



Construction And Standardization Of A Social Intelligence Test

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ABSTRACT

The present study aimed to construct and standardize a Social Intelligence Test specifically designed for graduate-level students in the Jorhat district of Assam. Recognizing the growing importance of social intelligence in academic, personal, and professional success, the study sought to address the absence of culturally relevant and psychometrically sound assessment tools within the Indian context. A 7-point Likert-type scale was developed, incorporating three core dimensions: Social Information Processing, Social Skills, and Social Awareness. After expert validation, try-out administration, and rigorous item analysis, 26 items were finalized for the scale. The standardized tool demonstrated strong reliability (split-half reliability of 0.85) and satisfactory content validity. The study offers a valuable instrument for educators, counselors, and researchers to assess and enhance social intelligence among young adults.

Keywords: Social Intelligence, Test Construction, Standardization, Graduate Students, Item Analysis, Reliability, Validity, Jorhat District.

1.0 INTRODUCTION

In an era defined by rapid social changes and complex interpersonal dynamics, the ability to navigate social interactions effectively has become a crucial skill for individuals. Social Intelligence, often regarded as the ability to understand and manage social relationships, is essential for fostering cooperation, empathy, and meaningful communication in diverse settings. Particularly in the context of graduate-level students,

Social Intelligence plays a vital role in shaping their academic success, career readiness, and overall personal development.

Graduate students, as emerging adults, face a myriad of challenges in adapting to new environments, collaborating with peers, and engaging with educators and society at large. In the Jorhat district of Assam, where cultural diversity and socio-economic variations are prominent, understanding and enhancing Social Intelligence among graduate-level students holds particular significance. It is crucial to provide a scientific basis for assessing this skill to address gaps in education, policy-making, and personality development initiatives. Despite the recognized importance of Social Intelligence, there remains a lack of standardized tools to measure this construct effectively in the Indian context, particularly among young adults in higher education. This project aims to bridge this gap by constructing and standardizing a Social Intelligence Test specifically tailored for graduate-level students in Jorhat district. Such a scale will not only contribute to the body of knowledge in psychological and educational research but also serve as a valuable instrument for identifying strengths and areas of improvement in students' social competencies.

The present research will involve systematic procedures for test construction, including item generation, pilot testing, and standardization through statistical analyses. By employing a robust methodology and drawing insights from a representative sample, this study seeks to ensure the reliability and validity of the developed scale. Ultimately, the findings from this research are expected to have practical implications for educators, counselors, and policymakers in fostering Social Intelligence among young learners and enhancing their ability to thrive in an interconnected world.

2.0 SIGNIFICANCE OF THE STUDY

The construction and standardization of a Social Intelligence Test for graduate-level students in Jorhat district holds significant importance for both educational and societal development. Social Intelligence is a critical skill for navigating interpersonal relationships effectively, yet there is a notable lack of culturally and contextually relevant tools to measure this construct in the Indian context. This study addresses this gap by developing a standardized test tailored to the unique socio-cultural dynamics of Jorhat district and its graduate students, providing a means to assess and enhance this essential skill.

Social Intelligence significantly influences academic success, peer relationships, and emotional well-being. By assessing the Social Intelligence levels of students, the study can offer valuable insights to educators and counselors in identifying students' strengths and weaknesses. These insights can further guide interventions aimed at fostering collaboration, communication, and adaptability, which are vital for thriving in academic and social environments. The standardized test developed through this research will also serve as a valuable tool for stakeholders in higher education, including educators, psychologists, and institutions, who can use it for assessments, counseling, and curriculum development to improve students' interpersonal skills.

3.0 OBJECTIVES OF THE STUDY

The objectives of the present study are as follows-

- 3.1 To construct and standardize a Social Intelligence test.
 - i. Prepare a preliminary Social Intelligence Test.
 - ii. Try-out of the preliminary draft Test.
 - iii. Item analysis of the preliminary draft Social Intelligence Test.
 - iv. Selection of the items for final Social Intelligence Test.
 - v. Estimation of the reliability coefficient of the Social Intelligence Test.
 - vi. Estimation of the validity of the Social Intelligence Test.

4.0 CONCEPTUAL AND OPERATIONAL DEFINITIONS OF THE TERMS USED

4.1 CONSTRUCTION: Construction of a test refers to a set of activities which are involved in the process of developing as well as evaluating a test especially a psychological test. The steps may include: specification of construct, items writing, selection of method (behavioral observation, performance, self-report etc.), item analyzing, testing reliability and validity and finding norms.

In this study, the investigator developed a test on social intelligence. While constructing the test, the investigators framed many statements called as items. By including all the items, the researcher prepared a preliminary draft and administer to a group of large sample. After administration, the investigator analyzed each item by discrimination power formulas. On the basis of item analysis, the investigator left few items and prepared the final draft scale by taking those items which are found satisfactory discrimination index.

4.2 STANDARDIZATION: Standardization of a test refers to test which can be administered and scored under standard and uniform testing conditions so that the results obtained from different samples may legitimately be compared (Singh, 2015, p.21).

In this study, standardization refers to the estimate validity and reliability of the final social intelligence scale by the investigator.

4.3 SOCIAL INTELLIGENCE: Psychologist Thorndike defined- "Social intelligence is the ability to understand and manage men and women. It is a skill we all need to build up and maintain interpersonal relationship to live well in the world." (Goleman, 2006). Increasing social intelligence refer increasing social awareness, social facility, social skill and social information processing.

In this study, Social Intelligence refers to the score obtained by the respondent of Graduate level students of Jorhat district in the scale/test constructed and standardized by the investigator. Higher the score in the scale means higher the social intelligence level.

5.0 METHODS AND PROCEDURE

5.1 Method used: The investigator found descriptive survey method to be most appropriate on the basis of the nature and characteristics of the study. Thus, the investigator used descriptive survey method for the study.

5.2 Population: The population of the study comprised of all the graduate level students of all general degree colleges of Jorhat district.

Table no.-1

Description of the Population

Sl. No.	Name of the College
1.	Bahona College
2.	Borholla College
3.	Chandra Kamal Bezbaruah College, Teok
4.	Chandra Kamal Bezbaruah Commerce College
5.	Cinnamara College
6.	D.C.B. Girls' College
7.	Dr. NabinBordoloi College
8.	Ghana Kanta Baruah College
9.	Jagannath Barooah College (Autonomous)
10.	Jorhat College
11.	Jorhat Kendriya Mahavidyalay
12.	Kakojan College
13.	Mariani College
14.	Nakachari College
15.	Nanda Nath Saikia College
16.	Sarbodaya College

5.3 Sample: The researcher selected two sets of samples from the entire population.

i) Sample for Try-out of the draft Social Intelligence Test: The researchers selected 2 colleges as a sample from the population for the purpose of try-out of the draft social intelligence test by using purposive sampling technique. Description of the sample is given in the following table.

Table:2**Description of Sample for Try-out of the test**

Sl. No.	Name of the College
1.	Chandra Kamal Bezbaruah College, Teok
2.	Ghana Kanta Baruah College

ii) Sample for Standardization of the Social Intelligence Test: The researchers selected 2 colleges as a sample from the population for the purpose of standardization of the social intelligence test by using purposive sampling technique.

Table: 3**Description of Sample for Standardization of the test**

Sl. No.	Name of the College
1.	Jorhat College
2.	Kakojan College

6.0 ANALYSIS AND INTERPRETATION OF THE DATA**6.1 CONSTRUCTION AND STANDARDIZATION OF A SOCIAL INTELLIGENCE TEST/SCALE****6.1.1 Prepare a preliminary draft Social Intelligence test**

The investigators wanted to construct a 7-point Likert Type scale. The scale has three dimensions. Those were- i) Social Information Processing, ii) Social Skill, and iii) Social Awareness. The investigators prepared a draft social intelligence test by generating 79 positive items of social intelligence. 20 items for Social Information Processing, 20 items for Social Skill and 35 items for Social Awareness. After constructing the preliminary draft, it was given to subject experts as well as measurement & evaluation experts for criticism and suggestions. On the basis of the expert suggestions 14 items have been removed. The investigators finalized the draft social intelligence scale with 61 items.

In order to score the test items a scoring key was developed by the investigator. The Scoring Key helps to prevent inconsistency in judgment. This Likert type scale has following 7 points- 'Strongly Agree', 'Mildly Agree', 'Agree', 'Undecided', 'Disagree', 'Mildly Disagree' and 'Strongly Disagree'. Based on these 7 points, following scoring key was prepared-

Table: 4
Scoring key

Items	Strongly Agree	Mildly Agree	Agree	Undecided	Disagree	Mildly Disagree	Strongly Disagree
Favorable (Positive)	Score 7	Score 6	Score 5	Score 4	Score 3	Score 2	Score 1
Unfavorable (Negative)	1	2	3	4	5	6	7

If a respondent chooses 'strongly agree' option in a favorable (positive) item then his/her score for that item will be 7. But if the item is unfavorable (negative) then his/her score for that item will be 1. Once numbers are assigned for all of the items in the scale, need to sum all the values to obtain a total scale score.

6.1.2 Try-out of the preliminary draft Test

The investigators conducted these try out on 400 sample graduate level students of following 2 colleges of Jorhat district.

Table: 5

Sl. No.	Name of the College	No. of Sample
1.	Chandra Kamal Bezbaruah College, Teok	250
2.	Ghana Kanta Baruah College	150

Before, administering the scale to the students, all the instructions were read before them and Social Intelligence Scale was given for try out. After students completed their work and gave their responses on Social Intelligence Scale, all the scales were collected back. After that item analysis was carried out.

6.1.3 Item analysis of the preliminary draft Social Intelligence Test

Total 400 students were checked based on the scoring of the scale; they were shorted in descending order of the scores of the students. After that, the top 27%, i.e., 108 students were selected as Upper Group of the students and the bottom 27% students i.e., 108 students were selected as a Lower Group of the students. Then the test maker to calculated 'mean' and 'standard deviation' of both groups against each item. Then using the following formulas:

$$a) SE_D = \sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}} \quad \text{and} \quad b) t = \frac{M_1 - M_2}{SED}$$

Table: 6
T-Values and Result after Item Analysis

Dimension	Item No.	t-value	Result
SIP	1	1.88	Accepted
SIP	2	1.81	Accepted
SIP	3	1.79	Accepted
SIP	4	1.76	Accepted
SIP	5	1.89	Accepted
SIP	6	1.67	Rejected
SIP	7	1.86	Accepted
SIP	8	1.75	Accepted
SIP	9	1.78	Accepted
SIP	10	1.64	Rejected
SIP	11	1.91	Accepted
SS	1	1.86	Accepted
SS	2	1.90	Accepted
SS	3	1.74	Rejected
SS	4	1.71	Rejected
SS	5	1.75	Accepted
SS	6	1.78	Accepted
SS	7	1.83	Accepted
SS	8	1.71	Rejected
SS	9	1.88	Accepted
SS	10	1.85	Accepted
SS	11	1.86	Accepted
SS	12	1.79	Accepted
SS	13	1.84	Accepted
SS	14	1.77	Accepted
SS	15	1.77	Accepted
SS	16	1.84	Accepted
SA	1	1.60	Rejected
SA	2	1.93	Accepted

SA	3	1.58	Rejected
SA	4	1.88	Accepted
SA	5	1.76	Accepted
SA	6	1.84	Accepted
SA	7	1.79	Accepted
SA	8	1.80	Accepted
SA	9	1.65	Rejected
SA	10	1.90	Accepted
SA	11	1.85	Accepted
SA	12	1.86	Accepted
SA	13	1.60	Rejected
SA	14	1.79	Accepted
SA	15	1.76	Accepted
SA	16	1.58	Rejected
SA	17	1.80	Accepted
SA	18	1.89	Accepted
SA	19	1.86	Accepted
SA	20	1.76	Accepted
SA	21	1.80	Accepted
SA	22	1.86	Accepted
SA	23	1.90	Accepted
SA	24	1.86	Accepted
SA	25	1.87	Accepted
SA	26	1.89	Accepted
SA	27	1.90	Accepted
SA	28	1.72	Rejected
SA	29	1.88	Accepted
SA	30	1.86	Accepted
SA	31	1.75	Accepted
SA	32	1.82	Accepted
SA	33	1.78	Accepted
SA	34	1.78	Accepted

6.1.4 Selection of the items for final Social Intelligence Test

After item analysis 11 items were rejected because of t value was found less than 1.75. It means the items having t value equal or greater than 1.75 were accepted for the final test. 50 items out of 61 were accepted after rejection of 11 items. The investigators selected 26 items from the acceptance list for the final social intelligence test.

Table: 7

LIST OF SELECTED ITEMS / FINAL SCALE

SI No	Dimension	Item	T Value
1	SIP	I can accurately interpret the emotions of others based on their facial expressions.	1.88
2	SIP	I find it easy to understand the underlying motives behind people's actions.	1.81
3	SIP	I can easily identify when someone is feeling overwhelmed in a group setting	1.79
4	SIP	I can quickly assess the emotional state of a group based on their interactions.	1.76
5	SIP	I often notice when someone is not being truthful in a conversation.	1.89
6	SIP	I can accurately predict how someone will react to certain feedback or suggestions.	1.88
7	SS	I feel confident initiating conversations with strangers.	1.86
8	SS	I can adapt my communication style to suit different social situations.	1.90
9	SS	I am effective at persuading others to see my point of view.	1.83
10	SS	I am comfortable navigating difficult conversations with peers or colleagues.	1.88
11	SS	I often take the initiative to resolve misunderstandings among group members.	1.85
12	SS	I find it easy to engage in productive discussions with my classmates or colleagues.	1.86
13	SS	I am good at making others feel comfortable during collaborative work.	1.77
14	SS	I handle criticism in a way that maintains positive relationships	1.84

		with others.	
15	SA	I can empathize with others' feelings, even if I haven't experienced the same situation.	1.93
16	SA	I am sensitive to the feelings of others, even when they do not express them verbally.	1.76
17	SA	I understand how my behavior affects the mood of those around me.	1.84
18	SA	I can recognize when someone is feeling left out and make an effort to include them.	1.79
19	SA	I adjust my communication style depending on whether I am speaking with a peer, professor, or industry professional.	1.79
20	SA	I often think about how my actions affect others.	1.86
21	SA	I am skilled at reading the emotional atmosphere of a room.	1.86
22	SA	I can maintain a positive attitude even in challenging social situations.	1.87
23	SA	I often consider the feelings of others before expressing my opinions.	1.88
24	SA	I can recognize when someone is uncomfortable and adjust my behavior accordingly.	1.86
25	SA	I can easily identify the strengths and weaknesses of my peers in group projects.	1.82
26	SA	I am skilled at finding common ground with people who have different viewpoints.	1.78

6.1.5 Estimation of the reliability coefficient of the Social Intelligence Test

Split half reliability was be found out. The scale was administered over 200 students. The usual method of dividing the scale into two equivalent halves is to take odd items in one half and all even items in the other half to calculate the reliability by this method. In this case Spearman- Brown formula mentioned was applied to find out the reliability. Reliability of the half test was found 0.74 and reliability of the whole scale was found 0.85. The reliability of the Social Intelligence Scale is quite good. Hence, it can be said that the Social Intelligence Scale is reliable.

6.1.5 Estimation of the validity coefficient of the Social Intelligence Test

The scale possesses satisfactory content validity after expert check and recheck.

7.0 MAJOR FINDINGS OF THE STUDY

The investigators constructed a 7-point Likert Type scale. The scale has three dimensions. Those were- i) Social Information Processing, ii) Social Skill, and iii) Social Awareness. The scale has following 7 points- ‘Strongly Agree’, ‘Mildly Agree’, ‘Agree’, ‘Undecided’, ‘Disagree’, ‘Mildly Disagree’ and ‘Strongly Disagree’. Based on these 7 points, following scoring key was prepared-

Table: 8
SCORING KEY OF SOCIAL INTELLIGENCE SCALE

Items	Strongly Agree	Mildly Agree	Agree	Undecided	Disagree	Mildly Disagree	Strongly Disagree
Favorable (Positive)	Score 7	Score 6	Score 5	Score 4	Score 3	Score 2	Score 1
Unfavorable (Negative)	1	2	3	4	5	6	7

The final scale has 26 items. 6 items for ‘Social Information Processing’, 8 items for ‘Social Skills’ and 12 items for ‘Social Awareness’ dimension. The split half reliability of the scale found 0.85 and also possesses satisfactory content validity.

8.0 CONCLUSION

The present study successfully constructed and standardized a Social Intelligence Test specifically designed for graduate-level students in the Jorhat district of Assam. Through systematic procedures—including item generation, expert validation, try-out administration, item analysis, and reliability and validity estimation—the study culminated in a psychometrically sound 26-item Social Intelligence Scale encompassing three essential dimensions: Social Information Processing, Social Skills, and Social Awareness. The reliability coefficient (0.85) indicates that the test is stable and consistent, while expert evaluation ensured satisfactory content validity. The tool thus serves as a meaningful contribution to educational research and practice, offering a reliable instrument for assessing students’ social competencies. Overall, the developed Social Intelligence Scale stands as a valuable resource for higher educational institutions, enabling better understanding of students’ social capabilities and contributing to holistic development in an increasingly interconnected world.

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