (2-tailed)	.000	
	N	100	100

Item-Total Correlations: Each item showed a corrected item-total correlation above .30, indicating that items measure a common underlying construct.

Normative Data

Generational norms showed slight variations, with Gen Z displaying marginally higher impulsivity scores than Baby Boomers. Gender-based analyses revealed comparable trends, with male participants showing slightly higher mean scores overall, although differences varied by generation.

DISCUSSION

The findings support the Generational Impulsivity Scale (GIS-20) as a robust measure of impulsivity. The high internal consistency and split-half reliability indicate that the scale items are consistently measuring a cohesive construct. The significant correlation with the Barratt Impulsiveness Scale (.74) further affirms its criterion-related validity.

In examining generational differences, the scale identified some variation in impulsivity levels across cohorts, aligning with prior research suggesting that both developmental stage and sociocultural factors influence impulsive behavior (Whiteside & Lynam, 2001). Future research should investigate these differences in longitudinal designs, as well as compare self-report with objective behavioral measures (Meda et al., 2009).

Clinical and Research Implications

The GIS-20 can be used in clinical settings to screen for impulsivity-related risks, such as potential for substance abuse or behavioral dysregulation. In research, its concise format (20 items) makes it suitable for large-scale epidemiological or cross-cultural studies.

Limitations

Although sample size was adequate, the generalizability may be limited by regional or cultural factors. Self-report biases, such as social desirability, may also influence responses. Further validation with diverse populations is recommended.

CONCLUSION

The Generational Impulsivity Scale (GIS-20) demonstrates strong reliability and validity in measuring impulsivity across different age cohorts. By offering specific generational norms, it provides a nuanced tool for both clinical assessment and empirical research. This scale

may be particularly useful for identifying risk factors in age-specific mental health interventions and contributes to the existing literature on impulsivity as a multidimensional construct.

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Conflict of Interest

The author(s) declared no conflict of interest.

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