

Item Analysis for Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF)

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Abstract. In this study, the researcher analyzed the TEIQue-SF (Trait Emotional Intelligence Questionnaire-Short Form) from Petrides (2009), which consists of fifteen facets of trait emotional intelligence and is measured by thirty items. The questionnaire measures four dimensions: emotionality, sociability, well-being, and self-control. This research involved 339 respondents from Indonesia. Reliability testing was conducted using Cronbach's Alpha. Discriminant analysis is conducted by examining the item-rest correlation. The results of this study indicate that the TEIQue-SF (Trait Emotional Intelligence Questionnaire-Short Form) is divided into two dimensions. The adaptation into Indonesia allows for cross-cultural validation studies and expands Indonesian contributions to global EI research. This research also facilitates more accurate and meaningful data collection in psychological research related to the trait of emotional intelligence.

Keywords: trait emotional intelligence, TEIQue-SF, psychometric evaluation

Introduction

Human beings are always defined by their behavior, which is caused by the dynamics of their mind and lots of different emotions. Emotions have been examined for centuries. Numerous prominent intellectuals have thoroughly investigated feelings and developed a range of theories, some highlighting their significance as essential components of human existence, while others point out the harmful effects emotions can impose if not balanced with rational thought (Gawai, 2016). Multiple empirical investigations into emotions have led to a more scientific methodology for grasping the various facets of emotional experience. Subsequent emotional experiences facilitate humans to be more adaptable to the situations they face.

Numerous research studies have been carried out to gain insights into intelligence. Following the emergence of the Intelligence Quotient (IQ) concept, global emphasis shifted to the advancement of this crucial area of human capability, leading to the rise of numerous theories and conceptual frameworks. Salovey and Mayer (1990) define emotional intelligence as the subset of social intelligence that involves the ability to monitor one's feelings and emotions, to discriminate among them, and to use this information to guide

one's thinking and actions. On the other hand, emotional intelligence reached its fame when Goleman (1995) described it as a fundamental individual personal competency to manage emotion that is distinct from cognitive intelligence. This model is usually called a performance-based model, focusing on self-awareness (Cherniss, 2004). Conversely, Bar-On, considered emotional intelligence to encompass non-cognitive abilities, skills, and competencies that affect a person's capacity to manage environmental challenges and stressors effectively (Bar-On, 1997).

Emotional intelligence (EI) has emerged as a significant construct in psychological research and applied domains such as education, health, leadership, and organizational behaviour. While traditionally intelligence was viewed through a cognitive lens (e.g., IQ), EI broadens this perspective by integrating affective capacities critical for interpersonal and intrapersonal functioning. Petrides and Furnham (2001) proposed the trait model of Emotional Intelligence. EI is described as a constellation of emotional self-perceptions located at the lower levels of personality hierarchies. Trait emotional intelligence, often referred to as trait EI, pertains to one's emotional tendencies and self-assessments evaluated through personal reflections (Petrides et al., 2007). On the other hand, emotional intelligence, also known as cognitive-emotional ability, focuses on the mental skills associated with emotions, assessed through tests that gauge performance.

The theory proposed by Petrides and Furnham (2001). It evaluates how individuals perceive their emotional abilities, rather than measuring actual emotional ability through performance. Trait emotional intelligence is the sole working definition within this domain that acknowledges the intrinsic subjectivity of emotional experiences. Additionally, studies affirm that the dimensions of trait emotional intelligence are elements of personality rather than skills, cognitive capabilities, or enablers, supported by research indicating that the same genetic factors associated with the emergence of individual variations in the Big Five personality characteristics are also linked to the formation of individual differences in trait emotional intelligence.

Trait EI is typically measured through self-report instruments such as the Trait Emotional Intelligence Questionnaire (TEIQue) and is considered distinct from cognitive-emotional abilities. The Trait Emotional Intelligence Questionnaire (TEIQue) is one of the most widely used psychometric tools for assessing emotional self-perceptions. Numerous

studies have validated the TEIQue in different cultural and linguistic contexts, proving its psychometric robustness. For example, recent validations in India (Charulatha & Sinha, 2023) Lebanon and UK (Sanchez-Ruiz et al., 2021) and Brazil (Zuanazzi et al., 2022); have reaffirmed its factor structure, internal consistency, and predictive validity.

Recent studies have explored the relationship of trait EI with mental health, resilience, academic performance, and workplace outcomes (e.g., Petrides et al., 2023; Andrei et al., 2022). This supports the claim that trait EI contributes uniquely to personal and professional success beyond traditional personality traits. New research uses trait EI to predict adaptive functioning, well-being, and coping strategies, especially in youth and adolescents (Vesely-Maillefer & Saklofske, 2022), reinforcing its relevance in psychological and educational research.

In Indonesia, the adaptation of the TEIQue and the trait EI model are still in nascent stages, but several phenomena can be identified. Indonesian researchers have begun using the TEIQue-SF in studies on student well-being, academic stress, and teacher-student interaction. Preliminary efforts have been made to translate and culturally validate the TEIQue-SF for Bahasa Indonesia (Febriana & Fajrianthi, 2021). However, many of these studies are either unpublished or limited in sample diversity. Cultural factors such as collectivism, emotional restraint also influence how emotional traits are expressed and measured, which poses adaptation challenges. In this research, the researcher conducted reliability testing using internal consistency and construct validity, using Exploratory Factor Analysis. The following is a blueprint of the the TEIQue-SF.

Table 1.

Blueprint Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) by Petrides (2009)

Dimension	Item Number		Total
	Favourable	Unfavourable	
Emotionality	1, 6, 17, 23	2, 8, 16, 28	8
Self-control	15, 19, 30	4, 22, 25	6
Sociability	9, 11, 21	7, 13, 26	6
Well-being	20, 24, 27	5, 10, 12	6
Auxiliary facets	3, 29	14, 18	4
Total	15	15	30

For the items of Trait Emotional Intelligence – Short Form in the Indonesian version are presented in Table 2.

Table 2.

TEIQue-SF in Indonesian version (Febriana & Fajrianthi, 2021)

No.	Item
1	Saya tidak kesulitan untuk mengungkapkan emosi saya dengan kata-kata
2	Saya sering kesulitan melihat sesuatu dari sudut pandang orang lain
3	Secara keseluruhan, saya adalah orang yang bermotivasi tinggi
4	Saya biasanya kesulitan mengendalikan emosi saya
5	Secara umum, saya tidak menikmati hidup
6	Saya bisa menghadapi orang dengan efektif
7	Saya cenderung untuk sering berubah pikiran
8	Seringkali, saya tidak dapat memahami emosi apa yang saya rasakan
9	Saya merasa memiliki sejumlah kelebihan
10	Saya sering kesulitan mempertahankan hak-hak saya
11	Saya biasanya mampu memengaruhi perasaan orang lain
12	Secara keseluruhan, saya memiliki perspektif/ pandangan yang suram pada banyak hal
13	Orang-orang terdekat saya sering mengeluh bahwa saya tidak memperlakukan mereka dengan benar
14	Saya sering kesulitan menyesuaikan hidup saya dengan keadaan
15	Saya mampu menghadapi stress
16	Saya sering kesulitan menunjukkan perasaan saya kepada orang-orang terdekat saya
17	Biasanya, saya bisa berempati dan memahami emosi orang lain
18	Saya biasanya kesulitan memotivasi diri sendiri
19	Saya biasanya mampu menemukan cara untuk mengendalikan emosi saya jika diperlukan
20	Secara keseluruhan saya senang dengan hidup saya
21	Saya menanggapi diri saya sebagai negosiator yang handal
22	Saya cenderung untuk terlibat
23	Saya sering merenung dan memikirkan perasaan saya
24	Saya percaya bahwa saya memiliki kelebihan saya sendiri
25	Saya cenderung untuk mengalah mestki saya tahu bahwa saya benar
26	Rasanya saya tidak punya kendali atas perasaan orang lain sama sekali
27	Saya percaya bahwa segala hal dalam hidup saya akan baik-baik saja
28	Saya kesulitan menjalin hubungan bahkan dengan orang-orang terdekat saya
29	Umumnya, saya mampu beradaptasi dengan lingkungan baru
30	Orang lain mengagumi saya karena ketenangan saya

The research promises to provide psychometric evidence for TEIQue-SF. Researchers are aiming to close the gap between Petrides' global developments in trait EI and its limited application in Indonesia. Psychometric evaluation, including validating the TEIQue-SF for the Indonesian context, will expand the use of the trait EI and test its cross-cultural invariance and in non-Western populations, especially in Indonesia. Indonesia has a collectivist culture that may interpret and express emotions differently from Western cultures, where TEIQue-SF was originally developed.

Method

This study used convenience sampling, with the research area in Indonesia. Baharum et al. (2023) explain that the minimum sample size required for Exploratory Factor Analysis (EFA) is between 250 and 500. The Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) by Petrides (2009) consisted of 30 statements with 7 response choices from strongly disagree (Score 1) to strongly agree (Score 7). A high score on this measuring instrument indicates an adequate emotional intelligence trait. The respondents of the study ranged from 300.

The reliability method used is the Alpha coefficient. Anastasi and Urbina (1997) stated that a sufficient reliability coefficient ranges from .80 to .90. To determine the construct validity, the researcher uses Exploratory Factor Analysis. Researchers use the model of fit by Hu & Bentler (1999). The fit indices used are the Tucker-Lewis Index (TLI/NNFI) and the Comparative Fit Index (CFI) $\geq .95$. Netemeyer, et. al. (2003) also explained that the value of p chi-square ($\geq .05$; Goodness of Fit Index (GFI) $\geq .90$; Root Mean Square Error of Approximation (RMSEA) $\leq .08$. Kline (2005) explains that the relative chi-square can be used as a reference if the value is ≤ 3 .

Psychometric Testing of TEIQue-SF Indonesian Version

The respondents were 339 people, consisting of 128 men and 211 women, with an age range of 13 to 60 years, from areas in Indonesia. The researcher conducted an item analysis with JASP version 0.18.3.

Item Analysis of TEIQue-SF Indonesian Version

Azwar (2012) explained that the minimum correlation standard of Cronbach's alpha for item-rest correlation is .30. The result of the item analysis can be seen in Table 3.

Table 3.

Item-Rest Correlation TEIQue-SF	
Item	Item-rest correlation
AUX3	.505
SC4*	.476
WB5*	.630
EM6	.420
SOC7*	.425
EM8*	.598

Item	Item-rest correlation
SOC9	.432
WB10*	.503
WB12*	.577
SOC13*	.554
AUX14*	.682
SC15	.510
EM16*	.404
EM17	.346
AUX18*	.598
SC19	.462
WB20	.572
SC22*	.493
WB24	.458
WB27	.470
EM28*	.573
AUX29	.572
SC30	.414

In this research, 7 items were deleted because the item-rest correlation did not meet the minimum standard. The deleted items are items 1, 2, 11, 21, 23, 25, and 26. From Table 3, the item-rest correlation for the scale ranges from .346 - .682. All items in this study have an item-rest correlation above .30. This indicates that the item has good discriminant power.

Reliability of TEIQue-SF Indonesian Version

The TEIQue-SF reliability was tested using Cronbach's alpha. The test results show that the reliability value of this instrument is 0.902 (M = 138.304, SD = 20.426). This indicates that the scale has sufficient reliability (above 0.70) (Shultz et al.,2021).

Construct Validity with Exploratory Factor Analysis

Based on the Measure Sampling Adequacy (MSA) Kaiser-Meyer-Olkin Test, the data showed that the MSA for each item is above .08, indicating that the sampling is adequate to represent the population. The data is also suitable for factor analysis.

Table 4.

Kaiser-Meyer-Olkin Test

	MSA		MSA
Overall MSA	.913	SC15	.883
AUX3	.880	EM16*	.881

SC4*	.912	EM17	.924
WB5*	.927	AUX18*	.902
EM6	.913	SC19	.900
SOC7*	.880	WB20	.919
EM8*	.913	SC22*	.938
SOC9	.888	WB24	.893
WB10*	.933	WB27	.931
WB12*	.924	EM28*	.926
SOC13*	.912	AUX29	.939
AUX14*	.944	SC30	.911

The Confirmatory Factor Analysis showed that the data did not fit the theoretical model; therefore, the researcher conducted the Exploratory Factor Analysis. The result shows that the scale is divided into two factors, which are shown in Figure 1. Construct Validity with Exploratory Factor Analysis.

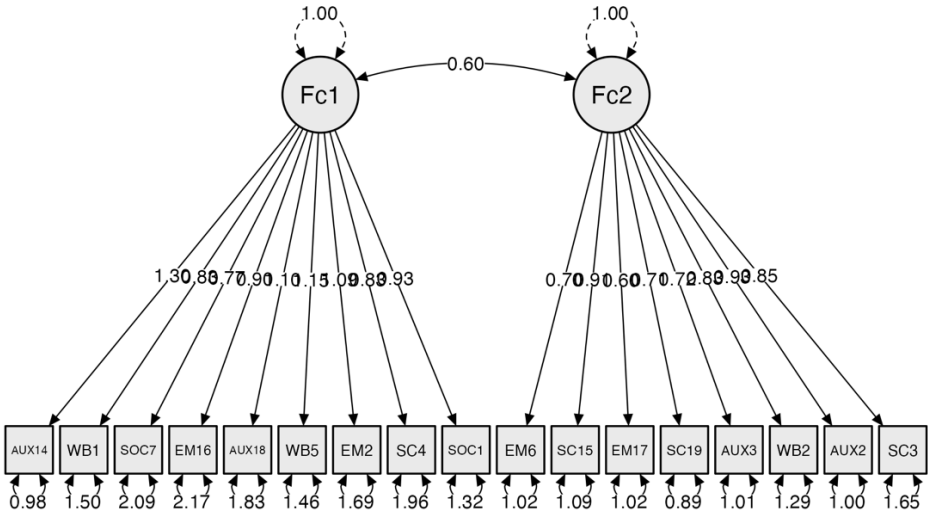


Figure 1. Model Plot

Based on the analysis, the Indonesian version of the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) measurement model has RMSEA = .075; GFI = .979; MFI = .719; CFI = .873. According to Hu and Bentler (1999), this model doesn't fit the theoretical model.

Table 5.
The Goodness of Fit from CF

Model	MFI	RMSEA	CFI	TLI	GFI
	≥0,9	< 0,08	≥0,95	≥0,95	≥0,9
	.719	.075	.873	.854	.979

Discussion

This research found that the Indonesian version of the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) is valid and reliable. The scale has reliability above 0.7, but construct validity doesn't meet the fit index. Petrides and Furnham (2001) explained that the items of the scale have to be analysed in different cultural contexts.

In this research, EFA yields only two factors rather than four. This happens due to methodological and sample-related reasons, not because the theoretical model is invalid. The sample characteristics, such as the number and type of participants (e.g., students, specific cultures), influence factor extraction. Smaller or less diverse samples often produce fewer, broader factors. The age range of the respondents in this study was also quite wide, ranging from 13 to 60 years old. It is necessary to group the respondents in the research. Another reason is item overlap and conceptual clustering. In this case, the items measuring different dimensions but related traits (e.g., optimism and happiness under well-being) can cluster together due to shared variance, thus forming broader dimensions. The Use of Short Forms with only 30 items is less capable of distinguishing all four theoretical factors, often resulting in 1–2 factor solutions (e.g., positive self-perceptions and negative self-perceptions). The other reason is cross-cultural differences, which factor structures across cultural contexts, causing the theoretically derived four factors to merge into two due to cultural interpretations of emotions. Based on the opinions of several respondents, some items were hard to understand. This made it difficult for them to respond. These items also tend to have high social desirability, where individuals tend to choose a response according to social standards.

Conclusion

Based on the research, the Indonesian version of the trait emotional intelligence has to be revised. The psychometric evaluation needs to be carried out, including reviewing the item language structure, reading tests, and re-collecting data.

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