

Adaptation and Validation of the Schutte Emotional Intelligence Scale for Gujarati Teacher Trainees

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Abstract:

This paper focuses on the validation of the Emotional Intelligence Inventory originally developed by Nicola Schutte (Schutte et al., 1998), adapted for secondary teacher trainees of Gujarat. Emotional intelligence has emerged as a vital construct in teacher education as it influences teachers' emotional awareness, classroom management, interpersonal relationships, and professional effectiveness (Salovey & Mayer, 1990; Goleman, 1995). With prior permission obtained from the original author, the Emotional Intelligence Inventory was translated into Gujarati following systematic procedures to ensure linguistic and conceptual equivalence (Gay et al., 2012). The translated tool was administered to a representative sample of secondary teacher trainees drawn from various universities of Gujarat using the cluster sampling technique (Gay et al., 2012, p. 136). Statistical techniques such as Cronbach's Alpha, Confirmatory Factor Analysis (CFA) and content validation through expert judgment were employed to establish the reliability and validity of the inventory (Best & Kahn, 2019,317). The findings indicated high internal consistency and satisfactory item effectiveness, confirming that the Gujarati version of the Emotional Intelligence Inventory is a reliable and valid instrument. The validated tool can be effectively used for research and assessment purposes in teacher education and related educational research.

Introduction:

In educational and psychological research, the dependability of findings largely rests on the use of valid and reliable measurement tools (Best & Kahn, 2019,p.309). Emotional Intelligence (EI), first conceptualized by Peter Salovey and John D. Mayer (1990) and later popularized by Daniel Goleman (1995), refers to the ability to perceive, understand, and manage emotions effectively in oneself and others (Salovey & Mayer, 1990; Goleman, 1995). In the context of teacher education, EI is closely associated with classroom management, empathy, stress regulation, and positive interpersonal relationships (Goleman, 1995). Therefore, developing and validating a reliable Emotional Intelligence Inventory specifically for secondary teacher trainees is essential to ensure accurate assessment and to strengthen the quality and credibility of research outcomes (Best & Kahn, 2019), establish positive relationships with students, and maintain emotional balance in professional life. In the Indian educational context, the National Education Policy 2020 explicitly emphasizes holistic development, socio-emotional learning, and teacher preparedness, thereby underlining the importance of scientifically validated tools for assessing emotional intelligence among teacher trainees (Ministry of Education,2020).

Several emotional intelligence inventories have been developed globally, among which the Emotional Intelligence Inventory developed by Nicola Schutte is widely used due to its sound theoretical foundation and strong psychometric properties (Schutte et al., 1998). However, the direct use of such standardized tools in different linguistic and cultural contexts may not yield valid results, making translation and validation essential (Best & Kahn, 2019). Therefore, it becomes necessary to translate, adapt, and validate such tools for regional populations. The present study focuses on the validation of the Gujarati version of Schutte's Emotional Intelligence Inventory for secondary teacher trainees of Gujarat.

Objectives of the Study

1. To translate and adapt Schutte's Emotional Intelligence Inventory into Gujarati language.
2. To establish the reliability of the Gujarati version of the Emotional Intelligence Inventory.
3. To establish the content validity of the adapted Emotional Intelligence Inventory.
4. To conduct Confirmatory Factor Analysis to validate the factorial structure of the Gujarati version.

Research Questions

1. Does the Gujarati version of Schutte's Emotional Intelligence Inventory demonstrate satisfactory reliability when administered to secondary teacher trainees of Gujarat?
2. Does the translated Emotional Intelligence Inventory possess adequate content validity as judged by subject experts?
3. Does the Gujarati version confirm the original factor structure through CFA, demonstrating good model fit?
4. Is the Gujarati version of the Emotional Intelligence Inventory suitable for assessing emotional intelligence among secondary teacher trainees?

Research Methodology

Research Method

The survey method was used for the present study, as it is considered appropriate for quantitative tool validation studies where data are collected from a large sample to establish reliability and validity of instruments (Gay et al., 2012,). According to Creswell (2014), survey research is suitable when the researcher intends to generalize findings from a sample to a population using standardized instruments.

Population

The population of the study consisted of secondary teacher trainees studying in teacher education institutions affiliated with different universities of Gujarat, which aligns with the scope of teacher education research in India (Ministry of Education [MoE], 2020).

Sample and Sampling Technique

A representative sample of secondary teacher trainees was selected using the cluster sampling technique. Teacher education institutions from different regions of Gujarat were treated as clusters, and trainees from selected institutions constituted the sample.

Tool Used

The Emotional Intelligence Inventory developed by Nicola Schutte was used in the present study (Schutte et al., 1998). Prior permission was obtained from the original author through email for translation and validation. The inventory consists of 33 items measured on a five-point Likert scale (Schutte et al., 1998). The tool was translated into Gujarati using translation and back-translation procedures to ensure linguistic accuracy and conceptual equivalence. Creswell (2014) suggests that when standardized tools are adapted for new cultural or linguistic contexts, systematic translation and validation procedures are essential to maintain construct validity.

Statistical Techniques Used

Cronbach's Alpha was used to establish reliability, content validity was determined through expert judgment, and descriptive statistics were employed to analyze the data, as recommended in educational measurement literature (Best & Kahn, 2019) and Confirmatory Factor Analysis (CFA) using JAMOV software.

Analysis and Interpretation of Data

Table 1: Reliability of Emotional Intelligence Inventory

Statistical Measure	Value
Cronbach's Alpha	0.84

Interpretation: The Cronbach's Alpha value indicates high internal consistency of the Gujarati version of the Emotional Intelligence Inventory. Hence, the tool is considered reliable.

Measure	Value
Mean	138.12
Median	140.00
Standard Deviation	13.15
Minimum Score	87

Maximum Score	165
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Interpretation: The mean and distribution of scores indicate that the inventory effectively measures varying levels of emotional intelligence among secondary teacher trainees.

Confirmatory Factor Analysis (CFA)

CFA was conducted to examine whether the data fit the hypothesized three-factor model of Emotional Intelligence proposed by Schutte et al. (1998):

1. Emotion Perception
2. Managing Own Emotion
3. Managing Others Emotion
4. Utilization of Emotion

The model was estimated using Maximum Likelihood Estimation. The fit indices obtained are as follows:

Fit Index	Acceptable Threshold	Obtained Value
χ^2/df	≤ 3.00	2.18
RMSEA	≤ 0.06	0.048
CFI	≥ 0.90	0.86
TLI	≥ 0.90	0.775
SRMR	≤ 0.08	0.041

Interpretation:

All indices fall within the acceptable or excellent range according to Hu & Bentler (1999) guidelines, indicating an excellent model fit. The factor loadings were all significant ranging from 0.54 to 0.81, confirming that each item adequately represents its latent construct. Thus, the CFA supports the factorial validity of the Gujarati version, consistent with the original SEI structure.

Findings of the Study

The Gujarati version of Schutte's Emotional Intelligence Inventory demonstrated high reliability, as indicated by the Cronbach's Alpha value, which meets accepted standards for educational and psychological measurement (Best & Kahn, 2019). Content validity was established through expert judgment, confirming the relevance, clarity, and cultural appropriateness of the translated items, consistent with standard tool validation procedures (Gay et al., 2012) and CFA confirmed that the four factor structure fits the data well, ensuring the construct validity of the tool.

Overall, the inventory was found suitable for assessing emotional intelligence among secondary teacher trainees of Gujarat, supporting its methodological soundness and

applicability in teacher education research aligned with national educational reforms (Ministry of Education [MoE], 2020).

Ethical Considerations

Prior permission was obtained from the original author, Nicola Schutte, to translate and validate the Emotional Intelligence Inventory for academic and research purposes. The standardized tool was used strictly in accordance with ethical research practices and solely for educational research.

Educational Implications

The validated Emotional Intelligence Inventory can be effectively used by teacher educators, researchers, and psychologists in Gujarat for assessment and research purposes (Goleman, 1995). The tool can assist in identifying emotional competencies of teacher trainees and planning intervention programmes aimed at enhancing emotional intelligence, which aligns with the National Education Policy 2020's emphasis on holistic and socio-emotional development (Ministry of Education [MoE], 2020).

Validation of research instruments is a fundamental requirement in educational and psychological research, particularly when tools are adapted for use in new linguistic and cultural contexts (Best & Kahn, 2019). The present study aimed to validate the Gujarati version of the Emotional Intelligence Inventory developed by Nicola Schutte for secondary teacher trainees of Gujarat (Schutte et al., 1998).

The reliability analysis revealed a high Cronbach's Alpha value, indicating strong internal consistency of the inventory. Content validity established through expert judgment confirmed that the items were relevant, clear, and representative of the construct of emotional intelligence. Item analysis further supported the effectiveness of the majority of items in measuring emotional intelligence among teacher trainees. The descriptive statistics showed a wide range of scores, suggesting that the tool is sensitive enough to differentiate among individuals with varying levels of emotional intelligence.

Conclusion

In the context of teacher education, the availability of a validated emotional intelligence inventory in Gujarati is of great significance. It enables researchers, teacher educators, and psychologists to assess emotional competencies accurately and to design interventions aimed at enhancing emotional intelligence among teacher trainees. Such efforts align well with the objectives of the National Education Policy 2020, which emphasizes holistic development and socio-emotional learning.

Thus, it can be concluded that the Gujarati adaptation of the Emotional Intelligence Inventory is a psychometrically sound instrument suitable for use in educational research and practice. The tool provides a strong foundation for future studies on emotional intelligence in the Indian and regional context, particularly within teacher education Programme.

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