Port Said Journal of Educational Research (PSJER) 2024, VOL. 3, Issue no. 2, 41-66. DOI: 10.21608/psjer.2024.265051.1033



An Evaluation Study of Emotional Intelligence Structure according to the Ability and Traits Perspectives among University Students

Mahmoud Ali Moussa¹, & Hadya Adel Abdelrehim²

¹Assisstant Professor of Educational Psychology, Faculty of Education, Suez Canal University, Ismailia, Egypt

mahmoud_muhanna@edu.suez.edu.eg

²Lecturer of Educational Psychology, Faculty of Education, Suez Canal University, Ismailia, Egypt hadia_suleiman@edu.suez.edu.eg

Abstract

The study aimed to evaluate emotional intelligence (EI) models in Egyptian university students, focusing on the abilities and traits of 280 senior students at Suez Canal University. The researchers used descriptive and comparative causal approaches and used the BEIS-10 modified scale and the Trait Emotional Intelligence Questionnaire (TEIQue-30) to test both the general factor perspective and the sub-factors. The results of the two-factor model revealed that the items of EI loaded on one single factor, while most of the traits model items loaded on two factors. This implies that ability serves as the core for emotional thinking, emphasizing the necessity of emotional self-efficacy in learners. From the perspective of sub-factors, there was coherence among the factors assessing self-emotions, evaluating others' emotions, and utilizing emotions in the ability model. However, the emotional regulation factor lost its items' distribution across the first and second factors, indicating that an individual's evaluation of others' emotions depends heavily on emotional experience and awareness.

Keywords

Emotional intelligence, Stressful situations, the trait model of emotional intelligence.

Introduction

Many researchers agreed on the importance of understanding and managing emotions in everyday life situations. By understanding emotions, one can be effective and successful in social relationships, while emotional management helps individuals deal effectively with daily challenges of an emotional nature, such as family conflicts, workplace issues, or illness and healthcare provision. Therefore, emotions are associated with a form of ability and can be improved and developed as a desirable process (Durosini et al., 2021).

A certain disagreement arose about the concept of emotional intelligence. Salovey and Meyer (1990) defined it as a type of social intelligence that includes the ability to perceive, monitor, and express one's own and others' emotions and feelings. It also includes the ability to distinguish between different emotions and use this information to lead and manage other responses effectively. Mayer and Salovey then developed this conception so that it (Mayer & Salovey, 1997) incorporated the cognitive skills needed to monitor and regulate intra-self-influences of emotions. These skills include emotional understanding, processing, management, and integration (Sharidan et al., 2006). While Goleman (1995) defined it as the ability to recognize and control emotions in ourselves and others. Subsequently, conflict in explaining intelligence, whether it was constructive abilities (Mayer et al., 2016), or a range of distinct emotional perceptions of personality traits increased (Petrides, 2010). The trait approach defined emotional intelligence as the set of behavioral tendencies and self-perceptions related to an individual's ability to recognize, process, and use emotionally encoded information (Ng et al., 2010).

Responsive reactions according to the ability and trait model:

1. Behavioral or motor expression: it is a spontaneous, identical response that depends on an individual's emotional perception and the nature of reactions that the individual developed to express repressed emotion (Hess & Fischer, 2013). According to the psychoanalytic approach, suppressed emotions can reveal themselves either through slips of the tongue, dreams, crying, or verbal errors. Perception may coincide with the similarity of contexts, and the individual may adopt verbal response emotional methods or some words that provoke emotion in a way that promotes positive or artificial adaptation to the social context, which is called social temptation (Hess et al., 1998).

2. Emotional imitation or mimicry: The approach of measuring emotional intelligence as ability ignores the subjective nature of EI and encourages the adoption of measurement processes like these used for assessing IQ (Petrides, 2010). In fact, EI as an ability is available to all individuals, however, its application can vary greatly according to the surroundings especially when individuals face unexpected situations. In some cases, individuals may turn to behavioral imitation to adapt to new situations. Based on previous experience and practice or some capability of emotional manipulation. Emotional imitation may be adaptive, such as imitating the emotional expressions of others while offering duties of condolence. For example, a person mimics specific facial movements that constitute a separate emotional expression to interpret the emotional intentions and symptoms in a fated context (implicitly or explicitly). Emotional mimicry depends on the relationship between the observer and the expresser as a social regulator (Hess & Fischer, 2013). The perceived ability to understand and differentiate various mood states and emotions can be clear due to the individual's self-concept's clarity, stability, and consistency (Tajmirriyahi & Ickes, 2022). Emotional imitation leads to multiple positive outcomes, especially in relationship management, increasing perceived quality and satisfaction with the partner, perceived pleasure in interpersonal interactions, and enhancing perceived enjoyment in interactions by gaining a deeper insight into overlooking the mistakes of others. (Hu et al., 2022; Tajmirriyahi & Ickes, 2022).

- 3. Expressive reactions of emotion: The ability model of Mayer and Salovey's EI emphasized emotional intelligence as the ability to monitor one's own and others' individual emotions, differentiate between them, and use this information to direct one's thinking and manage actions (Salovey & Mayer, 1990). Emotions manifest as specific cognitive, behavioral, and physiological reactions. These feelings are dynamic and are automatically aroused. They are essential for adapting to new situations. (Matthews et al., 2015). These emotions are necessary to adapt to new situations. Emotions result from a cognitive assessment of environmental stimuli (Denollet et al., 2008). There are three stages of processing emotional reactions: 1) comparing the emotion's nature with previous sentiments in the emotional experience, 2) Selective encoding of the emotion, and 3) forming a group of reactions that align with the context (McKeown & Curtis, 2014). The accuracy of processing emotional stimuli is positively related to the perspective of emotional intelligence as a trait because it depends on the interpretation of behaviors and their emotional impact on the individual. However, this discrimination of behaviors might suffer from a lack of accuracy if individuals cannot distinguish authentic emotions (Matthews et al., 2015). The nature of the response to emotional behavior can be explained as follows:
 - a. The physiological nature of emotional behavior: The physiological nature is related to the individual's tendency to act according to their emotions. Emotional reactions might lead to aroused reactions associated with violent behaviors, feelings of stress, and depression, and might activate feelings of sadness or anger to maintain their current state (Denollet et al., 2008). Physiological responses occur consciously and perceptibly, where an

individual instantly feels them, and the emotional experience cannot be easily described. The physiological aspects of emotion can be observed when the individual is saturated with affective stimuli. The physiological nature of emotion appears in the symptoms as the following: facial movement and expressions, vocalizations, and voluntary behaviors (Gross, 2008).

- b. The practical nature of emotional behavior: Emotions serve an ancient adaptive function that characterizes the healthy psychological functioning of individuals and affects decision-making. The degree of emotional adaptability depends on the individual's emotional regulation (Denollet et al., 2008). According to the ability model, emotional behavior may be characterized by unwise judgments in human relationships due to its bias. (Petrides, 2010). Conceptual knowledge related to a prior emotional experience is related to perceptions of the external world and, accordingly, produces an intentional emotional state because of the influence of the outcomes of a past event or context. The individual may be forced into this adaptive state to coexist with a certain reality (Mayer et al., 2000). The practical nature of emotion reflects the quality of the balance of the internal emotional state that connects that knowledge with the stimuli of the external world to achieve psychological flow or to withdraw from the emotional situation to refrain from harmful emotions (Barrett et al., 2007; Sternberg et al., 1986).
- c. The behavioral nature is shaped by the ongoing changes resulting from the emergent events that affect the mood state's nature and repeatedly trigger emotions. and affects the psychological flow and placing the individual in a state of stimulation or a sense of social and psychological alienation (Barrett et al., 2007; Gross, 2008). When these environmental stimuli of emotion are

assessed, there is harmony between behavioral and physiological reactions (Denollet et al., 2008).

Problems related to EI measurement tools:

The development of measures of emotional intelligence is rooted in cognitive theories that relate individual differences to social context and conditioning. Affective context theories emerged as a response to the inability of traditional measures of cognitive intelligence to predict individual success in daily life (Mayer & Brackett, 2004). Psychological evidence (Goleman, 1996; Mayer & Brackett, 2004) indicated that IQ contributes up to 20% to success in areas of life, while the rest of life factors are related to motivation, emotion, and understanding. In addition, emotion is associated with some aspects of personality. The function of emotion is emotional expression, making feelings important in making appropriate decisions and preparing the individual to deal with environmental demands (Denollet et al., 2008).

1. Emotion is a multifaceted perception of emotions. There is a perspective that studies it as a fusion that results in changes in subjective experience, behavior, and physiology because it is related to physiological aspects. Accordingly, emotional intelligence must be measured using situational tests (Gross, 2008; Mayer et al., 2016). The epistemological perspective of Durosini et al. (2021) showed that emotional intelligence is a mental construct that can be expressed in performance and problemsolving in an accurate and context-appropriate manner. According to the cognitive perspective, intelligence must be measured through task-based tests that are like measuring cognitive intelligence. While another perspective studies emotional intelligence as the ability to express feelings and understand them, this gives an unreliable impression because it makes emotion tend to be biased and interpreted

(Brackett et al., 2006). The trait perspective relates emotion to areas of human functioning such as coping, stress management, relationship satisfaction, workplace performance, quality of life, and subjective well-being. The measure of trait perspective relies on self-evaluation or introspection in interpreting these feelings toward the performance context (Matthews et al., 2015). In addition, pressures and emotionally charged situations cause emotional distortion of the variables and the individual's lack of acceptance of those variables due to the sensitivity of emotional perception and instability that may push the individual to interpret events negatively (Sheridan et al., 2006). The personality perspective is based on Bandura's theory of self-efficacy, which is the belief that an individual form is a basis for effectively evaluating a certain ability or skill, and that emotional self-competence in this way enables one to manage emotion by combining personal intelligence with social intelligence (Kanesan & Fauzan, 2019).

2. Interpretation of emotions is a problem, as the concept of emotional intelligence as a cognitive ability includes an ability that is not perceived by others, and its emotions, details, and embodiment can only be expressed by the factor of emotional experience (Petrides, 2010). Emotions may fall within the scope of the self and are affected by social and cultural characteristics. To accurately identify and understand feelings requires observing the behavior of others and self-impressions to act accordingly. Also, is the emotion direct, or is it artificial to adapt to the nature of the stimuli of the context, and thus this perspective is a merger between emotional ability and self-efficacy? Subjective impressions of the other's emotion may be an individual's guess considering the context of the conversation or depending on his personal experience (Durosini et al., 2021; Mayer et al., 2016).

- 3. The emotional experience may be artificial to gain temporary gains or to make the emotion prevail over the variables of the situation. He sees (Barrett, Mesquita, Ochsner & Gross, 2007; Gross, 2008) that emotional experiences are content-rich events that can be displayed in actions. Often, individuals direct their feelings to do something by soliciting sympathy from others, or emotional approach, empathy, or pretending to do some actions such as crying to show things other than those that the individual possesses. The perspective of traits as Petrides's (2010) conceptualization, every ability requires competencies related to the personal features or between the personality to enable the individual to access information, judge the artificiality of the emotional situation, act according to the emotional experience resulting from understanding the other, and suppress or prevent him from what issues, matches or modifies his actions. Emotional to adapt to the current context.
- 4. Considering emotional intelligence as social intelligence, and considering it the ability to understand and manage the feelings of others, and to act wisely in human relationships, is an imperfect concept because the internal state of the individual and others, or their motives, can only be achieved through their behaviors, and these behaviors may be wrong as a result of emotional conflict, or symptoms Depression, or the desire to cope with the contemporary context (Mayer & Salovey, 1993).
- 5. Managing self and relationships is sensitive to complex contexts. The complex context is due to the difficulty of emotional expression for several reasons, including the sensitivity of many personal and contextual circumstances of the individual. These expressions consist of a group of feelings rather than just a single emotion. The individual may find it difficult to choose appropriate language expressions to

accurately express his sentiments, which makes him feel confused (Seyeditabari et al., 2018).

Problems Related to Emotional Intelligence Theories:

All perspectives agree that emotional intelligence is both personal and social. Mayer and Salovey (1993) clarified that emotional intelligence involves understanding and managing individual emotions (personal) as well as the emotions of others (social). On the other hand, the Bar-On mixed model suggests that emotional intelligence consists of substructures encompassing personal interactions (intrapersonal) and interactions between individuals (social).

Goleman's developed model (Goleman, 2011) focuses on portraying emotional intelligence as self-awareness and self-management (personal) and social awareness and relationship management (social). Additionally, Mayer and Salovey's model (1993) considers emotional intelligence as part of emotional regulation, reflecting the efforts an individual makes to manage, modify, and enhance emotions towards oneself or others (Thompson, 1994).

As one of the elements of emotional intelligence, social competences are characterized by their presence in adults and are not fully developed in children due to a lack of wisdom in decision-making. Emotions, particularly in children, tend to dominate decision-making (Loeb et al., 2016). As a result, understanding a child's emotions is handled via the lens of social information processing, which serves as an indicator of emotional reactivity to certain events. A child's interaction with a guest at their father's house, for example, indicates their emotional response to that guest. Thus, within the mixed model of emotional intelligence, social interactions in children represent emotional comprehension, emotional control, and emotional expression in the context of social behavior. (Calkins et al., 2001).

Moreover, emotional intelligence necessarily relies on social competencies, and these competencies are typically cultivated outside the home environment for children. (Thompson, 1994).

The Four Elements model of emotional intelligence is based on the idea that skills are inseparable from the social context in which they are examined. This fusion of skills and context requires the self-awareness of appropriate norms of behavior for social interaction with others (Salovey & Grewal, 2005).

Considering this perspective, intelligence is a set of interrelated skills that allow an individual to efficiently and accurately process emotions related to emotion (Mayer et al., 1999). Tohme & Joseph (2020) defined it as the ability to process emotional information accurately and efficiently and to regulate subjective feelings. Thus, emotional intelligence relates to mindfulness to describe the cognitive, emotional, and behavioral characteristics of achieving emotion-based coping.

Given that emotional intelligence is related to verbal abilities, it moderately interacts with personality characteristics neuroticism, such as openness, agreeableness, conscientiousness, and extraversion. Therefore, emotional intelligence can be defined as a set of skills or competencies rather than personality traits, with the limitation that these skills work together in the same way in each social context (Salovey & Grewal, 2005). As a result, individual differences emerge in the emotional processing of information in social contexts. Individuals can share personal experiences, particularly those that are emotionally challenging, in a way that helps them achieve emotional fulfillment and improve emotional and psychological well-being. This highlights a trait perspective on emotional intelligence (Barrett et al., 2007; Calkins et al., 2001; Salovey & Grewal, 2005).

51 PSJER, 3(2), 2024

The nature of intelligence tests is characterized by a false allure, relying on the idea that they reintroduce personality variables within cognitive abilities. This results in appealing concepts that trigger the respondent's intuition, leading to responses that tend to be emotional, social, or creatively emotional. This has led to the diversification of approaches to studying emotional intelligence. Thorndike studied the social aspect as an entry point for social intelligence, while Gardner viewed it through the lens of emotion as a key to personal intelligence. Petrides (2009) considered it as predominant personal traits, including empathy, flexibility, and emotional regulation, among other dimensions of emotional intelligence.

The trait model of emotional intelligence introduced emotion as a distinctive feature of social behavior, focusing on personal, interpersonal, and social traits. It sees the integration of different intelligences as a false process, as emotions result from emotional, cognitive, motivational, and social contextual factors. Self-efficacy comes from activating these emotional traits to serve the individual in regulating or utilizing emotions for their benefit in the current context (Petrides et al., 2007). The difference between the ability and trait models of emotional intelligence lies in the individual's confidence in their emotional abilities and their adaptive use as a means of behavioral adjustment and success. The ability model is limited, as relying on maximal performance in emotional intelligence does not necessarily indicate an individual's ability to succeed. Introverted individuals or those with emotional muteness due to severe pressures they have experienced are examples of people who may not align with the ability model of emotional intelligence.

The current study aims to assess Emotional Intelligence using Petrides' Trait Emotional Intelligence theory (Petrides, 2009). According to this perspective, Emotional Intelligence is considered a representation of emotional self-efficacy. The difference between the ability and trait models of Emotional Intelligence lies in the extent to which an individual trusts their emotional capabilities and employs them adaptively. The ability model is considered limited because relying solely on maximum performance in Emotional Intelligence does not necessarily indicate one's ability to adapt successfully. Some individuals may be introverted or experience emotional silence due to the severity of pressures they face (Petrides, et al., 2007). The study aims to verify the structure of the Trait Emotional Intelligence scale through a comprehensive factor analysis, using exploratory factor analysis for the items of both the Trait and Ability measures. This approach is intended to determine the independence or interdependence of the factors constituting the scale and to assess whether the Trait model encompasses emotional ability and emotional self-efficacy.

The Present study

The study gap is relied on Petradis' assumption that the trait model depends on emotional self-efficacy, which is only realized in behavioral interactions through the availability of emotional ability. Therefore, the study attempted to investigate the ability component within the trait model in two ways. The first method assumes emotional intelligence as a cognitive ability, along with the concurrent use of a trait measure of emotional intelligence and the use of exploratory factor analysis. The other method is to verify the presence of factor differences in the two constructs of the ability and trait model.

The first objective of the study is to verify the theoretical assumption of the Petrides trait EI model that an integral component of EI as a trait is EI ability which is a pre-requisite to emotional self-efficacy. The second objective is to test the construct validity of the short form of trait EI questionnaire (TEIQues-30) among Egyptian university students.

Methodology

Study design

The study used a cross-sectional study design, a descriptive-analytical technique, and a comparative causal strategy to compare both the ability and trait models of emotional intelligence for the same sample across levels using confirmatory factor analysis. The study investigated the potential integration of the two constructs (EI ability and traits) in the presence of the general and sub-factorial variables for both models in a single analysis.

Sampling and sample profile:

The study sample consisted of fourth-year students at the Faculty of Education in Ismailia who were available recruited. 280 participants divided according to gender into 44 males and 236 females. The mean age of the participants was 21.37 years, with a standard deviation of 0.74 years.

The participants were tested during their exam period and were asked to deliver or achieve many assignments as they were in their final semester. In this situation, many students have declared to the researcher that they were under great stress. The objectives of the study were declared to students and they agreed to participate voluntarily in the study by filling out the agreement online consent.

Tools:

1. The Brief Emotional Intelligence Scale (BEIS-10)

The scale measures emotional intelligence using the ability approach. Davies et al. (2010) developed the BEIS-10 scale, a self-report measure consisting of ten items that assess

individual behaviors connected to understanding one's own and others' emotions, based on Mayer and Salovey's notion of emotional intelligence. The researchers updated the scale's wording to align it more closely with the concept of emotional intelligence as an ability, following Mayer and Salovey's (1990) concepts. The scale consists of five dimensions: appraisal of own emotions (items 1 and 2). Appraisal of others' emotions (3 and 4), regulation of one's own emotions (5 and 6), regulation of others' emotions (7 and 8), and utilization of emotion (9 and 10). A five-point Likert scale was chosen for the response on the items.

2. Traits Emotional Intelligence Questionnaire (TEIQue-30)

Petrides and Furnham (2001) define emotional intelligence as a set of emotional selfperceptions found at lower levels of personality traits. Structure relates to people's selfperceptions of their affective capabilities or emotional self-efficacy. The scale measures four factors: well-being, self-control, emotionality, and sociability. According to stability, the alpha coefficient was 0.83, 0.78, 0.75, and 0.79. The scale requires 25 minutes to respond to it. The Likert scale points of responses are reduced to five points instead of seven points. Petrides and Furnham (2001) test the second-order five-factor model and the second-order general factor model, the general factor model has a higher fit. The Cronbach's alpha ranged from .74 to .87.

Study procedures

The researchers announced the objectives of the study to all fourth-year students and announced that the students' responses to these tools were completely separate from their performance and grades in the course. The researchers obtained consent to conduct the research from the sample, as well as informed consent electronically before their responses to the scale, and accordingly, the student is considered to have withdrawn if he does not respond to the scale data. The application was done electronically through the Google Form platform at the link: <u>https://docs.google.com/forms/d/1xTxkmpiICWxc8atJsnq0uZd5QJqsRx1sH1_POje0Mh8/edi</u> <u>t#responses</u>

Data analysis

Exploratory factor analysis of items was used to test ability and traits emotional intelligence scales using the principal components (PC) method and orthogonal rotation using the Varimax and determining the number of extracted factors by two to study the general factor for each construct and let the items distributed in both constructs on it. In addition, the exploratory factor analysis using the principal axes factoring (PAF) method and the oblique rotation method using the Promax method was conducted to analyze the items of both structures in one analysis, so that the analysis includes nine extracted factors (five for the ability model, and four for the traits model). A cut-off point was chosen to accept item loadings in the first analysis equal to 0.34, and in the second analysis 0.45 to obtain the criterion for the parsimoniousness of the EFA model. The confirmatory factor analysis was used across levels to verify the extent to which there were differences in the sample's responses to the ability construct and the trait construct of emotional intelligence.

Results and discussion

1. Descriptive statistics

Descriptive statistics indicators were computed for the dimensions of the study models, including mean, median, variance, skewness, and kurtosis, as well as internal consistency using Cronbach's alpha coefficients for each subscale and the overall score. The results are shown in Table 1.

Table 1

Factor	Alpha	Mean	Median	Variance	Skewness	Kurtosis
Emotion assessment	.59	7.19	7	2.05	17	.02
Evaluation of others'	.67	7.98	8	1.87	31	.36
feelings						
emotion regulation	.58	7.34	8	2.52	43	.35
regulation of others'	.57	7.58	8	2.19	37	.08
emotions						
exploitation of emotion	.67	8.33	9	2.30	84	.39
Ability EI	.74	38.41	39	23.44	29	.22
well-being	.43	19.86	20	13.45	47	1.05
Self- control	.50	18.90	19	12.80	37	.96
Emotionality	.67	19.95	19	20.55	.45	.15
Sociability	.62	22.26	22	17.56	29	1.04
Traits EI	.77	80.98	81	136.15	54	3.22

Descriptive indices of Trait and Ability EI models.

The results showed that the dimensions of the two EI constructions (ability and traits) were normal distribution. Stability coefficients range from 0.57 to 0.67 for the dimensions, which are small values less than the accepted value, which is 0.7. This does not mean that the scale is not stable, but rather the variances of the responses of the individuals on the same items within the dimensions are close to some extent, which means the similarity of the sample individuals in the emotional traits measured by the ability scale. The small value of the variance of the total score relative to the mean score means that there is no significance in the emotional individual differences compared to the traits that inflated 136.15, and this may be due to the variant in the sample scores in relation to the emotional self-efficacy as the controller of the social and emotional traits that achieve control of the emotional behavior issued by one, which It brings him well-being.

2. General factor coherence in EI structure

Table 1 reveals the results of the exploratory factor analysis using the principal components analysis (PCA) method, and. Varimax rotation method. An item loading cut-off score was used as criteria 0.34 to retain items and to have a parsimonious EFA model. Table 2 shows the coherent factors in the EI as a trait model.

Table 2

General factor model is coherent in both the trait and ability EI model.

Factor 1 Ability EI m .34 .41 .30 .43 .45 .42 .38	Factor 2 odel
.34 .41 .30 .43 .45 .45 .42 .38	odel
.41 .30 .43 .45 .42 .38	
.30 .43 .45 .42 .38	
.43 .45 .42 .38	
.45 .42 .38	
.42 .38	
.38	
11	
.46	
.42	
.50	
Trait EI mo	del
-	-
-	-
.40	
	.35
	.50
.53	
	.58
	.59
.56	
	.48
.43	
	.36
	.32
	.51
_	-
	.46
	.38
	.49
52	
	.82
	.57
58	
.50	
_	.43
57	.т.,
- /2	-
	1 2 1
	4.31
13.14%	10.78%
	.46 .42 .50 <i>Trait EI mod</i> - - .40

The results revealed the relative stability of the items of the emotional intelligence scale as an ability, this suggests a cohesive structure for the ability scale, with all items converging onto a unified factor. In contrast, the items of the Emotional Intelligence Traits Scale converged onto two factors, confirming the dual structure. This implies the incorporation of both abilities and the concept of emotional self-efficacy in adapting to environmental variables. This result illustrates a certain overlap between the two constructions, due to the stressful conditions that the students face in their academic life. The distribution of trait items, which relies on experience and personal variables to describe emotional experience and processing, is loaded across both the ability and trait factors. This implies that students may adopt a mixed model of EI under academic pressure. Furthermore, individuals may be aware of their emotional abilities but may struggle to express them emotionally, as emotional self-efficacy may be low.

3. Coherence of EI trait and ability subscales:

The ability model of emotional intelligence consists of five factors, and the trait model of emotional intelligence comprises four sub-dimensions. Thus, the total number of factors entered into the analysis is nine factors. The researchers utilized exploratory factor analysis using Principal Axis Factoring (PAF) and Promax rotation, determining nine factors. They selected a cutoff point for saturation values of 0.45 to achieve model simplicity. The results are shown in Table 3.

Table 3

Factor coherence of Trait and Ability EI subscales.

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
	Abi	ility EI mo	odel						
1						.71			
2						.51			
3				.63					
4				.63					
5					.55				
6						.52			
7	-	-	-	-	-	-	-	-	-
8				.58					
9					.64				
10					.64				
	Tr	ait EI mo	del						
1	-	-	-	-	-	-	-	-	-
2 3	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
4							.67		
5		.47							
6	.55							.48	
7			.49				.49		
8			.62						
9	.61								
10			.58						
11	.50								
12		.53							
13		.64							
14		.59							
15	-	-	-	-	-	-	-	-	-
16		.55							
17	-	-	-	-	-	-	-	-	-
18			.67						
19	.66								
20	.59								
21	.53								
22							.55		40
23									.49
24	.68								
25	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-
27	.60	<u> </u>							
28		.60							
29	40							.57	
30	.48							.58	

Regarding the EI ability model, items 1 and 2 were loaded on one factor, indicating that the self-emotion appraisal factor is internally consistent with its items. Items 3 and 4 were loaded on the factor of evaluating the feelings of others, suggesting the cohesion of that factor. Additionally, items 9 and 10 were loaded on the emotion exploitation factor, which indicates the coherence of these three factors. However, there is a notable difference in the loading of items on the self-emotional regulation factor. One item loaded on the self-emotion appraisal factor, while another loaded on the emotional utilization factor. Consequently, the emotional regulation factor for others emerged from the structure of emotional Intelligence as an ability, as proposed by Durosini (2022).

Concerning the trait EI mode, the factor of well-being is the most coherent, as it encompasses five items out of six (5, 9, 20, 24, and 27) While Three items out of six loaded on the self-regulation factor (4, 7, and 22), and three items were loaded on the social factor (6, 11, and 21). The social and well-being subscales items combine into a single factor, and this may justify an individual's turn to interpersonal relationships in stressful situations as a means of coping with stressful situations and perceived well-being during such situations is an adaptive process that occurs through social integration with others. This indicates the importance that youth place on the social environment during this stage of their lives and how effectively they interact with it for adaptive coping in stressful situations.

Examining factors in the analysis for both models, we find that the absence of emotional selfregulation and emotional regulation for other factors from the ability model suggests that emotional arousal leads to diminish analytical thinking of thoughts and organizing them in context to achieve one's objectives. While, in the trait model, the emotionality factor diminishes under strain, corroborating the ability mode's prior finding of the absence of self and other emotional regulation.

4. Factorial invariant in Ability and trait EI model performance:

Multi-groups CFA technique was used to verify the differences between to structure goodness of fit for EI interpretation. The results are as follows in Table 4.

Table 4

Factorial invariant of Trait and Ability EI models.

Model	RMSEA	X^2	GFI	NNFI	SRMR	AGFI
Ability EI	.085	74.95	.98	1	.057	.95
Trait EI	.550	1472.24	.80	1	.12	.76
Invariant	.465	-	.18	0	.063	.19

The previous results highlighted that the differences between the two constructions were not quite big. This result may shed light on the fact that individuals' emotional self-competencies are unable to adapt to the course of the stressful environment. Emotional arousal is what controls a person, and emotional ability is an individual's awareness of his emotional capabilities and the capabilities of others, but in a state of arousal, a person is unable to use this ability either to control himself in the emotion he emits or to suppress his behavior during anger in dealing with others.

Conclusion

The main disagreement between researchers in the field of emotional intelligence revolves around defining what emotional intelligence: whether it is a structure of different and interrelated abilities or is it a distinct set of emotional impressions that can be considered part of personality traits This disagreement has influenced the methodology used to measure this variable (Durosini, 2022). Therefore, this study aims to investigate the existence of differences in the responses of fourth-year students at the Faculty of Education on two measures: emotional intelligence as a trait and emotional intelligence as an ability. No differences were found between the two groups, and this may give the impression that traits and abilities are intertwined or complementary. A person cannot act in a social context without the presence of emotional ability that can be used through the availability of a certain level of emotional self-efficacy. However, the trait model requires a level of personal experience that allows the use of emotion as an adaptive process to balance one's inner state (one's dominant mood) to gain personal and social harmony and meet the goals and needs of the situation. This is consistent with (Coskun et al., 2021; Fteiha & Awwad, 2020) results. It noted through the saturation of the items in the two-factor model that the trait model was distributed on two factors and that half of its items were distributed on the ability factor. Through the descriptive indicators, it became clear that the averages of the ability scores are close to the midpoint of the traits. This means that the emotional features of emotional intelligence require, in essence, the availability of the ability. The study of emotional ability alone is a deficient method, as that ability may be hidden or difficult to express, or that a person suppresses his emotions due to adherence to certain social rules that force them to adhere to a specific emotional pattern in a situation that triggers emotional reactions.

The overlap between the well-being and social subscales could be due to the nature of the pressures experienced by students in the fourth year, which affects the emotional processing of stressful situations. At this stage, the student seeks to achieve personal, academic, and professional growth and feels a constant need for advice from someone older than him. He may not find this advice, which hinders his sense of well-being, affects his perceived self-image, and creates restrictions in social interaction, and this is consistent with previous studies (e.g. Barrett et al., 2007; Calkins et al., 2001; Salovey & Grewal, 2005). The interaction between the two factors may be attributed to the fact that individuals under academic pressure may act without wisdom, leading to an imbalance in personal relationships with their peers. This, in turn, hinders the perceived social self-image, affecting the perceived well-being of others and increasing emotional conflict or insecure adaptation among fourth-year students. This may partially align with the opinions of Mayer and Salovey (1993), and Seyeditabari et al. (2018).

The current study used the traits scale for emotional intelligence of Petrides and Furnham (2001) because it has a discriminatory ability between youth and children, and it links personality traits, and the relationships between personality and experience, in contrast to the focus on the meta-mood traits model that is associated with fixing mood. Emotions and emotional attention are aspects associated with the ability to a high degree and control the emotional behavior of the individual (Moussa, 2021a, b), but this measure neglects experience and what the TEIQue scale addresses. On the other hand, the study employed the short version of EI scale as ability, because Mayer and Salovey's scale is not factor-specific, as psychological studies have varied in defining the number of factors. Moreover, it introduces ambiguity, as individuals may struggle to identify their emotional traits or might exaggerate their expressions.

Hence, the current study suggests that during stressful situations, an interaction occurs between trait and ability emotional intelligence. The individual may resort to employing his emotions or his emotional experience of others and activate his emotional self-efficacy to fully employ his emotional capabilities in stressful situations, which helps him develop his responses and achieve the desired interaction goals. Also, in these stressful situations, the individual may resort to imitating the behaviors of others in order to be able to adapt to them.

References

- Barrett, L. F., Mesquita, B., Ochsner, K. N., & Gross, J. J. (2007). The experience of emotion. *Annual. Review. Psychol.*, 58, 373-403. https://doi.org/10.1146/annurev.psych.58.110405.085709
- Brackett, M. A., Rivers, S. E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: a comparison of self-report and performance measures of emotional intelligence. *Journal of personality and social psychology*, 91(4), 780. <u>https://psycnet.apa.org/doi/10.1037/0022-3514.91.4.780</u>
- Calkins, S. D., Gill, K. L., Johnson, M. C., & Smith, C. L. (2001). Emotional Reactivity and Emotional Regulation Strategies as Predictors of Social Behavior with Peers During Toddlerhood. *Social Development*, 8(3), 310–334. <u>https://doi.org/10.1111/1467-9507.00098</u>

- Coskun, K., Kalin, O. U., & Aydemir, A. (2021). Is Emotional Intelligence Correlated with Values Among Primary Schoolers. SAGE Open, 11(2), 21582440211020747.
- Denollet, J., Nykliček, I., & Vingerhoets, A. J. (2008). Introduction: Emotions, emotion regulation, and health. In Emotion regulation (pp. 3-11). Springer, Boston, MA.
- Durosini, I., Triberti, S., Ongaro, G., & Pravettoni, G. (2021). Validation of the Italian version of the brief emotional intelligence scale (BEIS-10). *Psychological Reports*, 124(5), 2356-2376. <u>https://doi.org/10.1177/0033294120959776</u>
- Fteiha, M., & Awwad, N. (2020). Emotional intelligence and its relationship with stress coping style. *Health* psychology open, 7(2), 2055102920970416. <u>https://doi.org/10.1177/2055102920970416</u>
- Goleman, D. (1996). Emotional intelligence: Why it can matter more than IQ. Bloomsbury Publishing.
- Goleman, D. (2011). The brain and emotional intelligence: new insights. Regional Business, 94.
- Goleman, D. D. (1995). Emotional intelligence: Why it can matter more than IQ for character, health and lifelong achievement. Bantam Books
- Gross, J. J. (2008). Emotion regulation. Emotions, 3(3), 497-513.
- Hess, U., & Fischer, A. (2013). Emotional mimicry as social regulation. *Personality and social psychology review*, 17(2), 142-157. <u>https://doi.org/10.1177/1088868312472607</u>
- Hess, U., Philippot, P., & Blairy, S. (1998). Facial reactions to emotional facial expressions: Affect or cognition? *Cognition & Emotion*, 12, 509-532. <u>https://doi.org/10.1080/026999398379547</u>
- Hu, Y., Ren, X., Zhang, J., & Song, W. (2022). An experimental study on the movement characteristics of a social group in unidirectional flow. *Transportmetrica A: Transport Science*, 1-20. <u>https://doi.org/10.1080/23249935.2021.2017066</u>
- Loeb, C., Stempel, C., & Isaksson, K. (2016). Social and emotional self-efficacy at work. *Scandinavian Journal of Psychology*, 57(2), 152-161. <u>https://doi.org/10.1111/sjop.12274</u>
- Matthews, G., Pérez-González, J. C., Fellner, A. N., Funke, G. J., Emo, A. K., Zeidner, M., & Roberts, R. D. (2015). Individual differences in facial emotion processing: Trait emotional intelligence, cognitive ability, or transient stress?. *Journal of Psychoeducational Assessment*, 33(1), 68-82. <u>https://doi.org/10.1177/0734282914550386</u>
- Mayer, J. D., & Brackett, M. A. (2004). *Emotional intelligence: Key readings on the Mayer and Salovey model*. Port Chester, NY: National Professional Resources, 29-61.
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17(4), 433-442. <u>https://doi.org/10.1016/0160-2896(93)90010-3</u>

- Mayer, J. D., & Salovey, P. (1997) *What is emotional intelligence?* In P. Salovey & D. Sluyter (Eds.), Emotional development and emotional intelligence: implications for educators. New York: Basic Books. Pp. 3-3 1
- Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267-298. https://doi.org/10.1016/S0160-2896(99)00016-1
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sternberg, R. J. (2000). Models of emotional intelligence. JD Mayer.
- McKeown, M. G., & Curtis, M. E. (2014). The nature of vocabulary acquisition. Psychology Press.
- Moussa, M. (2021a). Social compensation and Emotional Gratification Needing as Predictors of Supportive Feedback Behavior among Social networks users'. *International Journal of Research in Educational Sciences*, 4(2), 323 - 352. Retrieved from http://iafh.net/index.php/IJRES/article/view/191
- Moussa, M. A. (2021b, January). Assessing the Construct and Convergent Validity of Trait Metamood Scale among Suez Canal University Students during Corona Pandemic. *Faculty of Education in Ismailia*, 2, 49, 19- 32
- Ng, K. M., Wang, C., Kim, D. H., & Bodenhorn, N. (2010). Factor structure analysis of the Schutte Self-Report Emotional Intelligence Scale on international students. *Educational and Psychological Measurement*, 70(4), 695-709. <u>https://doi.org/10.1177/0013164409355691</u>
- Petrides, K. V. (2009). *Psychometric properties of the trait emotional intelligence questionnaire (TEIQue)*. In Assessing emotional intelligence (pp. 85-101). Springer, Boston, MA.
- Petrides, K. V. (2010). Trait emotional intelligence theory. *Industrial and organizational* psychology, 3(2), 136-139.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European journal of personality*, 15(6), 425-448. <u>https://doi.org/10.1002/per.416</u>
- Petrides, K. V., Pérez-González, J. C., & Furnham, A. (2007). On the criterion and incremental validity of trait emotional intelligence. *Cognition and emotion*, 21(1), 26-55. https://doi.org/10.1080/02699930601038912
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British journal of psychology*, 98(2), 273-289. <u>https://doi.org/10.1348/000712606X120618</u>
- Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current Directions in Psychological Science*, 14(6), 281-285. <u>https://doi.org/10.1111/j.0963-7214.2005.00381.x</u>
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence and its relationship to other intelligences. *Imagination, Cognition and Personality, 9*(3), 185–211. <u>https://doi.org/10.1037/0022-3514.50.2.421</u>

- Seyeditabari, A., Tabari, N., & Zadrozny, W. (2018). *Emotion detection in text: a review*. arXiv preprint arXiv:1806.00674.
- Sheridan, M. J., Horgas, S., Fukunishi, I., & Wise, T. N. (2006). A revised emotional intelligence scale: Factor re-evaluation and item reduction. *Psychological Reports*, 98(1), 65-71. <u>https://doi.org/10.2466/pr0.98.1.65-71</u>
- Sternberg, R. J., Davidson, J. E., & Wagner, R. K. (Eds.). (1986). *Practical intelligence: Nature and origins of competence in the everyday world*. CUP Archive.
- Tajmirriyahi, M., & Ickes, W. (2022). Evidence that increasing self-concept clarity tends to reduce the role of emotional contagion in predicting one's emotional intelligence regarding a romantic partner. *Personality* and *Individual Differences*, 185, 111259. <u>https://doi.org/10.1016/j.paid.2021.111259</u>
- Thompson, R. A. (1994). Emotion regulation: A theme in search of a definition. In N. A. Fox (Ed.) Emotion regulation: Behavioral and biological considerations, Monographs of the Society for Research in Child Development (Nos. 2–3, Serial No. 240), 25–52.
- Tohme, O., & Joseph, S. (2020). Authenticity is correlated with mindfulness and emotional intelligence. *Journal of Humanistic Psychology*, 1- 18. https://doi.org/10.1177/0022167820940926