# Adapting the Trait Emotional Intelligence Questionnaire Short Form (TEIQUE-SF) into Indonesian Language and Culture

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#### **Abstract**

This study aimed to adapt the TEIQue-SF 1.50 measuring instrument to the Indonesian culture. This research was conducted in two studies. In Study I, the translation process and the equivalence testing were carried out, involving six translators, three expert reviewers, and ten laypeople for cognitive debriefing. Study 2 involved 200 subjects who were workers in Indonesia and tested the TEIQue-SF 1.50 measuring instrument with confirmatory factor analysis using AMOS version 22. The entire adaptation process referred to the International Test Commission (ITC) Guidelines for Test Adaptation 2016. The CFA results showed that the TEIQUE-SF 1.50 measurement model was fit to the one-factor model. Overall, this study showed that the Indonesian version of TEIQue-SF 1.50 was valid and reliable so that it can be used to measure the Trait Emotional Intelligence in Indonesia.

**Keywords**: Trait Emotional Intelligence, instrument adaptation Indonesia.

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#### Introduction

Emotional intelligence is a concept that is still reaping controversy both in the realm of Management and Industrial-Organizational Psychology. It, however, plays a critical role in individual career performance and success and greatly influences organizational performance (Yin, 2018). Individuals with high emotional intelligence can actively control stress and regulate their emotions well and adopt positive coping strategies to deal with and overcome problems (Fteiha & Awwad, 2020). According to Mayer, Salovay, & Caruso (2008) emotional intelligence is part of social intelligence that involves individual's ability to monitor controlling feelings and emotions in himself/herself and others and then differentiate and use this ability to direct the individual thoughts and behaviours. In line with this opinion, Fajrianthi and Zein (2017)

identified Emotional Intelligence as the ability of individuals to evaluate, interpret, and regulate emotional responses to produce the right actions.

The originator of Emotional Intelligence, Cherniss and Goleman (2001), explained that this concept is a combination of abilities, competencies, and personality traits that as a whole allows individuals to better understand and control the emotions of themselves and others. On the other hand, Petrides and Furnham (2001) divided Emotional Intelligence based on its nature into trait and ability, by different measures. Emotional intelligence, which is cognitive-related ability to understand emotions, is measured by performance tests, while that in the form of traits (Trait Emotional Intelligence), which is related to personality and behavioural tendencies to feel, is measured using self-reports (Petrides & Furnham, 2001).

Trait Emotional Intelligence is a collection of emotional self-perceptions that fall under the hierarchy of personality or, more specifically, is a collection of personality traits regarding an individual's perception of his emotional abilities (Petrides, 2010). This concept consists of 15 aspects, namely adaptability, assertiveness, emotional expression, emotion management, emotion perception, emotion regulation, trait empathy, trait happiness, low-impulsiveness, trait optimism, relationships with others, self-esteem, self-motivation, social awareness, and stress management (Petrides, 2010; Petrides & Furnham, 2001). Furthermore, a psychometric investigation study conducted by Petrides and Furnham (2001) has compared two models of Confirmatory Factor Analysis. The first model classified 15 aspects into the dimensions of intrapersonal, interpersonal, adaptability, stress management and general mood. The results of this study explained that although the fit parameter was higher in the second-order model, compared to the first-order analysis, the second-order model showed that the very-high item loading factor and the composite reliability values for each dimension indicate the existence of a redundancy layer, recommending a single-factor model with 15 indicators more adequate for the data. Petrides (2009) conducted a study of psychometric properties by grouping 15 aspects of Trait Emotional Intelligence into four dimensions: emotionality, self-control, sociability, and well-being. This study proved that the highest internal consistency value was in the measurement of the global trait emotional intelligence (Global Trait El). Furthermore, it also explained that the four dimensions could be derived through a prior assessment based on the completed form. But, the additional dimensions, consisting of aspects of self-motivation and adaptability, can only contribute to the measurement of the global trait emotional

intelligence (Global Trait El). These findings were in line with Zampetakis's study (2011), showing that the Global Trait El scoring process was done by adding up the total score, which was then divided by the number of items. However, items 3, 18, 14 and 29 only contributed to the Global Trait El score and did not form part of each dimension. The psychometric analysis study was again carried out using the item response theory approach. This study revised items 8, 9, 23 and 24 that showed the result of strong unidimensionality in both TEIQue-SF versions 1.00 and 1.50 with high item discrimination parameters, making it relatively easy to understand (Cooper & Petrides, 2010). In line with Cooper and Petrides' findings, Zampetakis (2011) also proved the existence of a strong unidimensionality in the TEIQue-SF concept. However, both Cooper and Petrides (2010) and Zampetakis (2011) studies explained the existence of multidimensional indications in the TEIQue-SF structure.

TEIQue-SF has been adapted into Italian, German, Serbian, Georgian, French and the original English versions (Andrei et al., 2016). Even in the Asian region, TEIQue-SF has good reliability or above 0.7. For example, the study by Gökçen et al. (2014) that adapted this measurement to Chinese culture showed that the TEIQue-SF version 1.50 has a Cronbach's alpha value of 0.91. Furthermore, the study of Swami, Begum, and Petrides (2010) also showed this measuring instrument has a Cronbach's alpha value of 0.98. In studies with Indonesian samples, this measure has a reliability value of 0.73 (Fauziyah, 2016) dan 0.78 (Hasnah, Hendra, & Hapsah, 2016). Unfortunately, no detailed information has been obtained about the process of adaptation of TEIQue-SF into the Indonesian language and culture, which is very much needed for the interpretation of research results. Scale adaptation is necessary since inappropriate translation procedures and cross-cultural instrument adaptation can lead to concluding a construct that is inappropriate as well (Ali, 2016). For instance, the confirmatory study of the Trait Emotional Intelligence, by Tresnawaty (2018), stated that 11 out of 30 TEIQue-SF items were declared invalid to be used in the Indonesian sample. There were some irregularities in this study, namely a) some adaptation items lacked the meaning of equality with those at the original scale, b) the confirmatory analysis process was not in accordance with the psychometric test properties of Petrides (2009) and Zampetakis (2011), where items 14 and 30, which were indicators of adaptability, and item 18 originally of self-motivation were tested to explain the self-control dimension, c) the confirmatory test process was somewhat confusing in terms of choosing the first-order model or the second-order one, because the initial step was carried out to each dimension while the second step was carried out

simultaneously to multi-dimensions, and d) although this study explained the existence of multi-dimensions in the construct of trait emotional intelligence, but in fact, the fit model results showed the inter-correlation between all dimensions.

Based on this problem, this study aimed to adapt the Indonesian version of the TEIQue-SF measuring instrument. According to Epstein, Santo, and Guillemin (2015), the process of adapting the measuring instrument is to ensure the equivalence between the new and the original questionnaires, in terms of characteristics and functions. Therefore, we need a standardised TEIQue-SF measurement tool that is adapted to the Indonesian language and culture but still has equality with the original questionnaire.

## Study I (Process of Adapting TEIQue-SF Version 1.50)

#### **Method**

#### **Participants**

Study I was the process of scale translation from the original to the translated scales (in Bahasa Indonesia). In the background of the TEIQue-SF translation process, back and forth, the researchers involved six translators selected based on English and Indonesian language skills, psychology education background, cultural understanding of the research subjects, and knowledge of the constructs of measuring instruments. Besides, the researchers asked help from three (3) expert reviewers who had expertise in emotional intelligence expertise. In cognitive discussions, the researchers could talk with 10 laypeople who were leaders or, moreover, those who had work members.

#### Instruments

In this study, the measurement instrument of trait emotional intelligence will be adapted using the Trait Emotional Intelligence Questioner Short Form (TEIQue-SF) version 1.50.

#### **Procedures**

The adaptation steps for TEIQue-SF version 1.50 was carried out with a cross-cultural approach based on the International Test Commission (ITC) Guidelines for Test Adaptation 2016.

#### Pre-condition

At this stage, the researcher reviewed several measuring devices on each variable in the study, and then selected the measuring tool that best suited the study. In the trait emotional intelligence variables, it had been known that there were two measuring instruments, namely TEIQue-SF version 1.00 compiled by Petrides and Furnham (2001), in which in 2010, revisions and improvements to items were made by Cooper and Petrides (2010) to become TEIQue-SF version 1.50. Therefore, this study used the TEIQue-SF version 1.50. After determining the scale to be used in the study, the researchers then sought permission from the makers of the measuring instrument by sending messages via email. After getting permission, then, the writer looks for translators for the forward and backward translations. The selection was based on their English and Indonesian proficiencies, psychology education background, cultural understanding of the research subjects, and knowledge of the construct of the measuring instrument.

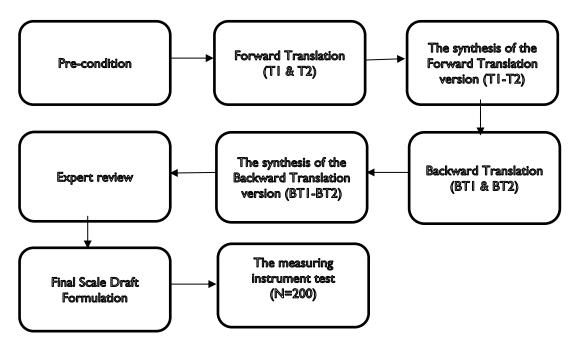


Figure 1. TEIQue-SF versom 1.50 Adaptation Process Scheme

#### Forward translation

The forward translation is the process of translating the scale into the Indonesian version. This process was carried out by two translators, both of whom did not know each other. The translators chosen were those who were experts in English and Indonesian so well that

misinterpretation would not occur. Translators were given information about the research objectives, operational definitions of each variable and a research sample plan so that they could better understand the aims and objectives of the translation.

#### The synthesis of the forward translation

The results of the forward translation from the two translators were then discussed with one person who had a Masters in Psychology background and had English language skills and understood the construct of the measuring tool to get an Indonesian translation scale, called the synthesis of the forward translation.

#### **Backward** translation

The backward translation is the process of translating the synthesis of the forward one into English. It was done to ensure the translated version in Bahasa Indonesia does not deviate from the original scale. The process was carried out by two translators who were experts in Indonesian and English, respectively, and didn't know each other. Both translators did not see the original scale but were only given the synthesis of the forward translation.

#### The synthesis of the backward translation

The results of the backward translation were then discussed with one person who had a background in Masters in Psychology and has English language skills and understood the construct of the measuring instrument to get backward translation synthesis. The translator of the backward translation synthesis was a different person from the translator of the forward one.

## Expert Reviewer

At this stage, the role of the expert committee was to consolidate the forward and backward versions and the synthesis of measuring instruments, as well as develop a prefinal version of the measuring instruments that would be used for field testing. (Beaton, Bombardier, Guillemin, & Ferraz, 2000). The expert reviewers selected were three people who had a psychology education background and understood the concept of emotional intelligence, cultural context, and Indonesian and English languages well. They were given a brief description related to the research topic and an explanation of the reasons for selecting them, including their assignments as expert reviewers. Furthermore, they were given forms of the statement of willingness to become an expert reviewer, and then were given a brief description regarding

the construct and operational definitions of each variable. They were also given two (2) assessment forms, namely I) Comparability and Equality between the original and the backward translation versions and 2) the Content Validity assessment form. Furthermore, in the language comparison form, Comparability shows the level of Similarity of language, phrases, terms, words, and sentences between the two versions. Items of statements that were very identical and had no differences were given a score of I, while those that were completely different in terms of language were given a score of 7. Similarity means the degree of similarity in meaning between the two versions of the scale, even though the terms used are different. Items of statement that have identical meanings were given a score of I, while those with very different meanings were given a score of 7. This scoring refers to the rating scales proposed by Jeanrie & Bertrand (1999) and Sperber (2004) with rating ranges ranging from 1 until 7, as suggested in the ITC Guidelines for Adaptation (2016). At this stage, the Content Validity was also assessed. The expert reviewers were asked to rate each item related to the extent to which the items matched or were relevant to its construct and the function of the measurement tool (Relevancy), how important were they when related to the construct and the research context (Importance), and whether they were sufficiently clear and can be understood (Clarity) (Haynes, Richard, & Kubany, 1995; Rubio, Weger, Tebb, Lee, & Rauch, 2003). Referring to Lynn (1986, in Polit & Beck, 2006), a minimum of three experts is needed to conduct an assessment. Each item is given a score from 1-4, good items are rated 3 and 4, while unfavourable items are rated I and 2. Furthermore, assessments are given a score of I (for those 3 and 4) and 0 (for those 1 and 2). The I-CVI score is done by adding up the rating values on each item and then divided by the number of expert reviewers. The S-CVI score is determined by calculating the average I-CVI, i.e. the total I-CVI score divided by the total number of items. The I-CVI and S-CVI assessments refer to Polit & Beck (2006) and Polit, Beck, & Owen (2007).

#### Final scale draft formulation

The final draft scale was given to 10 laypeople who had positions of leadership or, at least, as chairpersons who had work members. The pilot study was initiated by asking respondents to provide an initial assessment of the final draft questionnaire. In this process, respondents were asked to assess whether they find problems difficult to understand, confusing, inappropriate/cannot represent situations/conditions/habits existing in Indonesian work culture, by circling the "T" mark (Tidak/No) on the column provided. On the other hand, if

the questions are easily understood, clear, and following the work culture of Indonesia, then the respondents were asked to circle the "Y" (Ya/Yes), and be allowed to comment on items that were deemed necessary. After completing the questionnaire, the FGD process was then carried out to discuss the clarity of each questionnaire's instructions and the intent or understanding of the questionnaire questions, the compatibility of the questionnaire questions with local cultural conditions, and the questionnaire display format (size and type of letters, including the arrangement).

#### Results

Overall, from the results of a series of the backward and forward translation processes, followed by the assessment of Comparability-Similarity and Content Validity by the expert reviewers, a summary of the translation items was obtained as follows:

Table I TEIQue-SF version 1.50 Scale Translation Results

No.	Item Orisinal	Sintesa	Sintesa	Suggestion
		Item Forward	Item Backward	Expert Reviewer
		(FT1 & FT2)	(BTI & BT2)	
Ι.	Expressing my	Mengungkapkan emosi	Expressing my emotion	Saya tidak kesulitan
	emotions with	saya dengan kata-kata	through words is not a	untuk mengungkapkan
	words is not a	tidak masalah bagi saya.	problem for me	emosi saya dengan
	problem for me.			kata-kata
2.	I often find it	Saya sering kesulitan	I often get difficulty in	
	difficult to see	melihat sesuatu dari	seeing things from	
	things from	sudut pandang orang	others' perspective	
	another person's	lain.		
_	viewpoint.			
3.	On the whole,	Secara keseluruhan, saya	Overall, I am a highly	
	I'm a highly	adalah orang yang	motivated person	
	motivated person	bermotivasi tinggi		
4.	I usually find it	Saya biasanya kesulitan	I usually have difficulty	
	difficult to	mengendalikan emosi	controlling my emotions	
	regulate my	saya		
_	emotions			
5.	I generally don't	Saya biasanya tidak	Usually, i don't feel that	Secara umum, saya
	find life enjoyable	merasa hidup itu menyenangkan.	life is fun	tidak menikmati hidup
6.	I can deal	Saya bisa menghadapi	I can deal with people	
	effectively with	orang dengan efektif	effectively.	
	people			
7.	I tend to change	Saya cenderung sering	I tend to change my	Saya cenderung untuk
	my mind	mengubah pikiran saya	mind frequently	sering berubah pikiran
	frequently			

8.	Many times, I can't figure out what emotional I'm feeling	Seringkali, saya tidak dapat memahami emosi apa yang saya rasakan	Frequently, I couldn't figure out the feeling of my own emotion	
9.	I feel that I have number of good qualities	Saya merasa memiliki sejumlah kelebihan	I feel that I have a number of capabilities	
10.	l often find it difficult to stand up for my rights	Saya sering kesulitan untuk memperjuangkan hak-hak saya	I often find it difficult to fight for my rights	Saya sering kesulitan mempertahankan hak- hak saya
11.	I'm usually able to influence the way other people feel	Saya biasanya mampu mempengaruhi perasaan orang lain.	I am usually able to influence other people's feelings.	
12.	On the whole, I have a gloomy perspective on most things	Secara keseluruhan, saya punya sudut pandang yang suram tentang kebanyakan hal	Overall, I have a gloomy perspective in most things	Secara keseluruhan, saya memiliki perspektif/ pandangan yang suram pada banyak hal
13.	Those close to me often complain that I don't treat them right.	Orang-orang terdekat saya sering mengeluh bahwa saya tidak memperlakukan mereka dengan benar.	The people closest to me often complain that I do not treat them properly.	
14.	I often find it difficult to adjust my life according to the circumstances	Saya sering kesulitan menyesuaikan hidup saya dengan keadaan	I often get difficulty in adjusting my life to the circumstances	
15.	On the whole, I'm able to deal with stress	Secara keseluruhan, saya mampu menghadapi stres	Overall, I am able to deal with stress.	Saya mampu menghadapi stres
16.	I often find it difficult to show my affection to those close to me.	Saya sering kesulitan menunjukkan perasaan saya kepada orang-orang terdekat saya	I often get difficulty showing my feelings to the people closest to me.	
17.	I'm normally able to "get into someone's shoes" and experience their emotions	Saya biasanya mampu membayangkan posisi orang lain dan merasakan emosi mereka	I'm usually able to imagine other's condition and feel their emotion	Biasanya, saya bisa berempati dan memahami emosi orang lain
18.	I normally find it difficult to keep myself motivated.	Saya biasanya kesulitan memotivasi diri saya sendiri	I usually face difficulties to keep myself motivated	Saya biasanya kesulitan memotivasi diri sendiri
19.	I'm usually able to find ways to control my emotions when I want to.	Saya biasanya mampu menemukan cara untuk mengendalikan emosi saya jika diperlukan.	I am usually able to find way to control my emotions if it is necessary	
20.	On the whole, I'm pleased with my life	Secara keseluruhan, saya senang dengan hidup saya	Overall, I am happy with my life.	
21.	I would describe myself as a good negotiator.	Saya menganggap diri saya adalah negosiator yang baik	I consider myself as a good negotiator	Saya menganggap diri saya sebagai negosiator yang handal

22.	I tend to get involved in things I later wish I could get out of.	Saya cenderung untuk terlibat dalam hal-hal yang kemudian ingin saya tinggalkan.	I tend to be involved in things that I want to leave behind.	Saya cenderung untuk terlibat dalam hal-hal yang kemudian saya sesali
23.	I often pause and think about my feelings	Saya sering merenung dan memikirkan perasaan saya	I often muse and think about my feelings	
24.	I believe I'm full of personal strengths	Saya percaya bahwa saya memiliki kelebihan saya sendiri	I believe that I have my own strengths	
25.	I tend to "back down" even if I know I'm right	Saya cenderung untuk mundur meskipun saya tahu saya benar	I tend to step back even though I know I am in a right side	Saya cenderung untuk mengalah meski saya tahu bahwa saya benar
26.	I don't seem to have any power at all over other people's feelings.	Saya sepertinya tidak punya kekuatan atas perasaan orang lain sama sekali	It seems that I have no power at all of other people's feeling	Rasanya saya tidak punya kendali atas perasaan orang lain sama sekali
27.	I generally believe that things will work out fine in my life.	Saya biasanya percaya bahwa segala hal akan baik-baik saja dalam hidup saya	I usually believe that everything will be fine in my life	Saya percaya bahwa segala hal dalam hidup saya akan baik-baik saja
28.	I find it difficult to bond well even with those close to me.	Saya kesulitan menjalin hubungan bahkan dengan orang-orang terdekat saya.	I have trouble in building bonds even with the people closest to me.	,
29.	Generally, I'm able to adapt to new environments.	Umumnya, saya mampu beradaptasi dengan lingkungan baru.	Generally, I am able to adapt with new environment	
30.	Others admire me for being relaxed	Orang lain mengagumi saya karena ketenangan saya.	Other people admire me because of my calmness.	

Table 2
Expert Reviewer Assessment Results

	Comparibility Mean Score		Sim	nilarity		S-CVI
Scale			Mea	n Score	I-CVI	
_	Total	Range	Total	Range		
TEIQUE	2,23	1,00 – 2,66	2,10	1,00 – 2,66	ı	I

Table 2 shows the results of the expert reviewers' assessment of the levels of Comparability and Similarity. No item has a mean score of more than 3. A mean of > 3 (7 is for the worst deal; I is for the best deal) requires a formal review of the translated items. However, the items number 7, 18, 21, 27 which have a mean value > 2.5, needs to be observed. Each mean

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between 2.5 and 3 in the Similarity column is also considered problematic and needs to be reviewed for, possibly, revised. In theory, the re-translated items might differ from the original questionnaire in the assumed linguistic form and the meaning conveyed. Ideally, the appropriate items have a similar meaning and form of language. However, the similarity in meaning is preferred, while the form of language can be varied to ensure equality of meaning (Sperber, 2004). In addition to calculating the mean scores of Comparability and Similarity, the results of discussions with the three expert reviewers also provided input and suggestions related to items on a scale to make them more easily understood by the research sample. In TEIQue-SF, there were suggestions for improvement on items 1, 5, 7, 10, 12, 15, 17, 18, 21, 22, 25, 26, and 27. Item I was corrected due to forward translation stating "Mengungkapkan emosi saya dengan kata-kata tidak masalah bagi saya" He was considered inaccurate in terms of writing order, so it was changed to "Saya tidak kesulitan untuk mengungkapkan emosi saya dengan kata-kata". In item 5 of the forward translation stating "Saya biasanya tidak merasa hidup itu menyenangkan", a series of words "tidak merasa hidup itu menyenangkan" seemed confusing, so it was clarified into "Secara umum, saya tidak menikmati hidup". In item 7 of the forward translation stating "Saya cenderung sering mengubah pikiran saya", the wording "sering mengubah" was considered inappropriate so that it was changed to "Saya cenderung untuk sering berubah pikiran". In item 10 of the forward translation stating "Saya sering kesulitan untuk memperjuangkan hak-hak saya", the word "memeperjuangkan" was considered inappropriate to the original item "stand up" which means to survive so that the sentence was clarified to be "Saya sering kesulitan mempertahankan hak-hak saya". In item 12 of the forward translation stating "Secara keseluruhan, saya punya sudut pandang yang suram tentang kebanyakan hal", the word "sudut pandang" was considered to have a narrow meaning so that it was clarified by adding the word "perspectif" to the sentence to be "Secara keseluruhan, saya memiliki perspektif/ pandangan yang suram pada banyak hal". In item 15 of the forward translation stating "Secara keseluruhan, saya mampu menghadapi stres", the words "secara keseluruhan" were not appropriate to use so that the sentence was clarified more straightforwardly to be "Saya mampu menghadapi stres". In item 17 of the forward translation stating "Saya biasanya mampu membayangkan posisi orang lain dan merasakan emosi mereka" the word "membayangkan" seemed ambiguous so it was clarified to be "Biasanya, saya bisa berempati dan memahami emosi orang lain". In item 18 of the forward translation stating "Saya biasanya kesulitan memotivasi diri

saya sendiri", the word "saya" experienced unnecessary repetition so that the sentence slightly changed to "Saya biasanya kesulitan memotivasi diri sendiri". In item 21 of the forward translation stating "Saya menganggap diri saya adalah negosiator yang baik" the word "baik" is not quite right in explaining the negotiator so that it was clarified by replacing with "Saya menganggap diri saya sebagai negosiator yang handal". In item 22 of the forward translation stating "Saya cenderung untuk terlibat dalam hal-hal yang kemudian ingin saya tinggalkan", this sentence was confusing, so it was clarified to be more straightforward with "Saya cenderung untuk terlibat dalam hal-hal yang kemudian saya sesali". In item 25 of the forward translation stating "Saya cenderung untuk mundur meskipun saya tahu saya benar" the word "mundur" was considered to be less explaining the choice of attitude so that it as clarified by using the word "mengalah" to be "Saya cenderung untuk mengalah meski saya tahu bahwa saya benar". In item 26 of the forward translation stating "Saya sepertinya tidak punya kekuatan atas perasaan orang lain sama sekali", the word "kekuatan" was considered inappropriate to explain the meaning of the sentence so that it was clarified to be "Rasanya saya tidak punya kendali atas perasaan orang lain sama sekali". In item 27 of the forward translation stating "Saya biasanya percaya bahwa segala hal akan baikbaik saja dalam hidup saya", the word "biasanya" is considered unnecessary so that the sentence structure became "Saya percaya bahwa segala hal dalam hidup saya akan baik-baik saja".

Furthermore, the results of the I-CVI item selection assessment, as shown in Table 2, showed a score of I. Referring to Polit et al. (2007), an item is considered good if it has an I-CVI of 0.78 or more and if vice versa, it is considered as a candidate for revision or deletion. The results of the S-CVI assessment on TEIQue-SF also showed a score of I. Associated with S-CVI, Polit et al. (2007) recommend an S-CVI value of 0.90 or more. Therefore, it can be concluded that TEIQue-SF version 1.50 in this study has good Content Validity because it has the same scores of I-CVI and S-CVI, namely I.

After obtaining the final draft of the Indonesian version of the TEIQue-SF 1.50 scale, the next step was to conduct a Cognitive Debriefing on 10 laypeople who held positions as leaders to be asked to read the final draft items and to find out whether these items can be understood by laypeople according to the aim of the assessment of the scale. The result of this cognitive debriefing process showed that the 10 respondents stated that the items on the final draft scale were easily understood, so there was no revision needed. The measurement tool trial

was then done after that.

## **Study 2 (Confirmatory Factor Analysis)**

#### Method

**Participants** 

Confirmatory factor analysis of the Indonesian version of TEIQue-SF 1.50 was aimed at 200 subjects who were characterised as workers and those who occupied positions as leaders of the sectors of education, industry/manufacturing, marketing, IT, financial services, Government Agencies, and Creative Industries in Indonesia. The subjects consisted of 109 women (54.5%) and 91 men (45.5%) with the average age of 36.9 years (SD 8.64, min: 20 years, max: 64 years), in which of 58.2% had received their master's education while 34% had a bachelor's education background.

#### Instruments

The Trait Emotion Intelligence measuring instrument that would be used in Study 2 was the Indonesian version of the Emotional Intelligence Questioner Short Form (TEIQue-SF) version 1.50 with the blueprint arrangement as follows table 3. Conceptually, Petrides (2001) defined Trait Emotional Intelligence as a collection of one's personality traits in perceiving his/her emotional abilities. Based on this definition, the researchers operationalised the construct of Trait Emotional Intelligence as a degree of individual perception of their emotional abilities. The higher the score, the more positive the perception of the emotional abilities, and Vice Versa. Trait Emotional Intelligence consists of 15 aspects, namely Adaptability which is related to being flexible and willing to adapt to new conditions, Assertiveness related to being forthright, honest, and willing to defend rights, Emotion Expression related to being able to communicate feelings to others, Emotion Management to others related to being able to influence the feelings of others, Emotion Perception of self and others related to the clarity of one's own feelings and those of others, Emotion Regulation related to being able to control emotions, Trait Empathy related to being able to understand the perspectives of others, Trait Happiness related to being cheerful and satisfied with life, Low-impulsiveness related to the reflectiveness and the tendency to not following the desire, Trait Optimism related to confidence and tend to see life from the positive side, Relationships related to the ability to

maintain satisfying personal relationships, Self-esteem related to success and confidence, Self-motivation related to encouragement and the tendency to not give up in the face of difficulties, Social-awareness related to the ability to reach a wide network with superior social skills, and Stress-management related to the ability to withstand pressure and manage stress.

Table 3
Blueprint of the Trait Emotional Intelligence Scale

Aspect	ltem n	umber	Number
	F	UF	
Trait Optimism	27	12	2
Trait Happiness	20	5	2
Self-esteem	24	10	2
Trait Emphaty	17	2	2
Emotional perception (self and others)	23	8	2
Emotion expression	1	16	2
Relationships	6	28	2
Emotion regulation	19	4	2
Low-impulsiveness	30	22	2
Stress management	15	25	2
Emotion management	П	26	2
Assertiveness	9	7	2
Social awareness	21	13	2
Adaptability	29	14	2
Self-motivation	3	18	2
Total	15	15	30

Furthermore, responses were made using a 7 Likert scale. Scales range from 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (neutral), 5 (somewhat agree) 6 (agree), and 7 (strongly agree). The items in each aspect were added up so that the total TEIQue-SF score will be obtained by doing reverse scoring on unfavourable items. The higher the total score on TEIQUE-SF the higher the trait emotional intelligence, and vice versa.

#### **Procedures**

In this study, the construct Validity and Reliability tests were performed with a confirmatory factor analysis (CFA), which aimed to find out how precisely manifest variables (indicators)

can explain latent variables using AMOS version 22.

#### **Results**

The results of the assessment of the goodness of fit on the Indonesian version of TEIQue-SF I.50 in the current study (table 4). Hair et al. (2014) explained that the characteristics of the goodness of fit index differ in various situations. In the number of samples below 250 (<250; in this study the number of samples was 200) and the total number of indicators above 30 (> 30; in this study the total number of indicators was 77), the GOF indications are the significant p-values, CFI and TLI are above 0.92, RNI is above 0.92, SRMR is <0.9, and RMSEA is <0.8. The goodness of fit test results indicated that it was fit (CFI = 0.921; RMSEA = 0.076; CMINDF = 2.141, p-value = 0,000). Although the Chi-square value was not fit, the researchers, according to Hair et al. (2014), must report at least one (1) incremental index (represented by CFI) and one (1) absolute index (represented by CMINDF). Therefore, it could be concluded that the Trait Emotional Intelligence model in this study was following the theoretical model of Cooper and Petrides (2010). The final result of the goodness of fit of the trait construct of the Trait Emotional Intelligence with first-order confirmatory factor analysis (CFA) can be seen in the figure.

Table 4
The Goodness of fit of the Indonesian version of TEIQue-SF 1.50

Goodness of Fit	Goodness of Fit Acceptable level of		Annotation
criteria	conformity	results	
Chi-square	p > 0.05	0.000	Not fit
CMIN/DF	≤ 3.00	2.141	fit
RMR	≤ 0.05	0.037	fit
CFI	≥ 0.92	0.921	fit
RMSEA	≤ 0.08	0.076	fit

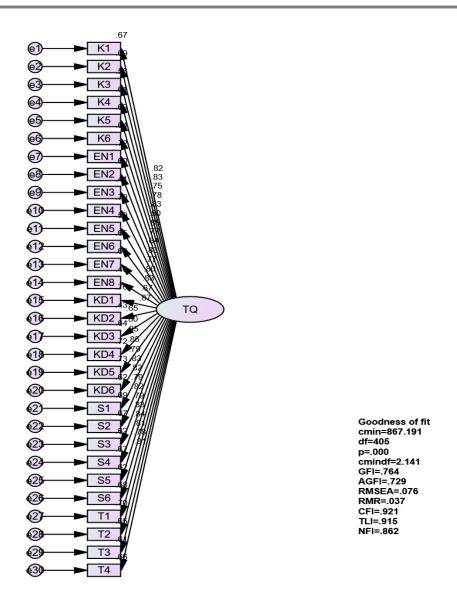


Figure 2. Confirmatory Factor Analysis TEIQue-SF version 1.50

Furthermore, the results of the construct Validity test showed that the Emotional Trait Intelligence scale item has an estimated loading factor value between 0.643 - 0.875. Hair, Black, Babin, & Anderson, (2014) explained that the estimated standardized loading item must be 0.5 or higher, and ideally is 0.7 or higher. Therefore, it could be concluded that all Indonesian TEIQue-SF 1.50 items were declared valid. The results of the construct Validity test are as follows table 5.

Table 5
Loading Factor of Trait Emotional Intelligence Scale

Aspect/Item	Loading Factor	Number of Item
Trait Optimism		
Item 27	0.820	2
Item I2	0.831	
Trait Happiness		
Item 20	0.749	2
Item 5	0.779	
Self-esteem		
Item 24	0.832	2
Item 10	0.799	
Trait Empathy		
Item 17	0.848	2
Item 2	0.773	
Emotional Perception (self and others)		
Item 23	0.643	2
Item 8	0.835	
Emotion expression		
Item I	0.769	2
Item 16	0.805	_
Relationships	0.000	
Item 6	0.833	2
Item 28	0.675	-
Emotion regulation	0.073	
Item 19	0.875	2
Item 4	0.653	_
Low-impulsiveness	0.055	
Item 30	0.798	2
Item 22	0.850	2
Stress management	0.050	
Item 15	0.855	2
Item 25	0.790	2
	0.770	
Emotion Management Item II	0.831	2
Item 26	0.821	2
	0.821	
Assertiveness Item 9	0.707	2
	0.786	2
Item 7	0.820	
Social awareness	0.700	2
Item 21	0.790	2
Item 13	0.827	
Adaptability	0.035	2
Item 29	0.835	2
Item 14	0.806	
Self-motivation	c ====	•
Item 3	0.783	2
Item 18	0.810	
Total		30

Furthermore, the Indonesian version of the TEIQue-SF 1.50 reliability test showed that the construct reliability value was 0.981 (> 0.70). Hair et al. (2014) explained that the rule of thumb for estimating reliability is 0.7 or higher, showing good reliability. This evidence proved that all TEIQue-SF 1.50 internal measurements consistently represented the same latent construction. Meanwhile, the average variance extracted for the Indonesian version of TEIQue-SF 1.50 showed a value of 0.638 (> 0.50). Hair et al. (2014) recommended that the average variance extracted test limit value is> 0.50. Therefore, this evidence showed that the amount of variance of the indicators extracted by the TEIQue-SF 1.50 latent construct was more than the error variance (Hair et al. 2014)). Therefore, it could be concluded that the Indonesian version of TEIQue-SF 1.50 showed good convergence. Table 6 are the results of construct reliability (CR) and average variance extracted (AVE) test

Table 6
Reliability Test Results

Construct	Contruct Reliability (CR)	AverageVariance Extracted (AVE)	Annotation
TEIQue-SF 1.50	0.981	0.638	Reliable

#### **Discussion**

This study aimed to adapt the TEIQue-SF version I.50 instrument into the Indonesian language and culture. The translation validation process aimed to obtain a standard scale of TEIQue-SF version I.50, which can be used for research subjects in Indonesia. Sperber (2004) explained that an instrument or questionnaire is not enough by just translating literally from the native language to that of the target, but it requires a process of adaptation and translation in a form that is relevant and easily understood culturally while still maintaining the meaning and purpose of the original instrument (Sperber, 2004). It should be noted that the adaptation test of an instrument is different from the translation test. Adaptation test involves the process of deciding whether an instrument that has been adapted in a particular language and culture can measure the same construct in the native language, then choosing translators and evaluate their background (like forward and backward translations), examining the equality of instruments in a second language and culture, and conducting the necessary Validity studies. Meanwhile, the translation of the test has a more limited meaning with a very simple approach

to change an instrument from one language to another without regard to education or psychological equivalence (International Test Commission, 2017).

In the translation validation process, the results showed that no items were having a mean score of more than 3, but Sperber (2004) said if there are items with mean scores between 2.5 to 3 in the interpretability column, a review needs to be done. The validation results showed that items number 7, 18, 21, and 27 needed to be examined and improved to have the same meaning as the original ones. In item 7, there was no difference in language and meaning between the original item and the backward translation. However, a slight improvement was made in the wording "sering mengubah pikiran" to be "sering berubah pikiran". Likewise item 18 showed the similarity of meaning between its original item and it in the backward translation, but the expert reviewers suggest an improvement so that the word "saya" is not repeated in one sentence. The correction was from "Saya biasanya kesulitan memotivasi diri saya sendiri" to be "Saya biasanya kesulitan memotivasi diri sendiri". In item 21, a slight difference was found between that in the original and the backward translation in language structure, but they had the same meaning. In this item, the expert provided suggestions for replacing words "baik" by "handal". The reason for choosing the word "handal" was because the word can represent someone's ability while the word "baik" is less specific so that the sentence was improved from "Saya menganggap diri saya adalah negosiator yang baik" to be "Saya menganggap diri saya sebagai negosiator yang handal". Item 27 also showed a difference in language structure, but the meanings between the original item and backward translation are the same. In this item, the experts suggested a little change in the sentence structure but with the same meaning with the original item to make it easier to understand. The sentence was improved from "Saya biasanya percaya bahwa segala hal akan baik-baik saja dalam hidup saya" to be "Saya percaya bahwa segala hal dalam hidup saya akan baik-baik saja". Indeed, in theory, the re-translated items might have differences in terms of the linguistic and meaning from the original questionnaire. But, ideally, they have similar meaning and form of language. However, in this case, the similarity of meaning was preferred, while the form of language could be varied to ensure equality of meaning (Sperber, 2004). Furthermore, the TEIQue-SF content validation process showed that the assessment of item selection I-CVI and S-CVI produced the same score, namely 1. Referring to Polit et al. (2007), an item is considered good if it has an I-CVI of 0.78 or more, so it can be said that TEIQue-SF in this study had good

content validity.

Understanding the psychometric properties of a construct is very important as a basis for consideration in the development, testing and use of a measuring instrument (Furr & Bacharach, 2014). Related to this, as the results of the TEIQue-SF version 1.50 literature review described earlier, the psychometric properties of the Trait Emotional Intelligence constructs are unidimensional so that the scoring process was done by adding up the total scores, which were then divided by the number of items. Furthermore, Hair et al. (2014) explained that determining whether a measurement model is valid or not can be done in two ways, namely 1) building an acceptable level of the goodness of fit for the measurement model and (2) finding specific evidence of construct Validity. The goodness of fit test results indicated that it was fit (CFI = 0.921; RMSEA = 0.076; CMINDF = 2.141, p-value = 0,000), meaning that the Trait Emotional Intelligence model in this study was following the theoretical model of Cooper and Petrides (2010). Meanwhile, the construct Validity test showed items 4, 23, and 28 had loading factors of less than 0.7. However, Hair et al. (2014) explained that at least the load factor of an item must be statistically significant with an estimated standardised loading of 0.5 or higher. In addition to having an adequate loading factor score, the Indonesian version of TEIQue-SF version 1.50 was proved to be valid with a construct reliability score of 0.981 (above 0.70) and an average variance extracted score of 0.638 (above 0.50). This evidence proved that all internal measurements of TEIQue-SF 1.50 consistently represented the same latent construction and good item convergence because the amount of variance of the indicators extracted by the latent construct was greater than the error variance. The limitation of this study was that respondents came from among workers who occupied positions as leaders. As such, further studies can replicate this study with different respondents' backgrounds.

## Conclusion

The Indonesian version of the TEIQue-SF I.50 instrument is valid and can be used to measure the Trait Emotional Intelligence constructs of respondents in Indonesia. Carrying out the adaptation process by considering the equivalence of meaning and language, as well as understanding the psychometric literature property of an instrument correctly, are an absolute

process to be carried out. An adaptation instrument that has been adapted to the culture and language of the intended respondents while still representing the meaning of the original scale will be easier to understand.

One of the limitations of this study was that the survey was conducted online, in which the researchers must carefully and accurately ensure that the participants met the research criteria and ensure that there was no double data due to participants filling out the questionnaire more than once. The researchers suggested that further research apply a paper-based test survey. Furthermore, the Indonesian version of the role stressor scale was only specific to a sample of workers who occupied the leadership/supervisor level. For this reason, the researchers suggested that further research carry out the adaptation process involving those occupying positions other than the leadership level (e.g., staff, members, secretaries, and executives).

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Instruksi: Jawablah setiap pernyataan di bawah ini dengan memilih salah satu lingkaran di bawah angka yang menggambarkan tingkat persetujuan atau ketidaksetujuan Anda dengan pernyataan tersebut. Terdapat 7 pilihan jawaban untuk masing-masing pernyataan dengan rentang pilihan "Sangat Tidak Setuju" (angka 1) sampai "Sangat Setuju" (angka 7).

Jangan berpikir terlalu lama mengenai makna dari setiap pernyatan, karena tidak ada jawaban yang benar atau salah. Bekerjalah dengan cepat dan cobalah untuk menjawab dengan seakurat mungkin.

TEIQue-SF 1.50 versi Indonesia

		Pilihan Jawaban						
No.	Pernyataan	Sangat tidak setuju	Tidak setuju	Agak tidak setuju	Netral	Agak setuju	Setuju	Sangat setuju
1.	Saya tidak kesulitan untuk mengungkapkan emosi saya dengan kata-kata	I	2	3	4	5	6	7
2.	Saya sering kesulitan melihat sesuatu dari sudut pandang orang lain	I	2	3	4	5	6	7
3.	Secara keseluruhan, saya adalah orang yang bermotivasi tinggi	1	2	3	4	5	6	7
4.	Saya biasanya kesulitan mengendalikan emosi saya	I	2	3	4	5	6	7
5.	Secara umum, saya tidak menikmati hidup	1	2	3	4	5	6	7
6.	Saya bisa menghadapi orang dengan efektif	I	2	3	4	5	6	7
7.	Saya cenderung untuk sering berubah pikiran	1	2	3	4	5	6	7
8.	Seringkali, saya tidak dapat memahami emosi apa yang saya rasakan	I	2	3	4	5	6	7
9.	Saya merasa memiliki sejumlah kelebihan	I	2	3	4	5	6	7
10.	Saya sering kesulitan mempertahankan hak-hak saya	I	2	3	4	5	6	7
11.	Saya biasanya mampu mempengaruhi perasaan orang lain	I	2	3	4	5	6	7

12.	Secara keseluruhan, saya memiliki perspektif/ pandangan yang suram pada banyak hal	1	2	3	4	5	6	7
13.	Orang-orang terdekat saya sering mengeluh bahwa saya tidak memperlakukan mereka dengan benar	I	2	3	4	5	6	7
14.	Saya sering kesulitan menyesuaikan hidup saya dengan keadaan	I	2	3	4	5	6	7
15.	Saya mampu menghadapi stres	I	2	3	4	5	6	7
16.	Saya sering kesulitan menunjukkan perasaan saya kepada orang-orang terdekat saya	ı	2	3	4	5	6	7
17.	Biasanya, saya bisa berempati dan memahami emosi orang lain	I	2	3	4	5	6	7
18.	Saya biasanya kesulitan memotivasi diri sendiri	I	2	3	4	5	6	7
19.	Saya biasanya mampu menemukan cara untuk mengendalikan emosi saya jika diperlukan.	I	2	3	4	5	6	7
20.	Secara keseluruhan, saya senang dengan hidup saya	I	2	3	4	5	6	7
21.	Saya menganggap diri saya sebagai negosiator yang handal	I	2	3	4	5	6	7
22.	Saya cenderung untuk terlibat dalam hal-hal yang kemudian saya sesali	ı	2	3	4	5	6	7
23.	Saya sering merenung dan memikirkan perasaan saya	_	2	3	4	5	6	7
24.	Saya percaya bahwa saya memiliki kelebihan saya sendiri	I	2	3	4	5	6	7
25.	Saya cenderung untuk mengalah meski saya tahu bahwa saya benar	I	2	3	4	5	6	7

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26.	Rasanya saya tidak punya kendali atas perasaan orang lain sama sekali	I	2	3	4	5	6	7
27.	Saya percaya bahwa segala hal dalam hidup saya akan baik- baik saja	-	2	3	4	5	6	7
28.	Saya kesulitan menjalin hubungan bahkan dengan orang-orang terdekat saya	I	2	3	4	5	6	7
29.	Umumnya, saya mampu beradaptasi dengan lingkungan baru.	I	2	3	4	5	6	7
30.	Orang lain mengagumi saya karena ketenangan saya	I	2	3	4	5	6	7