Doctoral thesis

Investigating Reliability and Construct Validity of Situational Test of Socio-Emotional Competencies in the Iranian Context

ELHAM MAFI KERMANSHAHI

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DIRECTORS

Dr. JOSEFINA SALA ROCA   DR. MEHRDAD AMIRI

Doctoral Program

Departament de Psicologia Bàsica, Evolutiva i de l'Educació

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ELHAM MAFI KERMANSHAHI

Vistiplau

Dra. Josefina Sala Roca   Dra. Mehrdad Amiri

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As for the search for truth, I know from my own painful searching, with its many blind alleys, how hard it is to take a reliable step, be it ever so small, towards the understanding of that which is truly significant.

— Albert Einstein

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Abstract

The present study was an attempt to investigate the reliability and construct validity of situational test of socio-emotional competencies in the Iranian context. To run the research, following the processes of translation, expert judgment, and piloting the test, a non-experimental exploratory study was designed and the modified reliable SSECDT Persian test was administered to 250 normal children (with the age range of 12 to 15) from both male and female genders studying at different educational centers (high schools) in Tehran from various districts. The collected data were analyzed through employing a) Cronbach's alpha for the purpose of estimating reliability of the test, b) intra-class correlation coefficients to find the internal consistency of the ratings of the five experts who evaluated the SSECDT based on content-related evidence, c) an exploratory factor analysis (EFA) to calculate the internal validity of the test, and finally d) a confirmatory factor analysis (CFA) which was run using LISREL 8.8 in order to probe the trait structure of the Persian version of the SSECDT. The results of data analysis revealed that the Persian version of the SJT developed by Sala-Roca et al. (2016) under the name of Situational Socio-emotional Skills Test (SSEST) firstly enjoyed significant internal consistency as the findings showed high degrees of reliability indices for the components of the test. Secondly, the results of data analysis revealed that the test had significant expert judgment validity based on Delphi method. Thirdly, the exploratory factor analysis (EFA) which was run to find internal validity of the test through varimax rotation using principal axis factoring method, showed that the test had significant degree of internal validity. In the fourth place, the data analysis results showed that the Persian version of the SSEST enjoyed significant construct validity as the confirmatory factor analysis (CFA) calculated through LISREL 8.8 investigated a model which included six latent variables; i.e. self-esteem, assertiveness, understanding others'

emotions, understanding own emotions, self-regulation and others' emotional regulation. In addition, these variables tapped on a higher order latent variable labeled as "SSEST". The findings have practical implications in clinical and educational psychology and sociology research.

Keywords: CFA, EFA, Reliability, Socio-Emotional Competences, SSEST, Validity

Resumen

El presente estudio pretende investigar la fiabilidad y la validez de constructo del Test Situacional del Desarrollo de Competencias Socioemocionales en el contexto de Iran. Para ello se realizó una traducción del test, una validación por expertos, una administración piloto y se diseñó un estudio exploratorio no experimental con la versión iraniana del test (SSECDT) que fue administrada a 250 niños (con edades de 12 a 15 años) de ambos sexos que estudiaban en diferentes institutos de Tehran. Los datos fueron analizados a partir de a) las alfas de Cronbach para estimar la fiabilidad del test, b) los coeficientes de correlación intraclase para analizar la consistencia interna de las puntuaciones de los cinco expertos que evaluaron el contenido del test, c) un análisis factorial exploratorio para calcular la validez interna del test, y finalmente d) un análisis factorial confirmatorio utilizando LISREL 8.8 para probar la estructura de la versión persa del SSECDT. Los resultados del análisis revelaron que la versión persa del test desarrollado por Sala-Roca et al. (2016) tenía una consistencia interna significativa a partir de los índices de fiabilidad de los componentes del test. En segundo lugar, el análisis reveló la validez del test a partir del análisis de los jueces utilizando el método Delphi. En tercer lugar, el análisis factorial exploratorio en que se realizó una. Rotación varimax mostró una significativa validez interna del test. En cuarto lugar, el análisis confirmatorio comprobó la validez de constructo de la versión persa con un modelo que presenta seis variables latentes: autoestima, asertividad, comprensión de las emociones de los otros, comprensión de las propias emociones, autorregulación, y regulación de las emociones de los otros. El análisis también identificó una variable latente superior etiquetada como SSEST. Los resultados tienen implicaciones prácticas tanto en la psicología clínica como educativa y la investigación sociológica.

Contents

I. Justification of the Research Problem

1.1 The General Background

The term EQ was coined by Bar-On in 1988 (Ahangar, 2012) and can be traced to early studies in the 1920s (Bar-On & Parker, 2000). Sternberg (1984) defined intelligence as "purposive selection and shaping of and adaptation to real-world environments relevant to one's life" (p. 312).

In the early 1980s, researchers initiated to conceptualize the notion of EI in a systematic way. Notably, Gardner (1983) was the pioneer who introduced the idea of multiple intelligences. He suggested that both intrapersonal and interpersonal intelligences should be considered as significant sorts of intelligence which are normally evaluated by Intelligence Quotient (IQ) and other relevant tests. Afterwards, he presented EI and characterized it as the capability to manage emotions.

The concept of 'social intelligence' was introduced by Thorndike (1920, as cited in Landy, 2005), who characterized it, as the capacity to comprehend and manage individuals to perform in a wise manner in human associations. The notion of EI emerged out of this specific definition. Likewsie Pacheco, Rey, and Sánchez-Álvarez (2019) declared that EI originated from the relationship between intelligence and social acts.

Subsequently, the notion of EI was popularized in the book called *Emotional Intelligence* (Goleman, 1995). Goleman clarifies that IQ is viewed to represent about 20% of the elements that determine achievements in life, and he claims that EI accounts for the rest of the elements. Emotional intelligence is considered as vital since emotional factors affect human relations in organizations more than rational elements (Ahangar, 2012). Other researchers have confirmed this very perspective (Gong & Jiao, 2019; Kim & Kim, 2017; Sfetcu, 2020).

Various definitions of EI have been proposed: Salovey and Mayer (1990) defined EI as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 185). Later on, Salovey and Mayer (1997) redefined EI as the capability "to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (p. 3).

Martinez (1997) considers EI as a collection of non-cognitive competencies and abilities that have an effect on an individual's capability to deal with pressures and demands around him. Goleman (1995) defines EI as an ability that helps individuals to understand their own feelings and those of others, to distinguish among various emotions properly, to use emotional information to assist thought and behavior, and to control and/or adjust feelings to adapt to environments or achieve goals.

Bar-On (1997) states that EI is a multiple-layered capability that goes beyond self-emotions and social composition, and focuses on non-cognitive capabilities that affect an individual's capability to succeed. Research has demonstrated that people with higher degrees of EI experience more performance related success in their lives than those who have lower degrees of EI (Goleman, 1995). In Schmidt and Hunter's (2000) words, intelligence is the "ability to grasp and reason correctly with abstractions (concepts) and solve problems" (p. 3). Mayer and Cobb (2000) propose that EI consists of four types of mental capability: a) emotional identification, awareness and expression, b) emotional facilitation of thought, c) emotional understanding, and d) emotional management.

4

Guerra, Modecki, and Cunningham (2014) indicate that assertiveness, self-understanding, self-regulation, empathy, and even self-esteem, are significant factors in the development of socio-emotional skills. In this respect, IARS group developed a test to measure the development of the emotional skills in adolescents from 12 to 18 years old. The test has been piloted and validated under the title of Situational Socio-Emotional Competences Development Test (SSECDT) by members of the IARS team (Josefina Sala, Gemma Filella, Xavier Oriol, Agnès Ros, Anna Soldevila, Esther Secanilla, Montserrat Rodríguez; Nair Zárate, Antoni Peregrino) and the GROP group (Núria Pérez). The test has been developed within the framework of a project funded by the Ministry of Economy and Competitiveness (EDU2013-43326-R) in Spain. The present study has focused on adaptation of the test in the Iranian context under the name of ''پرسشنامه مهارت های اجتماعی- عاطفی'' meaning Situational Socio-emotional Skills Test (SSEST).

1.2 Justification of the Research Problem

Interdisciplinary issues regarding research on EI have been surveyed and the results have shown that "EI in the work setting cannot be made under the scientific mantle" (Landy, 2005, p. 411). However, other studies show that EI meets the criteria put forward by a standard intelligence (Mayer, Caruso, & Salovey, 1999). The connection between EI and social competence among young learners has asserted the potential utility of EI in the context of academic institutions (Gil-Olarte Márquez, Palomera Martín, & Brackett, 2006). In this respect EI can take significance not only for wellbeing, but also for social integration and emotional health.

The association between EI and behavioral competence, as a positive youth development construct, has been well documented (Ma, 2006). Hence, it is necessary to introduce EI in the education of children and adolescents. In this regard, the social and emotional competence of young children has been surveyed (Domitrovich, Cortes & Greenberg, 2007). Likewise, the correlations between EI, personality, and the identified quality of social relationships among children have also been proved (Lopes, Salovey, & Straus, 2003).

One of the almost novel ideas presented in the EI literature is the association between EI and socio-emotional competences of children. Among recent works on EI one can refer to Halle and Darling-Churchill's (2016) study which reviewed measures of socio-emotional development and covered the bulk of literature on socio-emotional development based on 4 common subcategories: social competence, emotional competence, behavior problems, and self-regulation. As they proposed, EI enjoys a specific competence which is connected to other competences such as social competence.

Likewise, Jones (2016), who studied the influence of adverse childhood experiences, behavioral and emotional functioning and social context on social competence in the foster care youth population, found that both behavioral and emotional factors affect the social competence of foster care children. Teachers' awareness of the role of EI was found to play a significant role in the academic experiences of economically disadvantaged students (Harmon-Robins, 2016). This way the role intelligence could play in the academic experiences of poor students was highlighted. In this respect, measuring EI in the educational contexts seems a valuable task, however, most instruments measuring EI are expensive and for that cannot be used in the educational settings. Accordingly, constructing and implementing a test to measure

the development of the emotional skills in adolescents from 12 to 18 years old is of prime significance.

In terms of clinical interventions, it seems necessary to measure EI in children and adolescents to design individualized interventions. In this respect Schleider, Dobias, Sung, and Mullarkey (2020) have recently argued the significance of short-term interventions and their scientific orientation. More specifically, EI of children with misbehaviors could be taken into consideration as a significant factor affecting their behaviors and treatment procedure (Piqueras, Mateu-Martínez, Cejudo, & Pérez-González, 2019).

Parhomenko (2014) surveyed diagnostic methods of socio-emotional competence (SEC) in children. She proposed that there is a "need of developing a complex approach to evaluation of children SEC considering the age characteristics, child's development situation, participation of adults who constantly interact with the child, implementing the principle of unity of diagnosis and correction for further work" (p. 329). Nevertheless, almost no account of EI of young individuals based on Situational Socio-Emotional Competences Development Test (SSECDT) has been recorded in the related literature. Thus, the SSECDT is a copy left situational test to measure the development of Emotional competences among children.

As there is no instruments in Farsi to measure situational socio-emotional competences development, the present study tries to discuss previous studies which have focused on the situational tests or the components related to EI and then, it intends to validate the Persian version of the SSECDT developed by Sala Roca et al. in Iranian population.

II. Research Questions and Aims

2.1 Research Questions

This study was an attempt to answer these four research questions:

1. Do the components of Situational Socio-emotional Skills Test (SSEST) developed contribute to the reliability of the test?

2. Does the SSEST developed have expert judgment validity based on content-related evidence?

3. Does the SSEST developed have internal validity based on the participants' responses?

4. Does the SSEST developed enjoy construct validity? (What are the trait structures of the SEST developed?)

In order to answer these five research questions, the Spanish version of the Situational Socio-Emotional Competences Development Test (SSECDT) was translated into Farsi and was named the Situational Socio-emotional Skills Test (SSEST) to be more meaningful for the likely Iranian users and Persian speakers. Five experts were asked to check the content validity of the test. Two of these experts were university professors in social psychology and familiar with psychology research issues, another two were psychologist practitioners working with the psychology research center of department of education in Iran, and one was a university professor and psychometric expert who had conducted a lot of research in cognitive psychology and pragmatics. Then, the test was piloted with 50 normal children (with the age range of 12 to 15). Afterwards, the study was performed with 250 normal children, including the initial 50 ones as the participants. The test results were collected and Lisrel and SPSS were used to conduct the structural Equation Modelling (SEM) and other measures, respectively. The statistical analysis was carried out with the help of an expert who was proficient in statistics.

2.2 Research Aims

The present research aimed to explore the different components of the Persian version of the Situational Socio-Emotional Competences Development Test (SSECDT) and see whether these components contribute to the reliability of the test. In addition, the researcher was eager to see whether the developed test remained reliable concerning the performance of individuals with different genders. Also, the study aimed to see whether the developed test enjoyed an expert judgment validity based on content-related evidence. The internal validity of the developed test based on the participants' responses was also another concern of the researcher. The construct validity of the developed test and the trait structures of the test were also among the targets of the study.

III. Introduction

3.1 Emotional Intelligence (EI)

Emotional intelligence (EI) has developed as a domain of research since Salovey and Mayer (1990) defined EI and when it was popularized by Golleman (1995).While extremely prevalent in the business field and work place (Schlegel & Mortillaro, 2019), it is generally new to the world of higher education (Carter, 2015) and employing technology in the educational settings (Sanchez-Gomez & Breso, 2019). There are a lot of definitions of EI, yet supporters generally expect that the capacity to direct and control emotions will make individuals more intelligent (Brackett, Rivers, Shiffman, Lerner & Salovey, 2006). Mayer, Salovey, Caruso, and Sitarenios (2001) characterized emotion as "an organized mental response to an event that includes physiological, experiential, cognitive aspects" (p. 233). Low, Lomax, Jackson, and Nelson (2004) defined EI as "a learned ability to identify, experience, understand, and express human emotions in healthy and productive ways" (p. 9).

A review of the different definitions of EI found that there are common components including the utilization of critical thinking, coping with demands, the comprehension of one's self, and the capacity to create connections (Bar-On, 2006). Likewise, EI can consider the individuals' intelligence in using technological devices (Sanchez-Gomez & Breso, 2019) and creativity in solving problems (Gültekin & Icigen, 2019).

3.2 The Emergence of the Concept through the History

Though the idea of EI is relatively new to the field of psychology, allusions to the connections between thought and feeling in Western culture might go back to the beginning days of Greek philosophy, over 2000 years ago (Mayer et al., 2008). Bar-On (2006) finds the chronicled underlying foundations of EI research in the nineteenth century scientific work by Darwin (1872), whereby the significance of emotional expression to survival and adjustment

was noted. In the field of instruction, Allen and Cohen (2006) noticed that the social and emotional parts of training have been perceived as early as 3000 years ago, in Egypt, India and Greece, yet proposed that the more current perspective of EI goes back to Dewey (1896), who had accentuated the social and emotional essence of the classroom, the connections between social procedures and learning, and the need to coordinate social and emotional aspects into educating and learning. Nevertheless, until the twentieth century, affect and cognition were viewed generally as two separate mental procedures, and feelings were regularly seen as lower compared to thought and even as meddling with it (Mittal, 2020). It was at that point, with developing recognition that feeling and thought might not be so far separated as supposed (Mount, 2006), that the idea of EI was created and that most major hypothetical and experimental investigations in the field were published (e.g., Bar-On, 2006). As indicated by Mayer (2001), the advancement of the idea of EI within the twentieth century could be partitioned into the five following chronological eras. The following table shows the summary of the eras:

Table 3.1

Emotional Quotient Timeline

	Date	Author	Description
First Era	1930s	Edward Thorndike	Social intelligence: the ability to get along with other people
	1940s	David Wechsler	Suggested that affective components of intelligence may be essential to success in life
	1950s	Humanistic Psychologists (e.g., Abraham Maslow)	Described how people can build their emotional strength

	1975	Howard Gardner	Introduced the concept of multiple intelligence in his book named *'Shattered Mind'*
Second Era	1985	Sternberg	Utilized the term successful intelligence to show the relations between social, cognitive and emotional capacities, and the term practical intelligence to depict the social- emotional part of successful intelligence
	1987	Reuven Bar-On	Used emotional Quotient (EQ) in the unpublished version of his thesis
Third Era	1990	Peter Salovey & John Mayer	Published their article *'Emotional Intelligence'* in the journal *imagination, cognition, personality*
Fourth and	1995	Daniel Goleman	Popularized the concept of emotional intelligence in his book *'Emotional Intelligence: why it can matter more than IQ?'*
Fifth Era	1998	Epstein	Included social and emotional capacities in his Constructive Thinking model

3.2.1 The First Era (1900-1969)

During this period, intelligence and emotions were examined as two moderately isolated mental strands and cognitive intelligence was viewed as a noteworthy indicator of human change and the capacity to adjust, work and succeed (Dolev, 2012). Nevertheless, endeavors to recognize other different indicators of performance date back to 1920, to Thorndike, a pioneer in the field of scientific evaluation of intelligence. Thorndike (1920) recommended the idea of social intelligence, asserting that social practices can be intelligent and may include cognitive procedures.

This early proposition, in spite of not being generally acknowledged at the time, was later consolidated into the idea of EI (Bar-On, 2006). After one decade, Wechsler (1940), a standout amongst the most powerful specialists of intelligence, depicted the effect of non-intellective (non- cognitive) factors on what he pointed to as intelligent behavior, and contended that models of intelligence would not be thorough without more comprehensive constructs. Wechsler's famous intelligence test incorporates two sub-scales (comprehension and picture arrangement) that gauge parts of social intelligence.

3.2.2 The Second Era (1970-1989)

Within the 1970's, scientists started to investigate the connections between cognition and emotion and a new field in this regard developed, so that the term hot cognition, pointing to the connection between cognition and feeling within learning processes, was introduced (Tal, 2005).

This enthusiasm for the connections between cognition and emotion owed to a great extent to Gardner (1983), who had contended that conventional ideas of intelligence failed to represent noted varieties in accomplishment in individuals' lives (Bar-On, 2006).

In his theory of multiple intelligences, Gardner (1983) portrayed various intelligences (originally seven) which lead to achievement throughout everyday life, and proposed that only three of these (linguistic, mathematic, and spatial) could be gauged by the general-intelligence indices. He went ahead to distinguish instructors among the experts needing elevated amounts of interpersonal intelligence. The interpersonal and intra-personal intelligences in Gardner's model established the framework for the notion of EI. Sternberg (1985) utilized the term successful intelligence to portray the relations between social, cognitive and emotional

capacities, and the term practical intelligence to depict the social- emotional part of successful intelligence. Also, Epstein (1998) included social and emotional capacities in his Constructive Thinking model.

In his study of the improvement of the EI idea within this period, Mayer (2001) noticed the significant help of brain research and also that of other research domains, for example, nonverbal correspondence and artificial intelligence, to the illustration of the connections between feeling and thought (cognition). Likewise, the investigation of alexithymia – the failure to recognize, distinguish between, comprehend, portray, direct and express feelings (e.g., Taylor & Taylor-Allen, 2007) and the conceptualization of psychological mindedness – the craving to take in the conceivable meanings and reasons for emotional experiences – were additionally noted to add to the improvement of EI research (e.g., Bar-On, 2007).

3.2.3 The Third Era (1990-1993)

EI was first utilized by Salovey and Mayer (1990) as a component of their investigation of human intelligence, cognition, and affect. These researchers tried to recognize well-developed mental capacities that would enable individuals to know about feelings and to utilize emotional information to help thinking. Afterwards, the researchers characterized EI as the skill to "perceive accurately, appraise and express emotions; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotions and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Mayer & Salovey. 1997, p. 10). Salovey and Mayer (1990) contended that intelligence that is the ability to perform abstract reasoning, or more comprehensively, the ability to act intentionally, to think reasonably and to manage effectively one's condition (Salovey & Mayer,

1990), might be utilized not just with regards to numbers or words, yet in managing feelings (Mayer, 2001).

In their reference to feelings, Mayer and Salovey (1997) were tending to four principle segments: expressive, experiential, regulatory, and recognition. The researchers additionally focused on recognizing EI as a particular type of intelligence including feelings and distinguished a set of inter-related mental capacities that contained a hierarchal model of EI. This model, at first a three-part model, was later modified to incorporate four branches:

- Emotional perception, examination and articulation;

- Emotional integration – the capacity to utilize feelings to assist thought;

- Emotional understanding – the capacity to comprehend feelings and their meaning; and

- Emotion management – control of feelings in the self and others

Based on their broad empirical research and on the above-mentioned theory and model, Salovey and Mayer (1990) had continued to build up the Multifactor Emotional Intelligence Scale, MEIS, which later filled in as the foundation for a more up to date EI measure, the Mayer-Salovey-Caruso Emotional Intelligence Test, MSCEIT (Mayer, Caruso, & Salovey, 2000). Like assessment methods used to quantify different intelligences, the MSCEIT tool is a performance-based measure. It utilizes objective criteria and master, target and consensus scoring to assess the capacity of people to see, utilize, comprehend and control feelings in a set of emotion-related common life activities (Mayer et al., 2000). Information used to develop the MSCEIT showed acceptable reliability and validity (construct, content and discriminant) of the measure (e.g., Shriki, 2006), low to moderate correlations with cognitive measures, and low correlations with identity measures (e.g., Mayer et al., 2000).

Since constructing a performance measure is complicated, the MSCEIT has been the subject of a consistent procedure of refinement (Dolev, 2012). It is thought to be the main EI ability measure to date (Matthews, Zeidner, & Roberts, 2004). Saarni's (1990) study on emotional competence, in which she illustrated the advancement of emotional abilities and their associations with cognition and behavior in kids, generally was in line with the improvement of Salovey and Mayer's model (1990). Accentuating the significance of settings that encourage or restrain adaptive emotional development, Saarni (1990) recommended a series of interconnected social and emotional abilities that include emotional competence: awareness of self-emotional condition, understanding feelings of others and the impact of emotion correspondence on connections, utilization of emotion vocabulary, empathic contribution, controlling emotional articulations, feeling management and adapting, and emotional self-adequacy.

Further progressions in EI investigations within that time were made through brain research, principally the work by Damasio (1994). Damasio's (1994) investigation exhibited that human intellectual choices cannot be isolated from the activity of processing emotional information and offered more information about the improvement of emotional and social competence.

3.2.4 The Fourth (1994-1997) and Fifth (1998-Present) Eras

Within the fourth era, the notion of EI attracted much consideration and was developed and popularized (Mayer, 2001). Mayer and Salovey (1997) proceeded with their work on their model, while new models and measures, including those proposed by Goleman (1998) and Bar-On (1997), were developing. In the fifth (present) era the notion has been progressively

connected to various domains of practice, including education (Allen & Cohen, 2006), yet broad empirical investigation of fourth era models and measures and their consequent refinement have proceeded (Dolev, 2012). Improvements within these last two eras are hence discussed here together.

In his book, *Emotional Intelligence*, Goleman (1995) outlined the EI-related literature at the time, put EI in the focal point of both public and academic consideration and fortified the notion's further advancement. The initial interest with which the book and the idea of EI had been welcomed was connected to their inferred promise to solve the old fight between respecting and denying feelings and between feeling and cognition, which fit with the zeitgeist, the cultural spirit of the time (Mayer, Salovey & Caruso, 2000).

Goleman (1995) himself attributed enthusiasm for the notion to the fact that EI provided another point of view on abilities that could support school and life achievement and could help people to deal with different difficulties, including ones put forward by life in the modern era. A piece of Goleman's (1995) book was dedicated to the connection between EI and the helping professions, specifically ones that include kids, adolescents, and schools. He noted that schools are places where children's socio-emotional deficiencies can be rectified (Goleman, 1995). Goleman's part in building up the Collaborative to Advance Social and Emotional Learning (CASEL) (Elias, Hunter, & Cress, 2001) is proof of his enthusiasm for the subject.

3.3 Emotional Intelligence Models

The present section deals with issues pertained to the EI models. There are three noteworthy categories of EI models: ability, integrative, and mixed-model (Mayer, Roberts & Barsade, 2008). Ability models concentrate on one emotional/mental ability, for example,

emotional perception, emotion-assisted thinking, emotional reasoning, or emotion control (Mayer et al., 2008; Kanesan & Fauzan, 2019). Ability-based models enable specialists to concentrate on one particular component of EI and how it is created. These models are particular and narrow; and by themselves they do not give a complete picture of EI (Carter, 2015). However, such models have been recently used in studying the cognitive intelligence and job performance (Mittal, 2020; Nguyen, Nham & Takahashi, 2019).

Integrative models indicate EI as a strong, global capacity incorporating no less than two capacities (Mayer et al., 2008). While there are various integrative models, there are two seminal works that are pointed to most in the literature. The first seminal model in this respect is Izard's model of emotional knowledge (1993) which concentrates on emotion perception and labeling. Emotional knowledge includes a man's capacity to express and mark emotions and also comprehend the elements of such emotions. This emotional knowledge enables an individual to perform improvements in light of emotional motivation (Carter, 2015). The perception of emotion, while considered as a cognitive capacity, is only helpful when an individual can label and make meaning of that feeling in social settings (Izard, 2001). Hence, an individual with high emotional knowledge would have the capacity to precisely see, label, and use the feelings of himself/herself as well as other people. This model features an individual's capacity to adjust and change in light of the comprehension of emotions (Carter, 2015).

The second integrative model of EI was the 4-Branch (Level) integrative model created by Mayer, Salovey, and Caruso (2004). This model is a bit different from the model proposed by Mayer, Roberts, and Barsade (2008) as this model looks at emotions and how an individual can best use his/her emotional understanding and capacity in managing other individuals. The

22

primary level/branch of the model is the capacity to understand emotions and express them precisely. This understanding emotions competency includes the perception and interpretation of both verbal and non-verbal signals; and offers the establishment to facilitate emotional development. This prompts the second level of capability which is the capacity to produce and access feelings within facilitation. For instance, a person ready to decipher the non-verbal signals of a room and create sympathy while giving an introduction is practicing high second level EI, utilizing feelings to facilitate thought (Mayer et al., 2001). In this model, each competency expands on the skills created previously; a level-based chain of advancement and ability.

The third level of this integrative model represents the point at which individuals build up the capacity to comprehend feelings inside themselves and those of others, generally recognized as the understanding emotions competency. An individual who has built up this third level of EI would not only have the capacity to interpret the physical and emotional signs, and produce emotions, yet would likewise have the capacity to understand others.

The last level (the fourth level) of this model is acknowledged when an individual has built up the capacity to control feelings. An individual with this competency of EI can control feelings to address different circumstances (Mayer et al., 2004). This individual has control over his/her feelings and can decipher others' feelings. This individual does not permit his/her emotions to overpower and impact choices. Instead, an individual with a high emotional control competency can see, encourage, and comprehend the feelings inside him/her and the group, without giving those feelings a chance to control the circumstance (Mayer et al., 2004). This integrative model shows the idea of EI as a developmental task, with each branch (level) expanding upon past capacities. Integrative theories, in general, expect that distinctive

branches/capabilities/domains be produced and woven together to make a more emotionally intelligent individual (Carter, 2015).

In addition to the influential integrative models of EI, new models have been proposed relying on both mental and biological perspectives of EI. In his new definition of integrative model of intelligence, Petrides (2019) introduces *Radix Intelligence* relying on a discussion of misconceptions and pitfalls plaguing existing models of intelligence, with emphasis on the IQ literature. He argues that radix Intelligence can be considered "as the primal energy underpinning mind activity in its entirety "(p. 109).

Petrides (2019) argues that in the scope of personalized human mind, "the self-construct, a latent structure within the thinking stage of the Psycho-bionomic system, refracts the unitary flow of Radix Intelligence into a manifold of major traits, including cognitive, emotional, and social intelligence" (p. 109).

Mixed-model approaches give a more extensive definition of EI including capacities, emotional and social practices, and parts of personality theory (Gong & Jiao, 2019). Wang, Young, Wilhite, and Marczyk (2011) developed a model in view of four emotional component domains including empathy, self-management, and interpersonal relationship abilities. These elements are viewed as a procedure beginning with the improvement of self-awareness; the capacity to watch one's own particular behavior and know about how one's feelings impact one's behavior. Empathy, the capacity to comprehend another's feelings, was viewed as the second developmental level of emotional competency (Wang et al., 2011). The third level is self-management, where the capacities of self-awareness and empathy were utilized exhaustively to effectively deal with one's feelings both personally and in social collaborations. At last, an individual creates relationship abilities as an extension to the self-management

ability. In particular, an emotionally competent individual would have the capacity to have productive connections and communications within emotionally-charged circumstances. These abilities were believed to be produced through social and instructive conditions (Wang et al., 2011). This model was firmly connected to integrative models (Izard, 1993; Mayer et al., 2004); however, mixed-model approaches have a tendency to incorporate a procedure or hierarchy of improvement (Carter, 2015).

Petrides and Furnham (2000) characterized Mayer's Four-Branch integrative model as an ability-model because of the emphasis on cognitive emotional capacity. Petrides and Furnham (2000) arranged models of EI into two classifications: *ability/information-processing and trait*. Trait EI is about the improvement of emotional behaviors, for example, optimism, assertiveness, and empathy, which can be viewed as personality factors. Trait EI considers EI as an identity trait that fits inside the Five-Factor Model of Personality. A number of the personality traits that are straightforwardly identified with EI incorporate assertiveness, adaptability, emotional appraisal and expression, stress management, and self-esteem to give some examples (Petrides & Furnham, 2000). This mixed-model approach is a departure from other hypotheses as Petrides and Furnham (2000) put EI as a trait within personality instead of a different construct. Likewise, Sfetcu (2020, who has compared different mixed-model approaches of EI, argues that EI can be taken as competence which can represent a significant notion of one's personality.

A fundamental mixed model of EI was created by Bar-On (2006) and comprises of five social and emotional capabilities that people can create to build their EI. Bar-On (2006) defined emotional-social intelligence as "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express

ourselves, understand others and relate with them, and cope with daily demands." (p. 14). One competency is intrapersonal aptitudes which are simply the capacity to comprehend oneself, know about qualities and shortcomings, and to express feelings precisely. The next competency, interpersonal aptitudes, depends on one's capacity to comprehend others' feelings and work cooperatively in a group. The third competency is the capacity to deal with one's stress level concerning feelings (Bar-On, 2006). An individual who has stress management capacity can view feelings objectively and prevent them from affecting choices and results. At the point when an individual is stressed he/she may have a tendency to be over-emotional and allow feelings to impact choices and relationships. When an individual has high EI in this competency, nevertheless, he/she can adapt to stress steadily and hold feelings within proper limits (Bar-On, 2006). The fourth competency in this model is adaptability which is the capacity to adjust to every circumstance and social group. This is indeed basic to being effective in the workforce. An individual can build up this ability by becoming more quick-thinking and ready to settle on choices based on feelings, however not because of feelings (Bar-On, 2006). Eventually, Bar-On (2006) believed that an individual who developed high EI would likewise have a strong feeling of mental wellbeing. This prompts the last competency of general mood, including positive thinking, satisfaction, and self- motivation. The Bar-On model is a standout amongst the most referred to and investigated models of EI and gives an exhaustive definition and clarification of the skills that can be created to expand a man's capacity to adjust and handle distinctive emotional circumstances (Leedy & Smith, 2012). Also, Sfetcu (2020) argues that mixed model of Bar-On's mixed model of emotional intelligence refers to performance potential rather than performance itself, being process-oriented rather than results-oriented.

26

Hence, Sfetcu concludes that this model cannot be expected to provide the educational researchers with a result-oriented perspective.

While there is broad research with regards to scholastic accomplishment and EI, there is limited research concerning EI and learner development (Carter, 2015). Low et al. (2004) proposed a learner development model which included EI. This mixed-model approach to EI depended on the hypothesis that learners can build up the capacity to distinguish and express, comprehend and encounter feelings (Nelson, Low, & Nelson, 2005). The model depends on four abilities: interpersonal development, personal leadership, self-management, and intrapersonal development. Interpersonal development incorporates the advancement of good connections through the improvement of affirmation, anger, and anxiety management. Personal leadership incorporates the improvement of social awareness, sympathy, decision making, and positive impact. The third competency is centered on learners' self- management, particularly of his/her profession and individual life. This advancement of self-management incorporates drive, time management, responsibility and hard-working attitude, and positive change. At last, a learner develops intrapersonal competency in confidence and stress management (Low et al., 2004). This model depends on the Emotional Learning System (ELS) and was used in the Javelina EI Program at a large southern university (Low et al., 2004).

Allen, Shankman, and Miguel (2012) proposed a model of EI for use in preparing student leaders. The model is founded on three domains of consciousness and 21 abilities with regards to development. The Emotionally Intelligent Leadership (EIL) theory is a reconciliation of the mixed models talked about before (Allen et al., 2012). The primary domain is consciousness of setting and identifies with the learner having the capacity to decipher and comprehend the circumstance in which he/she is leading. The capacity to offer diverse

leadership in view of various circumstances is basic to superior leadership performance (Boyatzis, Stubbs, & Taylor, 2002). The second domain includes the advancement of self-consciousness. The abilities in this domain depend on the idea that pioneers ought to comprehend themselves and their values to genuinely be superior leaders. This self-consciousness enables learners to build up a feeling of identity and expands the feeling of personal responsibility, self- management, and self- motivation. The third domain is consciousness of others and includes the advancement of relationship building abilities (Allen et al., 2012). The abilities in this domain highlight ideas, for example, cultural consciousness, communication skills, and group dynamics. The researchers additionally created a self-report measure to go with this theory, the EIL Inventory. This theory is critical to this proposed investigation as it is the main published examination focusing on a student development /emotional intelligence model (Allen et al., 2012). With the shortage of research concerning student development theory and its combination with EI, there is additionally a gap of knowledge with regards to the experiences that aid the improvement of EI (Carter, 2015).

If instructors acknowledge that EI underlies socio- emotional learning, they should then decide if it is fitting or profitable to utilize ability EI to predict scholarly accomplishment and achievement; provided that this is true, they should then create strategy and practice to promote further research (McCuin, 2012).

Since the term intelligence conveys with it the idea that it points to an intrinsic and settled capacity, justifying its thought as something we can teach or impact in an instructive setting has been troublesome (McCuin, 2012).

There is proof that intelligence grows to some degree with age. In any case, the inquiry for instructors is whether they can teach this ability, or a set of consciousness, control, and

decision-making aptitudes to learners to enable them to build their positive determination of issues and set objectives that will improve their scholastic and social objectives and achievement (McCuin, 2012). Humphrey et al. (2007) investigated a number of the measures of EI to take note of the distinctions in the different perspectives, to see whether there are efficient measurement instruments. They discovered that the attribute tests (MEIS, MSCEIT) do appear to be legitimate and measure individuals' ability, while the trait and personality forms for the most part depend on self-reports which could be linked to social desirability. Likewise, trait and personality notions are firmly connected to different factors such as identity, personal desires, and social forces, hence, they have less reliability and validity.

Based on the Collaborative for Academic, Social, and Emotional Learning Web website (2007), SEL points to a kid's "ability to recognize and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations constructively" (p. 1). It comprises of the deliberate adjustment of EI building blocks into precisely developed projects that are planned to upgrade learners' socio-emotional abilities through cautious attention to teaching, modeling, and practice opportunities.

The original EI investigators (Mayer & Cobb, 2000) also believe that in spite of the fact that looking at learning higher EI is not meaningful, the adjustment in language to incorporate socio- emotional learning is acceptable. This small change suggests that it is conceivable to enhance emotional recognition and comprehension. With regard to blending EI into education, Mayer and Cobb contend that the acknowledgment of EI in instruction expands our comprehension of being smart. EI "may help educators better grasp the whole learner—that the information we convey as educators is both cognitive and emotional" (Mayer & Cobb, 2000, p. 178).

3.4 EI Empirical Studies

The present section deals with presenting the empirical studies found in the literature concerning measurements and tests of EI.

3.4.1 Measurement of Emotional Intelligence – General Methods

Van Rooy and Viswesvaran (2007) noticed that "for any construct to be useful, it should be measurable and individual differences should be quantifiable" (p. 260). Likewise, Gong and Jiao (2019), who conducted a meta-analysis of articles measuring EI, argued that emotional intelligence requires more accurate measurement scales to minimize the inflated decline effects. In fact, the idea of EI has been highlighted from its initial days by endeavors to gauge it, and refinements of such endeavors proceed today. The two primary categories of measures; i.e. performance measures and self-report measures, have risen, to a great extent in line with the frequently used models of EI in the related research.

Performance or ability measures, intended to assess the maximal performance level of people on EI-related activities, depend on a response format from which an accurate answer can be inferred by utilizing objective criteria typical to intelligence tests (Van Rooy & Viswesvaran, 2007). Such measures, characterized by the MSCEIT, are appropriate for estimating EI as an ability and are utilized in conjunction with the ability approach (Boyd, 2005; Sfetcu, 2020).

Self-report measures depend on self-perceptions in people and utilize self-rated arrangements of EI-related descriptors (Wilhelm, 2005). Such measures, utilized fundamentally as a major aspect of the competency approach, are targeted to reflect emotionally intelligent behaviors (Mayer et al., 2000). Of the extensive number of such EI self-report measures, the two measures most ordinarily used to date are the Emotional Quotient

inventory EQ-i (Bar-On, 1997), and the Emotional Competency Inventory ECI (Goleman, Boyatzis, & McKee, 2002). Nevertheless, a self-report measure related to the ability approach (to be specific the Emotional Intelligence Scale, or EIS) is likewise accessible (Schutte et al., 1998). On the other hand, Dang, King, and Inzlicht (2020) argue that self-report and behavioral measures are weakly correlated. This might down grade using self-reports as a reliable measure of EI.

Performance measures offer insignificant response bias but are tedious, difficult to utilize and require individual administration (Robitaille, 2007). Besides, their scoring techniques have raised concerns (Van Rooy & Viswesvaran, 2007). For instance, inquiries over the MSCEIT scores, and specifically over the convergence between the expert, agreement and target scoring strategies; the potential sensitivity of the initial two to cultural impacts (Van Rooy & Viswesvaran, 2007); the likelihood that consensus scoring may reflect conventionality (Boyd, 2005); and the restricted tasks used to evaluate every one of the model's four branches (Wilhelm, 2005) have been raised. Spector and Johnson (2006) noticed that performance measures might "not reflect the live performance of EI in the rich social situation of real life" (p. 335).

On the other hand, self-report measures are simpler and faster to manage and can offer significant data about internal procedures and experiences that can barely be evaluated by performance tests, and which might be available to the self-reporting person only (Van Rooy & Viswesvaran, 2007). In the meantime, such measures are indistinguishable from components such as self-perception, inspiration, understanding and social desirability and thus might be inclined to bias (Day & Carroll, 2008; Nguyen, et al., 2019). To enhance reliability, self-report

measures may incorporate extra scales that measure and correct potential distortions (Van Rooy & Viswesvaran, 2007).

Progressively, performance and self-report EI measures are seen as measures which evaluate diverse, but equally vital, parts of the EI notion, and the consolidated utilization of the two measures has as of late been suggested (Hajncl &Vučenović, 2020). Moreover, while existing EI measures are persistently being refined and while new measures are being created, EI measures of the two kinds have exhibited great levels of reliability and validity and have the possibility to "capture a respectable place among other widely accepted measurement techniques applied in selection, training and elsewhere" (Pacheco, Rey & Sánchez-Álvarez, 2019, p. 94).

3.4.2 The Multi Factor Emotional Intelligence Scale (MEIS)

Roberts, Zeidner, and Matthews (2001) surveyed if emotional intelligence could attain traditional standards set for an intelligence. They used the Multi Factor Emotional Intelligence Scale (MEIS) to perform a multivariate and performance-based investigation (Mayer, et al., 1999) in which 704 participants were asked to complete the TSDI (The Trait Self-Description Inventory), and also the ASVAB (The Armed Services Vocational Aptitude Battery). The obtained results were confusing: MEIS demonstrated convergent validity as indicated by the moderate correlation with the ASVAB. It also indicated divergent validity since it was minimally correlated with the TSDI. However, dissimilar scoring protocols (i.e., expert and consensus) resulted in ambiguous discoveries. Other measurement issues were found while analyzing the factor structure and estimating the reliability of the subscale. Overall, it was

reported that MEIS could not operationalize EI as construct with satisfactory reliability and validity attached to it.

Likewsie, Kim and Kim (2017), in their study concerning emotional intelligence and transformational leadership as a multi factor notion found that both of these constructs are highly correlated. In fact, different factors of transformational leadership could show correlation with the multi factor emotional intelligence scale used in the study.

3.4.3 The Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT)

Mayer, Salovey, Caruso, and Sitarenios (2003) attempted to measure EI with the MSCEIT. The Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT) was utilized and the researchers tried to investigate (a) whether the test answers were considered as accurate by the participants of a standardization sample and also a group of emotions experts; (b) the reliability of the target test; and (c) the factor structures of EI. Twenty-one emotions experts certified a large number of the same responses. This was also true about 2,112 individuals of the standardization group. Both groups demonstrated agreement, specifically when research provided clearer responses to test questions. The MSCEIT could attain satisfactory reliability while confirmatory factor analysis reinforced theoretical models of EI. These discoveries are considered as great help to shed light on issues raised in emotion research.

Gil-Olarte Márquez, Palomera Martín, and Brackett (2006) studied the relationship among emotional intelligence, social competence, and academic success in high school students and found that "the MSCEIT was discriminable from well-established measures of personality and intelligence. The test was also moderately related to social competence and predicted students' final grades. Most of the findings remained significant after personality and academic intelligence were statistically controlled". (p. 118).

Sanchez-Garcia, Extremera, and Fernandez-Berrocal (2016) calculated the factor structure and psychometric properties of the Spanish version of the Mayer-Salovey-Caruso Emotional Intelligence Test and found that the test enjoyed high construct validity. Likewise, in a systemic article, Odukoya and Olowookere (2020), Reviewed 43 Studies on the Psychometric Properties of Mayer–Salovey–Caruso Emotional Intelligence Test and found irrespective of the psychometric principle that no psychological instrument can have acceptable construct and criterion validities without a robust content validity, the content validity gap tends to put to question the authenticity of all the reported indices of validity of the MSCEIT.

3.4.4 The Self-Perception Profile for Children (SPPC)

Muris, Meesters, and Fijen (2003) tried to investigate how reliable and valid the Self-Perception Profile for Children (SPPC) was along with an emphasis on establishing its factor structure. A group of school children in Netherlands (N =1143) completed this profile. Results indicated the suitability of the factor structure of the target profile. In addition, the profile demonstrated a satisfactory level of internal and test-retest reliability as well as reasonable validity. This profile was particularly suitable as it demonstrated correlations with personality and psychopathology reports of children, parents, and teachers in a meaningful manner.

Spaten (2019) who investigated the psychometric properties and validation of the Danish self-perception profile argued that because of its significance reliability and construct validity derived based on CFA, the Danish version of this instrument is appropriate for individual assessments and in studies of self-concept.

3.4.5 The College Student Life Space Scale (CSLSS)

Brackett, Mayer, and Warner (2004) evaluated the discriminant, criterion and incremental validity of College Student Life Space Scale (CSLSS) which is an ability measure of EI. College students (N=330) were given the CSLSS with the reliabilities of alpha=0.62 to 0.88 (M=0.81) and Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT) with a split-half reliability of (r=0.90). They also measured the Big Five personality traits: neuroticism (α =0.85), extraversion (α =0.84), intellect (α =0.80), agreeableness (α =0.82), and conscientiousness (α=0.80). This investigation evaluated the discriminant, criterion and incremental validity of a capacity measure of passionate knowledge (EI). Undergrads (N=330) took a capacity trial of EI, a measure of the Big Five identity attributes, and gave data on Life Space scales that evaluated various self-mind practices, relaxation interests, scholarly exercises, and relational relations. Female participants scored altogether higher in EI than their male counterparts. EI, be that as it may, was more prescient of the Life Space criteria for male participants than for females. Lower EI in guys, primarily the failure to see feelings and to utilize feeling to encourage thought, was related with negative results, including illicit medication and liquor utilize, degenerate conduct, and poor relations with companions. The discoveries stayed noteworthy even after factually controlling for scores on the Big Five and scholastic accomplishment. In this example, EI was essentially connected with maladjustment and negative practices for school matured guys, yet not for female participants.

Perazzo et al. (2020) studied the trait EI questionnaire in the Brazilian context and compared it with the already available data bases in the United Kingdom and Latin-American and came to know that "the Brazilian EI test is psychometrically sound and can be

recommended for research and practical use" (p. 1), as it could gain the evidence of incremental validity of trait EI for life satisfaction and happiness over and above the Big Five.

3.4.6 The Relationships between Trait EI and Objective Socio-Emotional Outcomes in Childhood

Mavroveli, Petrides, Sangareau, and Furnham (2009) explored the relationships between trait EI and objective socio-emotional outcomes in childhood. The results uncovered that trait EI scores were positively associated with both peer-rated pro-social behavior and general peer competence. They could also predict the accuracy of emotion perception beyond general peer competence. According to what trait EI theory had hypothesized, the construct was not related to IQ and academic achievement. Indeed, trait EI could be efficiently operationalized through the TEIQue -CF and had important and multifaceted implications for the socialization of primary schoolchildren. In line with the above mentioned study, Petrides et al. (2018) investigated emotional intelligence as personality in the educational contexts for children and found that "research-based applications of trait EI theory in educational settings can yield concrete and lasting advantages for both individuals and schools" (p. 49).

3. 4.7 The Social Emotional Competence Questionnaire (SECQ)

Zhou and Ee (2012) created a 25-item scale for the Social Emotional Competence Questionnaire (SECQ) that characterized five aspects of SEC: self-awareness, social awareness, self-management, management of relationship, and responsible decision-making. A series of four investigations were reported in order to develop and validate the measure.

Confirmatory factor analyses of the responses of 444 fourth-graders indicated a satisfactory fit of the model (self-awareness α =.62; social awareness α =.72; self-management relationship α =.68; management α =.62; responsible decision-making α =.72). Zhou and Ee (2012) developed and validated the social emotional competence questionnaire (SECQ) which is viewed as a reliable and valid measure of kid's and teenagers' socio-emotional competence. Brasseur, Grégoire, Bourdu, and Mikolajczak (2013) specified the profile of emotional competence (PEC) and developed and validated "a self-reported measure that fits dimensions of emotional competence theory" (p.626).

3.4.8 The Test of Emotional Intelligence (TIE)

Śmieja, Orzechowski, and Stolarski (2014) designed the Test of Emotional Intelligence (TIE) as a new ability scale based on a hypothetical model that defines EI as a collection of skills responsible for the processing of emotion-related information. The validation study indicated the reliability and validity of the TIE which demonstrated its appropriateness for scientific investigation and individual assessment.

3.5 EI for Children and Adolescents

The present section deals with relevance of EI to children and adolescents in their social development, emotional health and adjustment to their context. As the amount of research in this area is vast, the researcher will present some examples of the empirical studies that illustrate the broad impact of the EI.

3.5.1 Trait EI and Kid's Peer Relations at School

Petrides, Sangareau, Furnham, and Frederickson (2006) investigated trait EI and kid's peer relations at school. Their 160 participants were asked to nominate classmates who fitted each of seven distinct behavioral descriptions (co-operative, disruptive, shy, aggressive, dependent, leader, and intimidating). Students with high trait EI grades were given more nominations for co-operation and leadership and less nomination for aggression, disruption, and dependence. Factor analysis of the results demonstrated that high trait EI students were able to score higher on the pro social factor. On the other hand, they scored lower when it came to the antisocial factor.

3.5.2 EI, Psychological Well-Being and Peer-Rated Social Competence in Adolescence

Mavroveli, Petrides, Rieffe, and Bakker (2007) investigated EI, psychological well-being and peer-rated social competence in adolescence. They explored the connection between trait EI and four distinctive socio-emotional. The sample consisted of 282 Dutch adolescents (136 girls and 146 boys) with a mean age of 13.75 years. Results demonstrated that trait EI had a positive association with adaptive coping styles. On the contrary, it had a negative correlation with number of bodily complaints and depressive thoughts. A negative correlation was also seen with maladaptive coping styles only in boys. Teenagers with who received high trait EI scores were more nominated by their peers as co-operative individuals. In addition, high trait EI scores indicated leadership qualities in individuals as reported by girls.

3.5.3 The Role of Trait EI and Socio-Emotional Skills in Students' Emotional and Behavioral Strengths

Poulou (2010) studied the role of trait EI and socio-emotional skills in students' emotional and behavioral strengths and difficulties among Greek adolescents and found that "students with higher trait emotional intelligence and stronger social and emotional skills were less likely to present emotional, conduct, hyperactivity and peer difficulties and more likely to present pro-social behavior" (p. 30).

3.5.4 The Connection between Disruptive Behaviors and the Emotional Abilities in Primary Schools

Esturgó-Deu and Sala-Roca (2010) analyzed the connection between disruptive behaviours and the emotional abilities in primary schools. To perform the study, the two constructs were assessed in 1422 students aged between 6 and 12 at eleven training centers utilizing EQIjv. No connection was discovered between disruptive behaviors and age, yet one was found for sex and emotional abilities as boys displayed more problematic behaviors than girls. Nevertheless, there was a significant connection between behaviors and the general index of EI. The most associated capacities were interpersonal relations and management of stress.

3.5.5 The Impact of EI on Coping Strategies and Mental Health in Adolescence

Davis and Humphrey (2012) investigated the impact of EI on coping strategies and mental health in adolescence. Results demonstrated that while EI influences mental health by

flexible *selection* of coping strategies, trait EI modifies coping *effectiveness;* particularly, high levels of trait EI strengthen the beneficial effects of active coping and reduce the effects of avoidant coping to minimize symptomatology.

In a recent study, Nyarko, Peltonen, Kangaslampi, and Punamäki (2020) investigated the protective mental health function of high emotional intelligence (EI), and cognitive skills (CS) among Ghanaian adolescents when exposed to stressful life-events and violence. The study firstly examined how exposure to stressful life-events and violent experiences could be associated with mental health, indicated by depressive and psychological distress symptoms, and, secondly, it sought for finding whether EI and CS could serve as possible moderators between stress, violence and mental health problems. 415 Ghanaian secondary education students had formed the study participants and they were asked to report about their depressive symptoms, psychological distress, and emotional intelligence, and cognitive skills. They also reported their stressful life-events and violent experiences. Statistical analyses were conducted using structural equation modeling (SEM). As hypothesized, high level of stressful life events were associated with high levels of depressive symptoms and psychological distress. Yet violent experiences did not associate with mental health problems. Against hypothesis, high levels of EI and CS could not protect adolescents' mental health from negative effects of stressful life events or violent experiences. A direct effects were found between low level of EI and CS and high level of mental health problems in adolescence.

3.5.6 EI skills of Disadvantaged Children

Oriol, Sala-Roca, and Filella (2014) investigated the challenges of young people in residential care in Catalonia (Spain). The Emotional Quotient Inventory (EQ-i) was given to

30 youngsters in residential care and the outcomes were compared with those acquired from a group of 89 youngsters from the normative population. EQ-i was also administered to a group of 33 youngsters marked with disadvantaged backgrounds. The purpose was to discover whether contrasts in emotional capabilities were because of the impacts of institutionalization or the disadvantaged family condition. In general, no significant difference was observed in the level of EI as indicated by the three groups. Nevertheless, the examination by gender indicated contrasts: boys in residential care received significantly lower scores in comparison with both the normative population and adolescents coming from disadvantaged families on the EQ-i as well as the component scale adaptability. Also, they received significantly lower scores compared with their counterparts in the normative group on general mood. In addition, lower scores were reported for these boys in comparison with the youngsters from disadvantaged families on management of stress. Nevertheless, no differences were observed between girls in residential care and their counterparts in the normative population; however, residential care girls received higher scores compared with those coming from disadvantaged families on the EQ-i and also on the interpersonal and adaptability scales. However, Zárate-Alva and Sala-Roca (2019) found that girls in care had lower EQ-i than girls not in care, but they don't differ from other disadvantaged girls. This signifies the importance of residential care for the disadvantaged children and shows how such a care can affect both their EI skills development and their social life.

3.5.7 The Connection between Emotional Understanding and School Success in Primary-School Children

Franco, Beja, Candeias, and Santos (2017) analyzed the connection between emotional understanding and school success in primary-school children. *Test of Emotion Comprehension, Colored Progressive Matrices of Raven, Socially Action and Interpersonal Problem-Solving Scale* were utilized. The structural equation model demonstrated the connection between the emotion understanding and school performance is dependent on designated social competence.

Although the concept of EI has been vastly investigated in the literature, almost no account of EI of young individuals based on Situational Test of Socio-emotional Competences (CSE) has been recorded in the related literature. This paper was an attempt to investigate the reliability and construct validity of situational test of socio-emotional competencies in the Iranian context and thus bridge this gap.

In their qualitative study on primary school pupils' emotional experiences in 46 schools in England, Humphry and Hampden-Thompson (2019) focused on understanding the emotional aspects of pedagogical approaches for primary-aged school children engaged in synchronous audio-led one-to-one online tuition. In a 27-week study, they randomly selected 600 students receiving an online mathematics tuition intervention. They employed focus groups and interviews with learners and school staff to investigate the pupils' emotional experiences of the mathematics intervention, with reference to the pupil–tutor relationship and the online environment. They found that "audio-led synchronous one-to-one online tuition provides variable and limited access to emotionally positive pupil–tutor relationships" (p. 100). Hence, it can be argued that irrespective of the positive points the modern technology provides

for the educational settings, the role of emotional intelligence is minimized in such technology-dependent educations.

Through a meta-analysis of 158 scientific articles and citations, MacCann et al. (2020) investigated whether individuals' EI could predict their academic performance. They found that following intelligence and conscientiousness, EI can be considered as the third most important predictor for academic performance. Hence, it can be argued that in case the learner's EI is enhanced, it is likely that s/he can have a better performance in the educational settings and can be a more successful person in the social context. This is also in line with the goals of pedagogical centers in selecting students. In fact, schools and universities devote considerable time and resources to developing students' social and emotional skills, such as emotional intelligence (EI). The goals of such programs are partly for personal development but partly to increase academic performance (MacCann et al., 2020).

3.6 Emotional Intelligence Situational Judgment Test

3.6.1 Situational Judgment Test

Situational Judgment tests (SJTs) are used to assess people' reactions to a number of hypothetical positions, which mirror conditions applicants are probably to come across in the target position. Those situations are primarily based on a detailed evaluation of the position and need to be developed in collaboration with issue matter specialists, in order to correctly examine the key attributes which are related to competent overall performance (Sorrel et al., 2016). SJTs have been vastly used by different organizations in Europe and North America for the purpose of personnel selection (Lievens & Chan, 2017; McDaniel, Morgenson, Finnegan, Campion & Braverman, 2001; Whrtzel & McDaniel, 2009). Such test have been designed in

order to assess candidate judgments with regard to the likely situations they might encounter in the work place (Sorrel et al., 2016; Weekly & Ployhart, 2006). In this regard, SJTs are supposed to diagnose the job applicants' self-esteem, emotional factors, self-recognition, understanding others' emotions, and self-regulation. Likewise the factors related to job performance of the applicants could be taken into consideration in SJTs (Sorrel et al., 2016). Christian, Edwards, and Bradley (2010) mentioned that SJTs could be classified onto four different categories with regard to their purpose and underlying construct to be measured. Basic personal tendencies, skills and knowledge, social skills applied to the work place, and mixed unspecified features were the four categories they presented.

From a theoretical angle, SJTs are believed to measure pro-social Implicit Trait Policies (ITPs), that are shaped through socialization processes which teach the application of expressing certain constructs in distinctive settings including agreeable expressions (e.g. assisting others in need), or disagreeable actions (e.g. advancing one's own interest at others expense) (Lievens & Chan, 2017). Likewise, McDaniel and Nguyen (2008) employed SJTs for job-related situations and asserted that as such tests are accompanied with the factors such as reality and fidelity, they were more likely to predict the candidates'' relatedness, workability, and emotions in the workplace.

The distinction between the written SJTs and the video-recorded ones have been discussed in the literature in an attempt to collect the more reliable data in this respect, especially in employing personnel in some organizations (Weekly & Jones, 1997). A video-based test includes some scenarios which are presented to the applicant and each scenario reports a specific job-related issue and at a specific and critical moment which is called "moment of truth", the video stops and the applicant is asked to choose one of the actions out

of many ones based on the scenario (Dalessio, 1994). Also, Funke and Schuler (1998) employed multimedia situational judgment test and argued that both video-taped and multimedia oriented SJTs enjoyed high stimulus fidelity and could portray the situation appropriately for the applicants.

Written SJTs have also been increasingly used in different job-related situations and for different purposes such as personnel employment (Christian et al., 2010; Lievens & Chan, 2017) and predicting personnel workability and fidelity (McDaniel & Nguyen, 2008). In addition, some scholars (Amiri & Birjandi, 2015; Jianda, 2010) used SJTs to measure inter-language pragmatic knowledge of EFL learners and argued that such tests measure both language functions and pragmatic knowledge of the interlocutors in different social contexts.

Academically speaking, it has become evident the need to include emotional education in the different educational settings. It has been demonstrated that social-emotional skills influence the transition processes into adulthood of young people in care (Sala-Roca, Villalba, Jariot & Rodríguez, 2009). These skills are also related to better academic outcomes (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011), and more positive ties with their friends and their parents (Lopes, Salovey & Straus, 2003).

3.6.2 STEU and STEM Tests

Situational Test of Emotional Understanding (STEU) and the Situational Test of Emotion Management (STEM) can be considered two significant measures of emotional intelligence (EI) developed by McCann and Roberts (2008). In their seminal article entitled "new paradigms for assessing emotional intelligence", they focused on multiple sources of validity evidence including relationships with EI, vocabulary, personality, and emotion-related criteria.

Also, they found significant correlations between STEU and STEM scores and clinical symptoms, finding relationships to anxiety and stress for both tests, and to depression for the STEM. Eventually, they reported that new performance-based approaches to test development, such as STEU and STEM, might be useful in distinguishing between test and construct effects. They also signified that such tests could be sued for developing EI interventions.

Some scholars believe that EI should be considered as a set of constructs within the domain of intelligence. That is why tests such as STEU and STEM take significance. Ferguson and Austin (2011) who have studied the factor structures of the STEM and the STEU (McCann & Roberts, 2008) in an attempt to find personality and individual differences. As they reported, "the results did not support a factor structure of either measure's subscales indicated by the approach used in developing the test items" (p. 791). Nor did the examination of the factors obtained using parallel analysis to determine the number of factors to extract "yield interpretable factors" (p. 791). These findings suggest that only total scale scores should be used for these tests, although the general factor extracted from the items was not strong for either test.

Considering EI as an ability, Fiori and Vesely-Maillefer (2018) studied the theory, challenges, and new directions of EI. They accounted the Situational Test of Emotional Understanding (STEU) and the Situational Test of Emotion Management (STEM) introduced by MacCann and Roberts (2008) as the tests which can reliably EI ability of individuals. They believe that the participants could be asked "to select, among a list of five, which emotion best describes how the protagonist would feel in each situation (STEU) or which course of action would be most effective in managing emotions in each situation (STEM)" (p. 29).

Yan, Feng, Xu, and Li (2019) investigated the psychometric properties and criterion validity of the brief versions of STEU and STEM, as two performance-based emotional intelligence tests, in the Chinese context. They relied on item response theory (IRT) analysis to conduct the experiment and found that both of the tests enjoyed "acceptable internal consistencies, and similar mean proportions of correct responses, item parameters, item information functions, and test information functions in China, as reported in previous studies" (p. 1). Furthermore, the scores obtained through these two instruments were found to be related to the employees' psychological strain, job-related affect, job satisfaction, and supervisor-rated job performance in a theoretically hypothesized manner. It could be deciphered that these tests could be employed in EI studies as reliable measurements.

In an attempt to understand the role of emotional intelligence in usage of social media, Madaan, Bhatia, and Bhatia (2020) employed the STEU and STEM tests as measures of evaluating EI among their participants who were social media users. They considered EI as a series of cognitive abilities in emotional working.

3.6.3 The Socio-emotional Competences Development Situational Judgment Test (SCDSJT)

3.6.3.1 The design of the SCDSJT

Sala Roca et al. (2016) developed and validated a judgment situational test to assess the development of socio-emotional competences as a sort of SJTs which assesses six socio-emotional skills, including self-esteem, assertiveness, self-understanding, self-regulation, empathy and emotional regulation of others, by introducing a number of situations which testees must say how they would respond to. This test includes 30 items in Spanish and could be used for both children in home care and out of home care in both schools and clinical centers.

Mafi Kermanshahi and Sala-Roca (2018) argue that this test could measure the emotional intelligence of young individuals considering their socio-emotional competences (CSE).

As Rodríguez Pérez, Sala Roca, and Doval Diéguez (2018) report, the IARS group has developed the DCSE-J test to provide a copy-left tool for professionals who work with children in care. The test has been validated by experts and by factorial analysis with a sample of 932 subjects. The DCSE-J includes the two scales of emotional regulation and emotional understanding the factorial analyses of which have been already confirmed.

It is worth mentioning that Rodríguez Pérez et al. (2018) reported on their study concerning the verification of the temporal stability (test-retest) of the test of social-emotional skills development in young people (DCSE-J). To do so, they administered the test to the initial sample of 167 individuals who were students from the Faculty of Education Sciences of the Autonomous University of Barcelona. The test-retest method was used in a 3-4 weeks interval and then, the data were analyzed. After the analysis of the verification questions, 48 people were discarded and the final sample consisted of 119 students (10.1% were boys; 89.9% were girls). The results indicated the confirmation of the temporal stability of the DCSE-J. Likewise, DCSE-J scores showed evidence of reliability and validity for the psycho-educational diagnosis of the measurement of social-emotional skills in young people.

Rodríguez Pérez, Urrea Monclús, Sanz Escutia, and Sala Roca (2018) investigated the convergent validity of the test of social emotional skills development in young people (DCSE-J). To conduct the convergent validity of the test, the researchers selected two tests considering the DCSE-J components, their criteria of validity and reliability. These tests were

Trait Meta-Mood Scale (TMMS-24) by Salovey, Mayer, Goldman, Turvey and Palfai (1995, as cited in Rodríguez Pérez et al., 2018) and the scale of assertiveness of RATHUS

(1973), adapted to Castilian by Carrasco, Clemente and Llavona (1984) as cited in Rodríguez Pérez et al. (2018). DCSE-J included the two scales of emotional regulation and emotional understanding confirmed by factorial analysis. 211 (67,0 %) of the study participants were girls, 32 (10,2 %) were boys, and 2 (0,6 %) were others and their average age was 20.80 years (S.D. = 2.211. The results reveled that in the convergent validity was not confirmed in the preliminary analysis. The reason might lie in the fact that the tests used to analyze the convergent validity were not situational tests, like the DCSE-J. Also, the target population of the DCSE-J were youth under 18 years, and the sample of the study was an average of 20.80 years (S.D. = 2.211). However, the feedback provided by participants showed that the test could be considered as a simple tool that probably could awaken the interest of the boys and girls answering it. In addition, DCSE-J could be taken into consideration as an interesting tool for children's care professionals and it could be used at no cost.

Moreover, Sala Roca, Rodríguez, and Doval (in press) have reported on the design and validation of a situational judgment test of socio-emotional competence development in young people. They have found evidence of a two factorial structure; understanding emotions, and regulating emotions. Also, they are testing the criteria validity of the test.

3.6.3.2 The Components of the SCDSJT

As Sala Roca et al. (2016) argue, SCDSJT assesses five socio-emotional skills, including self-understanding, self-regulation, empathy and emotional regulation of others, assertiveness, and self-esteem by introducing a number of situations which the likely testees must say how they would respond to. The coming sub-sections deal with describing the components of the SCDSJT.

3.6.3.2.1 Self-Esteem

Self-esteem is an assessment of one's own worthiness and competence, however theoretical views emphasize the significance of the social world in shaping self-esteem. Our self-perspectives are thought to develop from our interactions with others and the way we agree with others see us (Harter, 2012).

Socio-meter theory highlights the social nature of self-esteem and posits that it is a socio-meter, or mental gauge that indicates the extent to which one is accepted by others, supporting people hold their social ties. The stable element of self-esteem is seen as one's judgment that she or he is typically valued and accepted by others, and as the ''resting state'' of the socio-meter (Leary, 2012).

Self-esteem is reasonably stable throughout time and contexts, but it is also mutable, mainly during developmental transitions including those from childhood to adolescence, and adolescence to young adulthood (Huang, 2010).

In childhood, stability is taken into consideration to be low due to the fact self-esteem is emerging and not completely shaped throughout this time (Robins et al., 2002). In adolescence, stability is argued to be higher than in childhood because of an improved cognizance of self, however lower relative to young adulthood due to maturational and social modifications which are experienced throughout this time (Orth & Robins, 2014).

Furthermore, the concept of self-esteem is ubiquitous in present day life. In classrooms and offices, sporting events and music recitals, humans normally expect that high self-esteem is crucial to success in that area. In fact, the promoting of self-esteem, and the prevention of low self-esteem, is broadly perceived as an essential societal aim that deserves widespread

intervention to enhance self-esteem degrees in the population. But, until lately, the scientific literature supplied few insights into the nature and improvement of self-esteem.

Self-esteem refers to a person's subjective assessment of his or her worth as an individual (MacDonald & Leary, 2012). Importantly, self-esteem does not necessarily mirror someone's objective abilities and talents, or even how someone is evaluated by others. Furthermore, self-esteem is typically conceptualized as the "feeling that one is 'good enough,'" and therefore people with high self-esteem do not always believe they are superior to others (Rosenberg, 1965, p. 31). Thus, self-esteem includes feelings of self-acceptance and self-respect, in comparison to the excessive self-regard and self-aggrandizement characterizing narcissistic individuals (Ackerman et al., 2011).

3.6.3.2.2 Assertiveness

Assertiveness is a behavior and verbal exchange technique differing from passive and aggressive behavior. Powell (2000) notes that self-assertiveness is an alternative to competitive behaviors that appears to abuse the rights of others. He additionally explains that self-assertiveness can assist in understanding one's self, self-confidence and self-esteem. Self-assertiveness saves strength and decreases emotions of despair by means of not constantly thinking or worrying about offending others, not thinking a lot and feeling stressed while making choices. A person who has proper self-worth is normally assured and glad of their selves.

Haadi (2013) notes that self-assertiveness may be seen through the person's behaviors or verbal exchange while expressing emotions, thoughts and ideals truly without disputing the rights of others. Assertiveness is a self-protection method of one's rights to mention in addition

to share what is thought, felt and believed frankly, in a sincere and open manner, at the same time respecting the rights of others (Shafie et al., 2018).

3.6.3.2.3 Self-Understanding

In their situational socio-emotional test Sala Roca et al. (2016) consider understanding one's own emotions as a significant notion. However, other scholars refer to understanding one's own emotions using similar terminologies such as self-understanding and self-concept (Bosacki, 2017; Markus & Nurius, 1984; Townend & Brown, 2016). Although it seems constructs like "self-concept," "sense of self," Understanding one's own emotions and delete the other and "identity" are increasingly famous among theorists of pro-social behavior, these constructs have been invoked without a lot specification of what they may be taken to intend, nor with much systematic testing. Four distinctive conceptual models of the self-understanding drawn from social and developmental psychology are taken into consideration right here:

- *Self-Understanding as Content*

The most usual method to define self-understanding is to ask people to describe themselves, and then to categories each of the resulting views and self-reports regarding a content coding technique. If sure kinds of factors are commonplace in self-descriptions, then those factors define the self-concept and are anticipated to be associated with self-evaluation and behavior as well. For example, in a study of the self-descriptions of delinquent adolescents, Oyserman and Markus (1990) observed that this group made fewer references to their academic aspirations and greater references to future criminal activities than did a group of formally non-delinquent adolescents. In the context of pro-social behavior, we anticipate that individuals who describe the self in terms of ethical character traits, moral aspirations, and moral actions

might be much more likely to be involved in pro-social activities, and to evaluate the self in those terms, than others whose self-descriptions emphasize other traits.

- *Self-Understanding as a Semantic Space*

To model the self-understanding as a network of multiple representations which are arrayed in a *semantic space* is also viable. Semantic space also consists of representations of critical others. Studies of this kind proceeds through eliciting descriptions of different representations of self and important others.

Developmental and social psychologists have studied a number of different representations of self: the *actual self* (i.e., the person you are now), the *undesired self* (the kind of person you hope never to be) (Ogilvie, 1987), the *ideal self* (the person you would ideally like to be) (Bybee & Zigler, 1991), *temporal selves* (the person you were some years ago, the person you will be in some years) (Hart et al., 1993), *ought selves* (the person your parents expects you to be) (Strauman & Higgins, 1988), and *social selves* (what are you like when you are with your family? with your best friend?) (Ashmore & Ogilvie, 1992).

The location of these representations within the subject's semantic space is identified through assessing the similarity of these pairs of representations. If representations are defined in similar terms, they are defined as being in close proximity within the subject's semantic space; however, if the two representations are defined in very distinct ways, they are defined as being far from each other within the subject's semantic space.

- *Self-Understanding as a Hierarchy of Selves*

Social psychologists have stated that it is useful to envision the various representations of self and others a person might arranged in a hierarchy (Markus & Wurf, 1987). These different representations may overlap to varying degrees, with some representations subsuming others;

for instance, the ideal self may be a part of the actual self. The extent to which these representations overlap is thought to provide important clues to the creation of the self-concept (Rosenberg, 1988).

Patterns of similarity among the representations are used to identify set relations among representations rather than proximities. For instance, if two selves (A and B) are described with the same, or nearly the same descriptors, then A and B belong to the same set. If A and B are defined with very distinctive descriptors, they belong to disjunctive sets. Ultimately, if A is defined with all (or almost all) of the descriptors that symbolize B, however A consists of many descriptors that are not characteristic of B, then A may be superordinate to, B (Rosenberg, 1988).

- *Self- Understanding as Theory*

The approach that emphasizes the individual's construction of a theory about the self is the final approach to the self- understanding. Researchers have tried to identify the theories with which different people of different ages organize information about the self (Hart & Fegley, 1995).

Damon and Hart (1991) have identified three types of theories, each constructing a developmental level, which adults may believe about themselves. Level 1 is typically found only among young children. At Level 2, the self is described in relation to normative physical or social standards. For example, "I'm a careful driver and a good painter" might be a Level 2 description of self.

At Level 3, the theory of self-understanding is social acceptance and integration. The main concern for individuals at Level 3 is "being liked" and "fitting in." For example, "I'm a friendly person; this is important because it means people would like me."

At Level 4, self-understanding is organized in the context of systematic beliefs and life plans. The meaning of the self comes from its connections to important values and goals. For example, an adult may describe the self as "nice to others; this is important because it is crucial to respect others."

3.6.3.2.4 Empathy

Although the definition of empathy has varied considerably over the last decades, assumptions regarding the importance of empathy are pervasive (Batson, 2009). A fundamental assumption concerning empathy is that it both facilitates prosocial (Eisenberg & Miller, 1987) and inhibits antisocial behavior (Jolliffe & Farrington, 2004).

People with high empathy recognize how others feel (i.e., cognitive empathy) and also enjoy their feelings (i.e., affective empathy). Therefore, empathy is an investigative device, permitting people to glean affective data through cognitive approaches and emotional simulations. It is assumed that human beings with high empathy use this data to relieve the suffering of others and keep away from engaging in potentially dangerous behavior, while individuals with low empathy cannot use such data to guide their behavior. As a result, perpetrators of antisocial behavior, violence, and rape are frequently defined as having inadequate empathy (Miller & Eisenberg, 1988).

Moreover, empathy plays an essential role in numerous externalizing syndromes encompassed in the Diagnostic and Statistical manual of mental disorders (American Psychiatric association, 2013), consisting of conduct disorder, antisocial personality disease, and narcissistic personality disease.

Empathy deficits additionally play a critical role in psychopathy, a personality disorder characterized through chronic aggression and different styles of antisocial behavior (Hare & Neumann, 2008).

3.6.3.2.5 Emotional Regulation: Self-Regulation and Emotional Regulation of Others

Emotions rise up while something critical to us is at stake. Occasionally, emotions are caused simply automatically, for example, whilst we draw back fearfully from a snake (LeDoux, 1995). At other times, emotions rise up only after extensive meaning analysis, like while we go mad after hearing a belittling remark made about a friend (Frijda, 1986). In either case, emotions call forth a coordinated set of behavioral, experiential, and physiological reaction inclinations that collectively have an effect on how we reply perceived challenges and possibilities.

Although, most of the time, our emotional responses match well with the demands of our different life circumstances, that is, our emotions serve us nicely (Tooby & Cosmides, 1990), emotional responses can also mislead us, particularly when contemporary physical and social environments vary considerably from those that formed our emotions over the time (Gross, 1999). Consequently, our emotional responses may be more harmful than soothing. When our emotions seem to be ill-matched to a given situation, we frequently try to regulate our emotional responses so that they better serve our goals.

Consequently, emotion regulation refers to the strategies by using which we have an impact on which emotions we have, while we have them, and the way we experience and express them (Gross, 1999). Due to the fact emotions are multicomponent processes that unfold

over the years, emotion regulation includes modifications in emotion dynamics, rise time, magnitude, length, and offset of responses in behavioral, experiential, or physiological domains (Gross, 1999).

Emotion regulation additionally includes modifications in how reaction components are interrelated as the emotion unfolds, such as while increases in physiological responding occur in the absence of overt behavior. Three elements of this theory of emotion regulation deserve remark. First, despite the fact that people frequently attempt to lower negative emotion, there exists more to emotion regulation than this. People increase, hold, and decrease negative and positive feelings (Parrott, 1993). Second, many examples of emotion regulation are conscious, including figuring out to modify an upsetting subject matter, or biting one's lip while irritated. However, emotion regulation can also arise without conscious awareness, such as while one exaggerates one's pleasure upon receiving an unattractive gift (Cole, 1986), or while one shifts attention away from something upsetting very fast (Boden & Baumeister, 1997). Third, emotion regulation is neither inherently appropriate nor terrible. The same techniques that allow clinical experts to function effectively (Smith & Kleinman, 1989) may also neutralize empathic distress in torturers (Bandura, 1977).

3.7 Reliability and Validity Concepts in Research

Any test or questionnaire which intends to measure one or more hidden constructs of human beings requires to enjoy both reliability (meaning instrument consistency which refers to one's consistency of scores in an interval) and construct validity (meaning the ability of a test to measure the intended attribute or construct and to fulfill the test purpose). Likewise, both internal and external validity concepts, as standards of assessment in research, are taken serious

in both quantitative and qualitative approaches in research (Denzin & Lincoln, 2008). Situational judgment tests which are similar to inter-language pragmatic tests rely on specific situations to be focused on by the individuals taking the test. Hence, the answers given to any question asked might be correct but the degree to which an answer takes the highest rank depends on the immediate social context (McCrudden, Marchand & Schutz, (2019). The following sub-sections focus on general information on reliability and its types, validity issues, and finally the discussion of these two notions in the SJTs.

3.7.1 Reliability

Reliability as defined by Mousavi (2012) is "a quality of test scores which refers to the consistency of measures across different times, test forms, raters, and other characteristics of the measurement context" (p. 580). Reliability is an indispensable quality of any measurement process, for unless test scores are relatively consistent, they cannot provide us with any information at all about the ability we want to measure. If one does not know the reliability of the available data, little faith can be put in the results obtained and conclusions drawn from the results. Concern for reliability comes from the necessity for dependability in measurement. Synonyms for reliability are: dependability, stability, consistency, predictability, and accuracy (Goodwin & Goodwin, 2016).

McCrudden et al. (2019) argue that a test can have a high reliability index in case it can produce similar results while administered in consistent conditions. Internal consistency or reliability is so significant for a test or questionnaire that in case it does not gain enough reliability, it cannot be used in the studies conducted in the area of that test or questionnaire. The more reliable a test, the more confidence the researcher would have on the scores obtained

(Amiri & Birjandi, 2015). In other words, the researcher is somehow sure that similar scores will be obtained in the repeated measurements of the same ability.

In educational contexts, for example, if a student receives a low score on a test one day and a high score on the same test two days later (the test does not yield consistent results), the scores cannot be considered reliable indicators of the individual's ability. Or, if two raters give widely different ratings to the same sample, we say that the ratings are not reliable. The notion of reliability has to do with accuracy of measurement. This kind of accuracy is reflected in the obtaining of similar results when measurement is repeated on different occasions or with different instruments or by different persons. This characteristic of reliability is sometimes termed *consistency*. We can readily see how measurement with a steel tape measure would give more reliable or consistent results than measurement with an elastic tape measure. Thus, we infer that the steel tape measure is a more reliable instrument. In thinking of psychological tests in general, we say reliability is present when an examinee's results are consistent on repeated measurement. With a group of examinees, reliable measurement is indicated by a tendency to rank order the entire group in the same way on repeated administrations of the test. Even if a slight practice effect is present, such that the study participants do somewhat better on a second administration than they did on the first, if all scores improve equally, participants will be rank-ordered in the same way on the two administrations, the inter-correlation of these repeated measures will be high, and the test will be called reliable. Reliability is thus a measure of accuracy, consistency, dependability, or fairness of scores resulting from administration of a particular examination.

3. 7.1.1 Approaches to Defining Reliability

Reliability, in terms of its definition, could be taken into consideration in the following three ways: a) assumption of repeated measurement, b) assumption of true measures of the trait evaluated, and c) assumption of the amount of error of measurement in a measuring instrument. The first approach tries to answer the question which addresses whether measuring the same set of objects again and again with the same or comparable measuring instrument can result in the same or similar results. This question implies a definition of reliability in *stability, dependability, and predictability* terms. It is the definition most often given in elementary discussions of the subject (Cypress, 2017). The second approach mentioned above questions if the measures obtained from a measuring instrument are in reality the 'true' measures of the property measured. This is an *accuracy* definition (Mousavi, 2012). Compared to the first definition, it is further removed from common sense and intuition, but it is also more fundamental. These two approaches and definitions can be summarized in the words *stability* and *accuracy.* However, the third approach is the one that not only helps us better define and solve both theoretical and practical problems concerning reliability, but also implies other approaches and definitions. We can inquire how much error of measurement there is in a measuring instrument by calculating *standard error of measurement*. In this regard, statistically speaking, two general types of variance, namely systematic and random could be taken into consideration.

Systematic variance leans in one direction: scores tend to be all positive or all negative or all high or all low. Error in this case is constant or biased. *Random* or *error variance* is self-compensating: scores tend now to lean this way, now that way. Errors of measurement are random errors. They are the sum of product of a number of causes: the ordinary random or

chance elements present in all measures due to unknown causes, temporary or momentary fatigue, fortuitous conditions at a particular time that temporarily affect the object measured or the measuring instrument, fluctuations of memory or mood, and other factors that are temporary and shifting. To the extent that errors of measurement are present in a measuring instrument, to this extent the instrument is reliable (Khine, (2013). In other words, reliability can be defined as the relative absence of errors of measurement in a measuring instrument. To sum up, reliability is the *accuracy* or *precision* of a measuring instrument and psychological as well as educational measurements are sensitive to the concept of reliability.

3. 7.1.2 Approaches to Establishing Reliability

If reliability is associated with accuracy of measurement, it follows that reliability will increase as error of measurement is made to diminish. We actually quantify reliability so that we can be aware of the amount of error present in our measurement and the degree of confidence possible in scores obtained from the tests. In determining reliability, it would be desirable to obtain two sets of measures under identical conditions and then to compare the results. This procedure is impossible, of course, since the conditions under which evaluation data are obtained can never be identical (Nestor & Schutt, 2018).

As a substitute for this ideal procedure several methods of estimating reliability have been introduced. The methods are similar in that almost all of them involve correlating two sets of data, obtained either from the same evaluation instrument or from equivalent forms of the same procedure. Accordingly, different methods of estimating the reliability of a test could be taken into consideration. In this section, a number of ways through which one can determine rater reliability as well as instrument reliability are discussed.

- *Rater Reliability*

The main defining characteristic of rater reliability is that scores by two or more raters or between one rater at *Time X* and that same rater at *Time Y* are consistent. Inter-rater and Intra-rater Reliability (Smith et al., 2019). In many instances, test scores are objective and there is little judgment involved. However, it is also common in second language research for researchers to make judgments about data. For example, one might have taken a speaking test. In case the same examiner judges the individual's performance at different times the same way, the correlation coefficient between the two or more instances of scoring will be considered as *intra-rater reliability,* which shows the consistency of the scoring that is famous as rater reliability. However, *inter-rater reliability* begins with a well-defined construct. It is a measure of whether two or more raters judge the same set of data in the same way. If there is strong reliability, one can then assume with reasonable confidence that raters are judging the same set of data as representing the same phenomenon (ibid).

- *Instrument Reliability*

Not only do we have to make sure that our raters are judging what they believe they are judging in a consistent manner, we also need to ensure that our instrument is reliable. In this section, three types of reliability testing, namely, *test-retest, equivalence of forms of a test (e.g., pretest and posttest),* and *internal consistency* are considered.

- *Test-Retest*

In a test-retest method of determining reliability, the same test is given to the same group of individuals at two points in time. One must carefully determine the appropriate time

interval between test administrations (Creswell & Clark, 2017). This is particularly important in learning psychology tests given the likelihood that performance on a test at one time can differ from performance on that same test 2 months later, because participants are often in the process of learning (i.e., do not have static knowledge). There is also the possibility of practice effects, and the question of whether such effects impact all participants equally. In order to arrive at a score by which reliability can be established, one determines the correlation coefficient between the two test administrations (McCrudden et al., 2019).

• *Equivalence of Forms*

There are times when it is necessary to determine the equivalence of two tests, as, for example, in a pretest and a posttest. Quite clearly, it would be inappropriate to have one version of a test be easier than the other because the results of gains based on treatment would be artificially high or artificially low. In this method of determining reliability, two versions of a test are administered to the same individuals and a correlation coefficient is calculated (Smith et al., 2019).

• *Internal Consistency*

It is not always possible or feasible to administer tests twice to the same group of individuals (whether the same test or two different versions). Nonetheless, when that is the case, there are statistical methods to determine reliability; *split-half, Kuder-Richardson 20 and 21, and Cronbach's α (alpha)* are common ones (Goodwin & Goodwin, 2016). *Split-half* procedure is determined by obtaining a correlation coefficient by comparing the performance on half of a test with performance on the other half. This is most frequently

done by correlating even-numbered items with odd-numbered items. A statistical adjustment (Spearman-Brown prophecy formula) is generally made to determine the reliability of the test as a whole. If the correlation coefficient is high, it suggests that there is internal consistency to the test (Cypress, 2017). Also, *Kuder-Richardson 20 and 21* are two approaches that are used to determine the reliability index in a single administration of a test or questionnaire. Although Kuder-Richardson 21 requires equal difficulty of the test items, Kuder-Richardson 20 does not. Both are calculated using information consisting of the number of items, the mean, and the standard deviation. It is worth to mention that these two methods are best used with large numbers of items. Finally, *Cronbach's alpha* is similar to the Kuder-Richardson 20, but is used when the number of possible answers is more than two. Unlike Kuder-Richardson, Cronbach's a can be applied to ordinal data (Goodwin & Goodwin, 2016).

Out of the above-mentioned measures of reliability index Spearman-Brown prediction formula, Kuder-Richardson 20 (K-R 20), Kuder-Richardson 21 (K-R 21), Cronbach's alpha, and item analysis which relies on item discrimination and item difficulty measures are among the most frequently used methods of reliability measures. However, for the closed questionnaire formats, reliability is mainly calculated through Cronbach's alpha (Borich & Tombari, 2019).

In order to maximize reliability we should try to minimize measurement error (Creswell & Clark, 2017). For example, we can all think of factors such as poor health, fatigue, lack of interest or motivation, and test-wiseness that can affect individuals' test performance in a Situational Judgment Test (SJT), but which are not generally associated with *Assertively* or *Self-esteem*, and thus not the characteristics we want to measure with an assertively or self-

esteem questionnaire. However, these are but some of the more obvious sources of measurement error (Nestor & Schutt, 2018). In addition to factors such as these, which are largely unsystematic and hence unpredictable, the *test method facets* are potential sources of error that can be equally detrimental to the accurate measurement of assertively or self-esteem.

When we minimize the effect of these various factors, we minimize measurement error and maximize reliability. In other words, the less these factors affect test scores, the greater the relative effect of different abilities we want to measure and hence the reliability of the targeted test scores. When we increase the reliability of our measures, we are also satisfying a necessary condition for *validity* the investigation of reliability is concerned with answering the question, How much of an individual's test performance is due to measurement error, or to factors other than the ability or construct we want to measure?, and with minimizing the effects of these factors on test scores.

Furthermore, the investigation of reliability involves both logical analysis and empirical research; we must identify sources of error and estimate the magnitude of their effects on test scores (Mousavi, 2012). In order to identify sources of error, we need to distinguish the effect of the target abilities we want to measure from the effects of other factors. And this is a particularly complex problem. This is partly because of the interaction between components of an ability and test method facets, which may make it difficult to mark a clear boundary between the ability being measured and the method facets of a given test.

In an oral interview, for example, whether we consider a particular topic of a conversational interaction to be part of the test taker's ability to speak the language effectively or a part of the topic facet of the test method will depend upon how we want to interpret the test taker's score. If we want to make inferences about the test taker's ability to speak on a wide

variety of topics, then a specific topic might be considered part of the test method, and hence a potential source of error. If, on the other hand, we want to measure the test taker's ability to speak in this particular topic domain, then the topic could reasonably be considered part of the ability. The way we identify sources of error is thus clearly a function of the inferences or uses we want to make of the test score, which again demonstrates the relationship between reliability and validity (Borich & Tombari, 2019).

3.7.2 Validity

Validity shows to the extent to which a research and its findings sound appropriate and acceptable (McCrudden et al., 2019). In this regard, the extent to which the researcher can make solid causal statements, the research is said to have validity. That is, the findings are valid. The procedures to ask a good question and to select a systematic approach are followed to find an answer. The findings of research, i.e., the answer to the question should be verifiable and applicable. Verifiability of the results refers to the fact that upon the replication of research the same or similar results should be obtained. This is also called reliability (Goodwin & Goodwin, 2016). Applicability of the findings refers to the fact that the findings should be applicable in situations similar to those of the experiment. If an answer to a question enjoys these qualities, it is said to be valid. Hence, the concept of validity in research is so important that it needs to be explained in detail: The present section deals with describing validity in terms of content validity, face validity, construct validity, criterion-related validity, predictive validity, internal validity, and external validity.

3.7.2.1 Content Validity

Content validity "refers to the representativeness of our measurement regarding the phenomenon about which we want information" (Mackay & Gass, 2016, p.107). If we are interested in the acquisition of critical thinking (CT) for example and plan to present learners with an acceptability judgment task, we need to make sure that all CT principles are included. In case this is violated and only some specific principles of CT are the main concern in the test, our testing instrument is not sensitive to the full range of CT concepts, and we can say that it lacks content validity.

3.7.2.2 Face Validity

Face validity is closely related to the notion of content validity and refers to the familiarity of our instrument and how easy it is to convince others that there is content validity to it (Goodwin, & Goodwin, 2016). If, for example, learners are presented with reasoning tasks to carry out in an experiment and are already familiar with these sorts of tasks because they have carried them out in their classrooms, we can say that the task has face validity for the learners. Face validity thus hinges on the participants' perceptions of the research treatments and tests. If the participants do not perceive a connection between the research activities and other educational or second language activities, they may be less likely to take the experiment seriously.

3.7.2.3 Criterion-Related Validity

Criterion-related validity refers to the extent to which tests used in a research study are comparable to other well-established tests of the construct in question (Cypress, 2017). For example, many educational programs attempt to measure intelligence tests either for placement

into their own program or to determine the extent to which a student might meet a particular requirement. For the sake of convenience, these programs often develop their own internal intelligence tests which might be shorter than the standardized tests and claim to facilitate the administration process, but there may be little external evidence that these tests are measuring what the programs assume they are measuring. One could measure the performance of a group of students on the local test and a well-established test (e.g., Multiple Intelligences or IQ tests). Should there be a good correlation, one can then say that the local intelligence test has been demonstrated to have criterion-related validity.

3.7.2.4 Predictive Validity

Predictive validity deals with the use that one might eventually want to make of a particular measure and to see if it predicts performance on some other measure (Berk, 1990). Considering the earlier example of an intelligence test, if the test predicts performance on some other dimension (class grades), the test can be said to have predictive validity.

3.7.2.5 Internal Validity

The internal validity of research, as Farhady (2006) puts it, "refers to the extent to which the outcome of research is due to the manipulations imposed by the research, not other factors" (p.179). In other words, the extent to which the change in the dependent variable is due to the manipulations of the independent variable constitutes the degree of the internal validity of research (Muris et al., 2003). In order to achieve internal validity, the researcher tries to control as many variables as possible to limit the outcome to the independent variable only. This is exclusive to the experimental method of research because in other methods of

research the manipulation of variables does not exist. In historical and descriptive methods, the researcher does not attempt to make any change in any variable. Rather the researcher observes, measures, and interprets the relationship among the variables as they are. In other words, the researcher does not manipulate any variable to observe its effect on another variable. Therefore, the concept of internal validity should be considered a unique characteristic of the experimental methods of research.

Of course, there are some factors which influence the extent of internal validity. In fact, these factors are threats to the internal validity, and if the researcher does not attempt to take them into account, the degree of internal validity will decrease. Some of these factors are history effect, maturation effect, testing effect, selection effect, and mortality effect.

- *History Effect*

  The term history in this context refers to whatever happens to the subjects of the study outside the experimental environment. In case some of these events influence the dependent variable, the outcome of research will be altered not because of the independent variable but because of the outside factors (Cypress, 2017). Creswell and Clark (2017) argue that to the extent the results might be influenced by the history factor, the internal validity of research will decrease. Some unexpected events such as extra training, increased motivation, and personal factors which are not controlled by the researcher, changes the effect of the independent variable on the dependent variable. Since the researcher is not aware of such an event, the changes in the dependent variable might be attributed to the instruction, whereas they had been partially due to the history factor, i.e., students' attending receiving outside the program training. Of course, random selection of the subjects would

alleviate the history factor to a great extent because it is very unlikely that all randomly selected subjects would get involved in history factor. However, the researcher should be aware of such a factor.

- *Maturation Effect*

    Maturation refers to any process that involves systematic changes over time, regardless of specific events (Souza, Alexandre & Guirardello, 2017). Maturation is another factor which may interfere with the outcome of research, and thus, threaten the internal validity of research. In case an experiment takes a long time so that the natural maturation and physical growth of the children taking part in a study contribute to the effect of the independent variable on the dependent variable, the researcher cannot claim that the outcome is solely due to his treatment.

- *Testing Effect*

    In some of the experiments, researchers make use of a pretest and a posttest to study the effect of an independent variable on a dependent available. As Creswell and Clark (2017) argue in details, the pretest surely gives some awareness about the experiment to the subjects. Hence, the subjects receive certain experience on the content of the test which might influence their performance on the posttest. Sometimes the dependent variable is measured more than once. Thus, the subjects may utilize their memory in multiple testing situations (Burns et al., 2019). Of course, as some researchers suggest (Cypress, 2017; Goodwin & Goodwin, 2016; Jung & Lee, 2011) giving similar tests rather than identical tests may help researchers avoid the testing effect to some extent. However, testing and

retesting are some threats to internal validity and should be taken into account in conducting experiments.

- *Selection Effect*

    In the experimental method, the subjects are selected randomly. Thus, a selection effect may be produced by the manner in which the participants are selected (Souza et al., 2017). Cypress (2017) argues that randomization eliminates the selection effect to a great extent. However, in some cases a particular characteristic of the participants may differ systematically across the experimental groups. Furthermore, on some occasions, randomization is impossible: In such cases, to avoid the sampling effect a technique called matching provides an acceptable alternative to random selection (Mousavi, 2012). Matching is achieved by assigning participants to different groups on the basis of the scores they obtain on the relevant variable. For example, suppose that a researcher wants to match the subjects in two groups such that the groups are equal on the variable of motivation. The researcher gives a motivation questionnaire to all the subjects. Then, based on their scores, the subjects are assigned to the experimental or the control group in such a way that the groups are equalized regarding the motivation factor.

- *Mortality Effect*

    Experiments usually take time, especially the ones which require a long time to be conducted, i.e., longitudinal. Mortality effect is caused by the loss of subjects during the experiment. Mortality in research dealing with human beings is sometimes cal1ed attrition (Goodwin & Goodwin, 2016). Smith, Krishnan, Hong, and Reistetter (2019) argues that mortality effect is significant in longitudinal studies because in such cases, more subjects

are likely to be lost during the experiment. A carefully conducted study should take all the above-mentioned factors into account Otherwise, the outcome of research cannot be claimed to be due to the manipulation of the independent variable, i.e., the treatment even then, the researcher should be concerned with the other type of validity called external validity.

3.7.2.6 External Validity

External validity of research refers to the extent to which the outcome of research would apply to other similar situations (Farhady, 2006). In fact, when a research project is conducted with a sample of say 50, what happens to this small number of subjects is not of real interest to the researchers. Nor is it of significance to the improvement of human knowledge. Hence, the researcher will not be satisfied if the findings apply to the members of the sample only. In fact, under the scope of external validity, the real interest of the researcher is that the findings be applicable to similar cases. As Creswell and Clark (2017) mention, any study findings should be generalizable and the extent to which the findings of research can be generalized is the indication of the external validity of the research. Based on Smith et al. (2019), while internal validity is basically exclusive to experimental methods of research, external validity is an important requirement for all methods of research. That is, researchers try to conduct research in such a manner that the findings be generalizable from the sample to the population. Otherwise, research findings will be limited to the sample only and this limitation would decrease the value of the findings (Amiri & Birjandi, 2015).

Establishing internal and external validity is extremely important if the findings of the research are to be useful to others in the field. Therefore, researchers should be careful with

obtaining a reasonable degree of internal and external validity in their investigations. Otherwise, it cannot be claimed that the outcome of research is valid because it might be due to extraneous factors. Nor can it be claimed that the findings are applicable to similar situations because they might not have generalizability (Burns et al., 2019).

An important point should be clarified here that there is a close relationship between the internal and external validity of research. In order to increase the internal validity, the researcher should make sure that the outcome is due to the manipulation of the variables in research and not because of other uncontrolled variables (Cypress, 2017). To obtain this assurance, as many potentially influential factors as possible should be controlled. That is, the research should be conducted under strictly controlled conditions. In other words, the more controlled the condition of conducting research, the more internal validity can be obtained. McCrudden et al. (2019) mention that an example of the strictly controlled research is the one conducted in a laboratory. They continue that the more controlled the research condition is, however, the less generalizable the outcome will be because the situation in which the research is conducted is not similar to that of the real life situation. That is, the more controlled the research, the farther away it is from reality, and thus, the less generalizable the outcome. Field (2018) asserts that the same is true for external validity.

To achieve a high degree of generalizability, the research should be conducted under the conditions similar to those of the outside world (Smith et al., 2019). In realistic situations, it is very difficult to control all the variables which might influence the outcome of research. Thus, the more realistic the situation of research, the more external validity. However, the more realistic the situation, the less control over the variables, and thus, the less internal validity can

be established (Sahu, Chavan, Bala & Tyagi, 2019). Therefore, there is a trade-off between external and internal validity in research. As the researcher intends to increase one, the other will automatically decrease. What is recommended then is an attempt to keep a balance between the two. In other words, the researcher should try 'to apply procedures which would maximize both types of validity as much as possible.

3.7.2.7 Construct Validity

In research, construct validity refers to the degree to which the research adequately captures the construct of interest (Borich & Tombari, 2019). Likewise, a test or questionnaire should enjoy construct validity which means that the test should be able to measure what it has been intended to measure (Mousavi, 2012). Construct validity is an essential topic in educational and psychological research precisely because many of the variables investigated are not easily or directly defined. In psychological research, variables such as motivation, aptitude, exposure to environmental input, self-esteem, assertively, independence, impulsivity, self-regulation, and personal traits are of interest. However, these constructs are not directly measurable in the way concrete concepts are. Creswell and Clark (2017) believe that construct validity can be enhanced when multiple estimates of a construct are used.

3.8   Reliability and Validity in Situational Judgment Tests

Situational Judgment Tests (SJTs) are not uni-dimensional but they enjoy a multidimensional nature in their items (Lievens, Peeters & Schollaert, 2008; Sorrel et al., 2016). Hence, some authors have questioned the exactness of the conventional methods of establishing reliability and validity for the SLTs (Lievens et al., 2008; Sorrel et al., 2016; McDaniel & Nguyen, 2001). Sorrel et al. (2016) argues that reliability estimating method of

Cronbach's alpha can best measure the uni-dimensional tests and cannot be a reliable method to calculate the reliability index of SJTs. However, Rupp and Templin (2008a) argue that the reliability of the test could be diagnosed and accepted based on Cronbach's alpha provided that there is significant agreement between the raters evaluating the SJT items based on the intra-class correlation coefficients.

In case a test or a questionnaire could be administered in an interval the reliability of the test could be measured through correlation coefficient, meanwhile in a lot of cases the tests are given to single group because of the research limitations such as lack of frequent access to the subjects. In such cases, measures of reliability such as Cronbach's alpha or KR-20 and KR-21 are preferable.

Validity of SJTs have been conventionally calculated through Exploratory Factor Analysis (EFA) in terms of internal validity and through Confirmatory Factor Analysis (CFA) in terms of construct validity and estimating the latent variables or constructs (Berk, 1990; Burns et al., 2019; Cypress, 2017; Schmitt & Chan, 2006). Also, SJTs have been reported to have acceptable criterion-related validity, construct-related validity, and incremental validity indices (Lievens et al., 2008; Whetzel & McDaniel, 2009) based on the aforementioned conventional methods of estimating validity.

However, some studies have questioned EFA and CFA as measures of validity for SJTs on the ground that such methods rely on Classical Test Theory (CTT) (Christian, Edwards & Bradley, 2010; Lievens & Chan, 2017; Sorrel et al., 2016). Sorrel et al. (2016) suggest Cognitive Diagnostic Modes (CDM) as an appropriate measure of validity and reliability for the SJTs, however, they are not clear how reliability of such a test could be calculated and which statistical procedure should be followed to make it decipherable and interpretable.

Likewise, in terms of validity, they believe that CDM which makes use of R statistical software and relies on Generalized Deterministic-input, noisy-and-gate model (G-DINA) (de la Torre, 2011) is likely to show the underlying constructs of the SJTs better than the CFA or EFA. On the other hand, Ravand and Robitzsch (2015) argue that compared to the traditional IRT models and CTT oriented analyses, the Cognitive Diagnostic Modes (CDM) proposed for measuring reliability and validity of SJTs cannot be used extensively because of their novelty and hence lack of familiarity of the searchers with them and the costly nature and lack of availability of the software with which the analysis can be done. In addition, although Rupp and Templin (2008b) account CDM as a reliable and useful model of estimating construct validity of SJTs, they argue that the results of CFA is not that much different from the results of CDM, meanwhile, CFA is more user friendly and less complicated.

In terms of the sample size to be used in the CDM, the consensus is that the data should be elicited from the minimum random sample of 5000 (Ravand & Robitzsch, 2015; Rupp &Templin, 2008a), while CFA can be used with the sample sizes as small as 70 (Jung & Lee, 2011), though most sample size studies argue that CFA requires the minimum sample size of 150 to 200 (Beavers et al., 2013; Berk, 1990; Guadagnoli & Velicer, 1988; Hogarty et al., 2005).

3.9 Chapter Summary

The current chapter dealt with describing Emotional Intelligence (EI), its history and phases of emergence. Main approaches to emotional intelligence were discussed and methods of measuring EI were presented. The empirical research pertained to the issue under discussion were argued and then EI and kid's peer relations at educational settings were touched up on.

Likewise, the role of EI and socio emotional skills of children were focused on. Then, the arguments related to the socio emotional intelligence tests and questionnaires were presented and situational judgment tests and their subcomponents such as self-esteem, assertiveness, self-understanding, empathy, emotion, and self-regulation were presented. In addition, reliability and validity concepts in research were discoursed in detail and finally reliability and validity of situational judgment tests were argued with regard to the available literature.

The next chapter deals with study conducted to translate and validate the Situational Socio-Emotional Competences Development Test (SSECDT) developed by Sala-Roca et al. (2016) in the Iranian context.

IV. Study

4.1 Introduction

The present study aimed at investigating reliability and construct validity of situational test of socio-emotional competencies (Sala-Roca et al., 2016) in the Iranian context. The present test is a Situational Judgment Test (SJT) and it is noteworthy to mention that because of the multidimensional nature of items in the SLTs some authors have questioned the frequently used reliability estimating method of Cronbach's alpha for this index (Lievens, Peeters & Schollaert, 2008; Sorrel et al., 2016; McDaniel & Nguyen, 2001) saying that Cronbach's alpha can best measure the uni-dimensional tests. However, Rupp and Templin (2008a) argue that in case there is significant agreement between the raters evaluating the SJT items based on the intra-class correlation coefficients, while the items strongly measure one construct and partially measure another one (as the case is in the present study data pertained to the experts judging the test) the reliability of the test could be diagnosed and accepted based on Cronbach's alpha. Likewise, validity estimate of Confirmatory Factor Analysis (CFA) usually used for measuring construct validity of SJT scores based on Classical Test Theory (CTT) has been criticized in the past decade in terms of its instability, lack of exactness, and being much too psychometric and analytical, and being more useful for uni-dimensional tests (Christian, Edwards & Bradley, 2010; Lievens & Chan, 2017; Lievens, Peeters & Schollaert, 2008; Sorrel et al., 2016). On the other hand, Ravand and Robitzsch (2015) argue that compared to the traditional IRT models and CTT oriented analyses, the cognitive diagnostic modes (CDM) proposed for measuring reliability and validity of SJTs cannot be used extensively because of their novelty and hence lack of familiarity of the searchers with them and the costly nature and lack of availability of the software with which the analysis can be done. In addition, although Rupp and Templin (2008b) account CDM as a reliable and useful model of estimating construct validity of SJTs,

they argue that the results of CFA is not that much different from the results of CDM, meanwhile, CFA is more user friendly and less complicated.

In terms of the sample size to be used in the CDM, the consensus is that the data should be elicited from the minimum random sample of 5000 (Ravand & Robitzsch, 2015; Rupp &Templin, 2008a), while CFA can be used with the sample sizes as small as 70 (Jung & Lee, 2011), though most sample size studies argue that CFA requires the minimum sample size of 150 to 200 (Beavers et al., 2013; Berk, 1990; Guadagnoli & Velicer, 1988; Hogarty et al., 2005).

Another point which is worthy to mention is that the success of modern method of measuring construct validity such as Generalized Deterministic-input, noisy-and-gate model (G-DINA) (de la Torre, 2011; Ravand & Robitzsch, 2015) which mainly employ CDM packages proposed by McDaniel and Nguyen (2001), Sorrel et al. (2016), and Robitzsch, Keifer, Cathric George and Uenlue (2014) do not present clear-cult absolute interpretable statistics for reliability measurement of SJTs, nor do they show relatively absolute representations of construct validity in terms of interpretation. Instead as Sorrel et al. (2016) argue, CDM oriented measures of validity just claim to cover the latent variables with regard to the situations presented more appropriately. The question of exactness is then left unanswered in the modern movements to measure validity which themselves have questioned the very factor in the CFA and EFA. Based on the above mentioned reasons the preset author relied on Cronbach's alpha for the index of reliability and CFA for the validity estimation of the test.

The present section deals with reporting two phases of the study as follows: The first phase deals with translating and piloting the Situational Socio-Emotional Competences Development

Test (SSECDT) in Farsi, while the second phase (the main phase) investigates reliability and construct validity of the test in the Iranian context which adapt the SSECDT to Iranian population. Accordingly, the present section has been devoted to these two phases.

4.2 Phase One: Translating and Piloting the SSECDT in Farsi

The original version of the SSECDT is in the Spanish language. The test is the result of work done by a team of researchers belonging to the IARS group and has been validated and collected by members of the IARS team (Josefina Sala, Gemma Filella, Xavier Oriol, Agnès Ros, Anna Soldevila, Esther Secanilla, Montserrat Rodríguez; Nair Zárate, Antoni Peregrino) and the GROP group (Núria Pérez). The test was developed within the framework of a project funded by the Ministry of Economy and Competitiveness (EDU2013-43326-R) in Spain.

In this test, the testees will find five short stories presenting everyday situations that any boy or girl could find themselves in. Each story has situations with five different responses (marked as a, b, c, d, and e). They are asked to put themselves in the place of the characters and answer truthfully about how they would react to each situation. The testees are asked to choose the answer that most closely matches what they would do for each situation. It is noteworthy to mention that there are no right or wrong answers, only different ways of reacting are important.

The results obtained in this test are used to reflect on how we respond to social and emotional situations. For the exercise to be useful it is very important that the testeees respond truthfully to all questions and keep in mind that the answers will be treated confidentially. Finally, the test takes between 15 and 30 minutes to complete. See Appendix A for the English version of the test.

82

Translating and piloting this test went through the processes of a) translation of the test to Farsi, b) validating the test through expert judgment validity, c) receiving permission from the department of education and piloting the test in a group of 50 Iranian normal children, d) calculating and reporting the reliability of the Farsi version of the test, and calculating the construct validity of the test. The following parts deal with each of the aforementioned steps.

4.2.1 Translation of SSECDT test to Farsi

The English version of the SSECDT was emailed to the researcher by its developers. To be in line with the research agenda, the present researcher focused on process of translation and adaptation of instruments (Ljungberg, Fossum, Fürst, & Hagelin, 2015). The aim of this process is to achieve different language versions of the English instrument that are conceptually equivalent in each of the target countries/cultures. That is, "the instrument should be equally natural and acceptable and should practically perform in the same way. The focus is on cross-cultural and conceptual, rather than on linguistic/literal equivalence. A well-established method to achieve this goal is to use a) forward translation, b) expert panel check, c) cross-cultural cognitive reviewing, and finalizing test for validation" (ibid, p.68). Accordingly, the following steps were taken into consideration:

The test was translated into Persian by an official translator and was put to the scrutiny of two psychologists holding PhD and familiar with psychometrics testing to present their views concerning the language and content of the items presented in the test. An Iranian psycholinguist reviewed the test items and did modifications in terms of language of description and cultural issues; i.e. where cultural differences might create misunderstanding or social norms might be violated.

4.2.2 Expert Judgment Validity of the Farsi Version of the Test

Expert judgment validity argues that content-related evidence of validity is a central concern during instrument development and expert professional judgment should play an integral part in developing the test items and definition of what is to be measured (Berk, 1990). In the present study, the Persian version of the test was put to the scrutiny of 5 experts in psychometrics and psychology in the Iranian context. They presented their views about each item and its choices based on a validation form which included situations, items, factors and scales. See Appendix B for validation form filled out by the experts in the process of expert judgment validity. The results of expert judgment validly which appears in Table 4.1 below helped the researcher do some modifications to adapt the test to the Iranian culture and context. Out of the 33 items of the SJT, 4 items about whose specific domain the experts could not agree were omitted and the test finally included 29 items. The six constructs of Self-Esteem (items 1, 10, 13, 22, and 27), Assertiveness (items 7, 12, 17, and 20), Understanding Others' Emotion (items 3, 8, 15, 24, and 31), Self-Emotion Understanding (items 4, 16, 21, 23, and 30), Self-Emotional Regulation (items 2, 5, 11, 18, and 28), and Others' Emotional Regulation (items 6, 9, 14, 25, and 32) were recognized by the experts. Table 4.1 below shows the initial Q-Matrix in this regard.

Table 4.1

Initial Q-matrix for Items and Constructs

Items	Constructs					
	Self-Esteem	Assertiveness	Understanding Others' Emotion	Self-Emotion Understanding	Self-Emotional Regulation	Others' Emotional Regulation
1	1	0	0	0	0	0
2	0	0	0	0	1	0
3	0	0	1	0	0	0
4	0	0	0	1	0	0
5	0	0	0	0	1	0

6	0	0	0	0	0	1
7	0	1	0	0	0	0
8	0	0	1	0	0	0
9	0	0	0	0	0	1
10	1	0	0	0	0	0
11	0	0	0	0	1	0
12	0	1	0	0	0	0
13	1	0	0	0	0	0
14	0	0	0	0	0	1
15	0	0	1	0	0	0
16	0	0	0	1	0	0
17	0	1	0	0	0	0
18	0	0	0	0	1	0
*19	0	1	0	0	1	0
20	0	1	0	0	0	0
21	0	0	0	1	0	0
22	1	0	0	0	0	0
23	0	0	0	1	0	0
24	0	0	1	0	0	0
25	0	0	0	0	0	1
*26	0	1	0	0	1	0
27	1	0	0	0	0	0
28	0	0	0	0	1	0
*29	0	1	0	0	1	0
30	0	0	0	1	0	0
31	0	0	1	0	0	0
32	0	0	0	0	0	1
*33	0	0	0	1	1	0

*Note: Items 19, 26, 29, and 33 were left out as the experts did not agree upon their ability to check the exact construct specification.

To find if there were significant agreements between the experts (raters) an intra-class correlation coefficients was run. Based on the results displayed in Table 4.2 below it was concluded that there were significant agreements between the raters on; self-esteem ($\alpha = .751$, $p < .05$), assertiveness ($\alpha = .844$, $p < .05$), understanding others' emotions ($\alpha = .935$, $p < .05$), self-emotion understanding ($\alpha = .918$, $p < .05$), self-regulation ($\alpha = .727$, $p < .05$) and others' emotional regulation ($\alpha = .904$, $p < .05$).

Table 4.2
Intra-class Correlation Coefficients (Prior to the Pilot Study)

		Intra-class Correlation	95% Confidence Interval		F Test with True Value			
			Lower Bound	Upper Bound	Value	df1	df2	Sig
Self-Esteem	Single Measures	.377a	.015	.871	4.021	4	16	.019
	Average Measures	.751c	.072	.971	4.021	4	16	.019
Assertiveness	Single Measures	.575a	.122	.932	6.402	4	12	.005
	Average Measures	.844c	.356	.982	6.402	4	12	.005
Understanding Others' Emotion	Single Measures	.741[a]	.382	.963	15.270	4	16	.000
	Average Measures	.935[c]	.756	.992	15.270	4	16	.000
Self-Emotion Understanding	Single Measures	.691[a]	.311	.954	12.162	4	16	.000
	Average Measures	.918[c]	.693	.990	12.162	4	16	.000
Self-Emotional Regulation	Single Measures	.348[a]	-.003	.860	3.667	4	16	.026
	Average Measures	.727[c]	-.017	.968	3.667	4	16	.026
Others' Emotional Regulation	Single Measures	.654[a]	.264	.947	10.433	4	16	.000
	Average Measures	.904[c]	.643	.989	10.433	4	16	.000

Note. The first and second rows are intra-rater and inter-rater reliability estimates (Prior to the Pilot Study).

The results showed the concordance of ideas of the experts on the test items. As expert judgment validity of the translated test was proved, it was concluded that the test enjoyed a high expert judgment validity.

Also experts were asked to evaluate the effectiveness of all choices given for the items in the questionnaire. Then the average of value given to each choice in any item was calculated and the choices of each item were raked. The highest rank in each choice was specified and reported. The results showed that in terms of the choice effectiveness, the choices with the highest rank in each item of the questionnaire were the ones about which the five experts were in terms of agreement. Appendix C shows the expert judgment validation results concerning choice effectiveness. Likewise, Table 4.3 below presents the choice effectiveness for the items of the SJT in the initial Q-matrix form.

Table 4.3
Initial Q-matrix for Choice Effectiveness of the Items

Items	Choice A	Choice B	Choice C	Choice D	Choice E
1	0	0	0	1	0
2	0	0	1	0	0
3	0	0	0	1	0
4	0	0	1	0	0
5	0	0	0	0	1
6	1	0	0	0	0
7	0	1	0	0	0
8	0	0	0	1	0
9	0	0	1		0
10	0	0	0	1	0
11	0	0	1	0	0
12	0	1	0	0	0
13	0	0	0	1	0
14	0	0	1	0	0
15	0	0	1	0	0
16	0	1	0	0	0
17	1	0	0	0	0
18	1	0	0	0	0
*19	0	0	0	0	0
20	0	0	0	1	0
21	1	0	0	0	0
22	1	0	0	0	0
23	0	0	0	1	0
24	0	1	0	0	0

25	0	0	0	1	0
*26	0	0	0	0	0
27	0	0	0	1	0
28	0	0	0	1	0
*29	0	0	0	0	0
30	0	0	0	0	1
31	0	1	0	0	0
32	0	0	0	1	0
*33	0	0	0	0	0

The test was then piloted in order to check its psychometric properties and adjust its measurements. See Appendix D for the Persian version of the test, namely Situational Socio-Emotional Skills Test (SSEST). The results of piloting phase are presented in the next sections.

4.2.3 Piloting the Situational Socio-emotional Skills Test (SSEST)

To pilot a test, the researcher first informed the testing and evaluation department of Ministry of Education. Following some expert checks and religious measurement checks, the experts of the aforementioned office invited the researcher to present her study purpose and why the test should be administered at school. Through two really tough and breath taking sessions, the researcher could convince the aforementioned experts that the test could be useful and through providing evidence the researcher persuaded them that it belonged to her PhD program. Experiencing nearly a month in the department of testing and evaluation of the Ministry and its strict bureaucratic system, the researcher could receive permission to attend two schools (one girl school and one boy school) to administer the test for the piloting phase.

4.2.3.1 Pilot Study Participants

In this phase, 50 normal children (with the age range of 12 to 16 of whom 23 were boys and 27 were girls) took part in the study as the participants. Then, the participants of the study

88

in the process of validating the Persian version of the (phase 1) were 50 normal children from Iranian high schools located in Tehran city, districts 11 and 5 experts. The fifty children taking part in this phase of the study, as the piloting participants, were selected based on their willingness to take part in the study and by the permission of their parents. This way the codes of ethics were taken into consideration in this research.

4.2.3.2 Pilot Study Procedure

The participants answered the Farsi version of test in 45 minutes and in case they had any question they asked it from the researcher for more clarification. This feedback could help them to answer the test more accurately and meticulously. Following the administration of the test, the researcher collected the papers, scored them and then asked her psychometric consultant to enter the data into the SPSS software, version 25 and calculated the reliability of the test.

It is worth mentioning that after the process of scoring the researcher attended the schools in which the piloting phase had been conducted and informed the students from the results and talked with them about the test and the state of their situational socio-emotional competences.

4.2.4 Reliability and Validity of the Test in Farsi in the Piloting Phase

This section will explore the reliability of the test in the piloting phase. The test included six strategies and 33 items and after the piloting phase it was reduced to 29 items. The Cronbach's alpha reliability indices were calculated for the test sub-sections (constructs) including *self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation*, and *others' emotional regulation*. The next section (results) deals with the piloting phase analyses.

Table 4.4 displays the Cronbach's alpha reliability indices of these sub-sections. The reliability indices for the self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation and others' emotional regulation were .874, .773, .863, .791, .817 and .866, respectively.

Table 4.4
Reliability Statistics; Piloting Phase; 50 Participants

	Cronbach's Alpha	N of Items
Understanding own emotions	.891	5
Self-esteem	.874	5
Others' emotional regulation	.866	5
Understanding others' emotions	.863	5
Self-regulation	.817	5
Assertiveness	.773	4
Total	.847	29

Table 4.5 displays the item-total correlations for the 29 items of the tests. The results indicated that all items related to six strategies enjoyed moderate to large (.30 to .50) item-total correlations.

Table 4.5
Item-Total Statistics

Corrected Item-Total Correlations											
SelfEs1	.868	Assert1	.556	UnderOt1	.838	UnderOw1	.762	SelfReg1	.767	OthReg1	.849
SelfEs2	.827	Assert2	.571	UnderOt2	.848	UnderOw2	.741	SelfReg2	.761	OthReg2	.847
SelfEs3	.847	Assert3	.497	UnderOt3	.828	UnderOw3	.776	SelfReg3	.763	OthReg3	.835
SelfEs4	.834	Assert4	---	UnderOt4	.833	UnderOw4	.740	SelfReg4	.815	OthReg4	.824
SelfEs5	.854	Assert5	.692	UnderOt5	.828	UnderOw5	.736	SelfReg5	.799	OthReg5	.835

It is worth mentioning that in the piloting phase, the construct validity of the test in Farsi could not be taken into consideration as based on Field (2018), Exploratory Factor Analysis (EFA), which is usually used to calculate construct validity of the tests, is a subject-demanding analysis. The KMO index of sampling adequacy shows if the sample size adequate for running factor analysis. Field (2018) suggested the following guidelines for interpreting KMO index.

Marvelous: values in the 0.90s, *Meritorious:* values in the 0.80s, *Middling:* values in the 0.70s, *Mediocre:* values in the 0.60s, *Miserable:* values in the 0.50s, and *Merde:* values below 0.50.

Based on the mentioned criteria, the sample size of 50 for the pilot study was a miserable one. Field further noted that "the reliability of factor analysis depends on sample size" (p. 1013). Thus, Based on Field's (2018) suggestions as mentioned above, it can be concluded that irrespective of the acceptable reliability indices for the test and its components (see Table 4.4), the results of the factor analysis (FA) on the pilot study were not reliable due to the sample size (n=50). In fact, the sample sizes above 100 in number can end in more reliable results (Field, 2018). Meanwhile, in addition to the reliability notion which was checked in the pilot study phase, the students' understanding of the test items, their cultural misunderstandings, and specific ideas presented in the situations like the relations between girls and boys due to lack of co-educational systems in the Iranian schools, were taken into consideration. The reactions of the pilot study participants helped the researcher get informed of the test shortcomings and paved the way for modification of the test in such cases. Also, the participants' interest in the specific items, the tests' ability to motivate them and their views about the allotted time were sought in the subsequent sessions after the test administration and the results were applied in

the modification process. The results of checking the answers of the participants also showed enough variability in the answers.

Table 4.6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.555
Bartlett's Test of Sphericity	Approx. Chi-Square	839.601
	Df	406
	Sig.	.000

Tabachnick and Fidell (2014, p. 666) quoted MacCallum, Widaman, Zhang, and Hong (1999) as saying "that samples in the range of 100-200 are acceptable with well-determined factors (i.e., most factors defined by many indicators, i.e., marker variables with loadings > .80) and communalities (squared multiple correlations among variables) in the range of .5." In other words, if all factor loadings are higher than .80, a sample size of 100-200 are required. Hence, the discussion of construct validity of the present test was postponed to the main study in which 250 normal children took part.

4.3 Phase Two: Main Study

The present section deals with reporting method, participants, instruments, data analysis, and results. The chapter ends in discussion of the findings, conclusion, and limitations the researcher coped with during the accomplishment of the project.

4.3.1 Method

A non-experimental exploratory study was designed in which there was no treatment involved, nor was the study concerned with the learning process the participants might have

gone through as a significant factor. Hence, based on Goodwin and Goodwin (2016), the study was an exploratory one. Likewise, no control was implemented over the effect of independent variable of the study (components of Situational Test of Socio-Emotional Competencies) on the dependent variable (normal children's performance on the test in the Iranian context) (Creswell & Clark, 2017). None of the variables of the study were manipulated to cause changes, either. What was of paramount importance then was the type and strength of the connection between variables of the study; therefore, a non-experimental exploratory design was the appropriate design for the accomplishment of the purpose of the study in its second phase (Field, 2018). Accordingly, a detailed description of participants, instrumentation, procedure, design, and statistical analyses of the study would be of prime significance as presented in this chapter.

4.3.1.1 Participants

The participants in the main phase of the study were 250 normal children (with the age range of 12 to 15 of whom 158= 63.20 % were girls and 92= 36.8% were boys). These participants were randomly selected from both male and female genders studying at different educational centers (high schools) in Tehran from various districts. The researcher first received the permission of testing and evaluation department of Ministry of Education to administer the test in different districts and schools. Then, the researcher personally referred to the schools, informed managers of the schools and parents and asked for their permission and cooperation; and when the researcher got their permission she informed the students about the study, its objectives, and that the participation was voluntary and that collected data was anonymous. Fortunately, as the school managers were cooperative all the students who were

informed of the study process (N=250) consented to participate in the test. Then, the researcher administered the test to 250 high school students.

In this phase of the study and in a more technical attempt to confirm the reliability and construct validity of the test, the researcher administered the test to the participants.

4.3.1.2 Instruments

The Persian version of Situational Socio-Emotional Competences Development Test developed by Sala-Roca et al. (2016) named the Situational Socio-emotional Skills Test (SSEST) was employed to collect the data from 250 normal children with the age range of 12 to 15 in the Iranian context. As mentioned in section 4.2 above, the test, which is also called the situational test of socio emotional competence development, assesses six socio-emotional skills (self-esteem, assertiveness, self-understanding, self-regulation, empathy and emotional regulation of others) by introducing a number of situations which testees must say how they would respond to.

The test consisted of five short stories or situations from everyday life with different questions. The everyday situations are: "Where shall we go for our end-of-year trip?", "Group work", "I have moved to a new city and am looking for new friends", "The party" and "They don't buy me what I asked for". For every situation, testees were asked six questions, each with five different responses (they have to select one). Students were asked to put themselves in the shoes of the character and answer honestly regarding how they would react in the situation in question.

In total, following the expert judgment avidity in the piloting phase the Farsi version of test comprised 29 questions (items) and aimed at assessing the six constructs of *self-esteem,*

94

assertiveness, understanding others' emotions, understanding own emotions, self-regulation, and *others' emotional regulation.* It took between 30 and 45 minutes and was therefore completed in a single session.

4.3.1.3 Data Analysis

The data analysis section deals with the main study. In this phase the reliability and construct validity of the Persian version of the test were explored. The test included six sub-sections and 29 items. The Cronbach's alpha reliability indices were calculated for the test sub-sections including self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation, and others' emotional regulation. Then, by the help of SPSS version 25, an explanatory factor analysis (EFA) was run through varimax rotation using principal axis factoring in order to probe the underlying constructs of the items of the test. In the closing step, a confirmatory factor analysis (CFA) was run using LISREL 8.8 in order to probe the trait structure of the test. The next section (results) deals with the main study data analysis.

4.3.2 Main Study Results

The present study entitled "Investigating reliability and construct validity of situational test of socio-emotional competencies development in the Iranian context" was undertaken in order to investigate the following research questions;

Q1: Do the components of the Persian Situational Socio-Emotional Skills Test (SSEST) developed contribute to the reliability of the test?

Q2: Does the SSEST developed have expert judgment validity based on content-related evidence?

Q3: Does the SSEST developed have internal validity based on the participants'
responses?

Q4: Does the SSEST developed enjoy construct validity? (What are the trait structures
of the SSEST developed?)

4.3.2.1 Testing Univariate and Multivariate Normality

The above mentioned research questions were probed through Cronbach's alpha reliability,
intra-class correlation coefficients (inter-rater reliability), and exploratory and confirmatory
factor analysis. Before discussing the results, it should be noted that the assumption of
univariate normality was retained. As displayed in Table 4.7, the values of skewness and
kurtosis were lower than +/- 2 (Bachman, 2005: Bae & Bachman, 2010). The assumption of
multivariate normality was also met. The absolute value of the Mardia index; i.e. 13.954, was
lower than the critical value of 960 for 30 variables; as suggested by Khine (2013).

Table 4.7

Testing Univariate and Multivariate Normality (Main Study)

Variable	skew	kurtosis	Variable	skew	kurtosis
UnderOw3	-.936	-1.123	SelfEs2	-.936	-1.123
UnderOw4	-1.048	-.903	SelfEs5	-.958	-1.082
UnderOw1	-1.094	-.802	SelfEs4	-.958	-1.082
UnderOw5	-.936	-1.123	SelfEs3	-.852	-1.274
UnderOw2	-1.025	-.950	OthReg1	-.915	-1.163
Assert3	-.915	-1.163	OthReg5	-.915	-1.163
Assert1	-1.025	-.950	OthReg4	-.958	-1.082
Assert2	-1.218	-.518	OthReg3	-1.048	-.903
Assert5	-.980	-1.040	OthReg2	-1.142	-.695
SelfReg4	-.852	-1.274	UnderOt4	-.832	-1.308
SelfReg1	-1.167	-.638	UnderOt1	-1.071	-.853

Table 4.7

Testing Univariate and Multivariate Normality (Main Study)

Variable	skew	kurtosis	Variable	skew	kurtosis
SelfReg3	-.894	-1.201	UnderOt3	-.980	-1.040
SelfReg2	-1.025	-.950	UnderOt2	-1.002	-.996
SelfReg5	-.980	-1.040	UnderOt5	-.980	-1.040
SelfEs1	-1.025	-.950	Mardia	----	13.954

4.3.2.2 Exploring the First Research Question

The first research question aimed at investigating the extent to which components of the SSEST contributed to the reliability of the test. As displayed in Table 4.8, the SSEST questionnaire enjoyed a Cronbach's alpha reliability of .766. The reliability indices for the self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation and others' emotional regulation were .805, .712, .864, .656, .733 and .829, respectively.

Table 4.8

Reliability Statistics; Main Study

	Cronbach's Alpha	N of Items
Understanding others' emotions	.864	5
Others' emotional regulation	.829	5
Self-esteem	.805	5
Self-regulation	.733	5
Assertiveness	.712	4
Understanding own emotions	.656	5
Total	.766	29

Table 4.9 displays the item-total correlations of the SSEST items. The results indicated that all items had moderate to large (.30 to 50) contributions to the total test.

Table 4.9
Item-Total Statistics (Main Study)

			Corrected Item-Total Correlations									
SelfEs1	.788	Assert1	.491	UnderOt1	.845	UnderOw1	.592	SelfReg1	.695	OthReg1	.820
SelfEs2	.763	Assert2	.502	UnderOt2	.834	UnderOw2	.584	SelfReg2	.683	OthReg2	.782
SelfEs3	.756	Assert3	.475	UnderOt3	.832	UnderOw3	.628	SelfReg3	.693	OthReg3	.786
SelfEs4	.765	Assert4	---	UnderOt4	.845	UnderOw4	.631	SelfReg4	.690	OthReg4	.792
SelfEs5	.765	Assert5	.528	UnderOt5	.823	UnderOw5	.584	SelfReg5	.673	OthReg5	.795

4.3.2.3 Exploring the Second Research Question

This question, which addressed the expert judgment validity of the Persian version of the test, was answered for the second time in the process of test administration in the main study. Five experts evaluated the SSEST based on content-related evidence. The second research question targeted the internal consistency of these ratings. Based on the results displayed in Table 4.10,it can be concluded that there were significant agreements between the raters on; self-esteem ($\alpha = .878$, $p < .05$), assertiveness ($\alpha = .733$, $p < .05$), understanding others' emotions ($\alpha = .957$, $p < .05$), understanding own emotions ($\alpha = .952$, $p < .05$), self-regulation ($\alpha = .804$, $p < .05$) and others' emotional regulation ($\alpha = .758$, $p < .05$).

Table 4.10

Intra-class Correlation Coefficients (Main Study)

		Intraclass Correlation	95% Confidence Interval		F Test with True Value			
			Lower Bound	Upper Bound	Value	df1	df2	Sig
Self-Esteem	Single Measures	.589[a]	.192	.933	8.174	4	16	.001
	Average Measures	.878[c]	.544	.986	8.174	4	16	.001
Assertiveness	Single Measures	.407[a]	-.023	.888	3.750	4	12	.033
	Average Measures	.733[c]	-.099	.970	3.750	4	12	.033
Understanding Others' Emotion	Single Measures	.818[a]	.515	.976	23.500	4	16	.000
	Average Measures	.957[c]	.841	.995	23.500	4	16	.000
Understanding Own Emotion	Single Measures	.800[a]	.481	.973	21.000	4	16	.000
	Average Measures	.952[c]	.822	.994	21.000	4	16	.000
Self-Regulation	Single Measures	.450[a]	.068	.896	5.091	4	16	.008
	Average Measures	.804[c]	.267	.977	5.091	4	16	.008
Others' Emotional Regulation	Single Measures	.385[a]	.021	.874	4.125	4	16	.017
	Average Measures	.758[c]	.096	.972	4.125	4	16	.017

Note. The first and second rows are intra-rater and inter-rater reliability estimates.

4.3.2.4 Exploring the Third Research Question

An exploratory factor analysis (EFA) was run through varimax rotation using principal axis factoring method. Before discussing the results, it should be noted that the assumption of

sampling adequacy was met. The KMO index of .780 was higher than .60 (Table 4.11) which

shows a middling level and is considered as an acceptable value.

Table 4.11

KMO and Bartlett's Test (Main Study)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.780
	Approx. Chi-Square	23.13.879
Bartlett's Test of Sphericity	Df	406
	Sig.	.000

The results also indicated that the assumption of sphericity was retained (χ^2 (406) =

2313.87, p < .05). Thus, it can be concluded that the correlation matrix was an appropriate one

to carry out EFA. The results of KMO for each item further supported the adequacy of sample

for each item. All item level KMO indices (Table 4.12) were higher than .50 (Field, 2018).

Table 4.12

KMO Indices for Items (Main Study)

Variable	KMO	Variable	KMO	Variable	KMO	Variable	KMO
SelfEs1	.773	Assert5	.717	UnderOw3	.808	OthReg1	.770
SelfEs2	.839	UnderOt1	.817	UnderOw4	.726	OthReg2	.782
SelfEs3	.813	UnderOt2	.810	UnderOw5	.704	OthReg3	.741
SelfEs4	.752	UnderOt3	.828	SelfReg1	.747	OthReg4	.810
SelfEs5	.795	UnderOt4	.824	SelfReg2	.754	OthReg5	.769
Assert1	.779	UnderOt5	.827	SelfReg3	.757		
Assert2	.695	UnderOw1	.682	SelfReg4	.794		
Assert3	.793	UnderOw2	.741	SelfReg5	.769		

The EFA extracted six factors which accounted for 58.57 percent of the total variance.

That is to say; this six-factor solution accounted for 58.57 percent of variation in SSEST.

Table 4.13

Total Variance Explained (Main Study)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.000	17.242	17.242	4.473	15.422	15.422	2.843	9.803	9.803
2	2.812	9.696	26.938	2.370	8.173	23.596	2.543	8.770	18.573
3	2.535	8.741	35.679	2.026	6.986	30.581	2.362	8.144	26.717
4	2.175	7.501	43.180	1.601	5.522	36.103	1.873	6.457	33.175
5	1.828	6.304	49.484	1.203	4.150	40.253	1.650	5.689	38.864
6	1.770	6.103	55.587	1.145	3.948	44.201	1.548	5.337	44.201
7	.991	3.418	59.005						
8	.966	3.332	62.338						
9	.873	3.010	65.348						
10	.858	2.958	68.306						
11	.802	2.764	71.070						
12	.772	2.661	73.732						
13	.694	2.392	76.124						
14	.616	2.125	78.249						
15	.599	2.064	80.313						
16	.594	2.050	82.363						
17	.560	1.931	84.295						
18	.518	1.786	86.080						
19	.485	1.672	87.752						
20	.472	1.626	89.378						
21	.436	1.502	90.880						
22	.419	1.446	92.326						
23	.392	1.353	93.679						

	.369	1.273	94.952
24	.369	1.273	94.952
25	.337	1.160	96.113
26	.314	1.082	97.195
27	.298	1.027	98.222
28	.290	1.000	99.222
29	.225	.778	100.000

Extraction Method: Principal Axis Factoring.

Table 4.14 displays the factor loadings of the 29 items of the SSEST under the six extracted factors. The results showed that all items loaded under their respective factors. All items had large contributions to their factors (=>.50).

Table 4.14
Rotated Factor Matrix

	Factors					
	1	2	3	4	5	6
UnderOt5	.794					
UnderOt2	.768					
UnderOt3	.744					
UnderOt4	.700					
UnderOt1	.699					
OthReg2		.744				
OthReg3		.740				
OthReg4		.688				
OthReg5		.683				
OthReg1		.599				
SelfEs3			.721			
SelfEs4			.682			
SelfEs5			.669			
SelfEs2			.653			
SelfEs1			.565			

SelfReg5	.630		
SelfReg2	.593		
SelfReg3	.570		
SelfReg1	.564		
SelfReg4	.548		
Assert5		.684	
Assert2		.585	
Assert1		.576	
Assert3		.539	
UnderOw2			.587
UnderOw5			.580
UnderOw1			.573
UnderOw4			.417
UnderOw3			.414

4.3.2.5 Exploring the Fourth Research Question

A confirmatory factor analysis (CFA) was run using LISREL 8.8 in order to probe the trait structure of SSEST. Conceptual Diagram 4.1 displays the model being investigated. The model included six latent variables; i.e. self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation and others' emotional regulation which tapped on a higher order latent variable labeled as "SSEST". Each latent variable was measured through five indicators (items) except for assertiveness which was measured through 4 indicators.
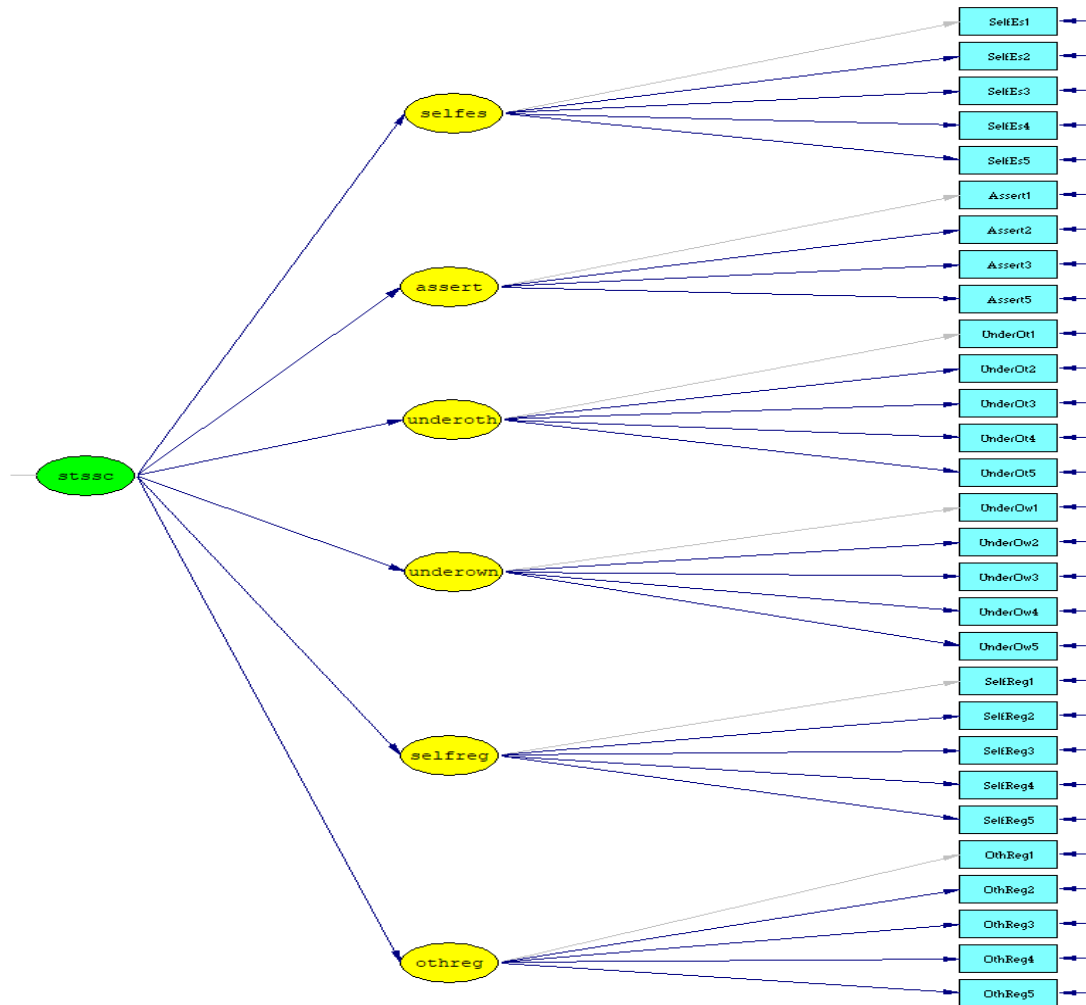
Conceptual Diagram 4.1, SSEST conceptual model

Measurement Model 4.2 displays the same model in standardized units. All standardized regression weights were higher than .30 indicating that the 29 items of the SSEST questionnaire had moderate to large contributions to their respective latent variable which in turn had moderate to large contributions to STSCC.
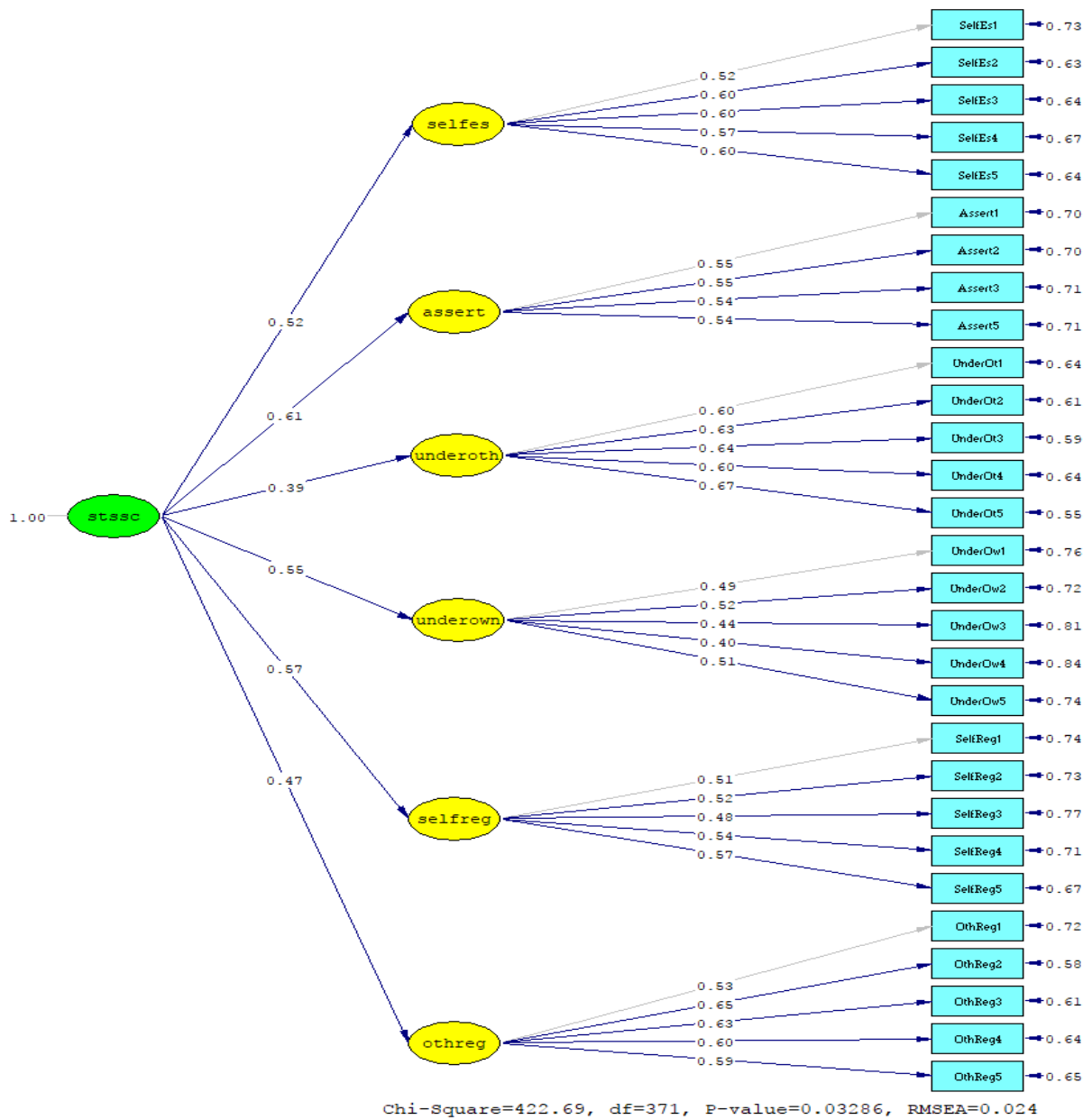
Measurement Model 4.2, Trait structure of SSEST in standardized units

And finally; Structural Model 4.3 displays the relationships between the latent variables. As
it was mentioned above all latent variables had moderate to large contributions to SSEST; i.e.

self-esteem (.52), assertiveness (.61), understanding others' emotions (.39), understanding own emotions (.55), self-regulation (.57) and others' emotional regulation (.47).

Chi-Square=422.69, df=371, P-value=0.03286, RMSEA=0.024
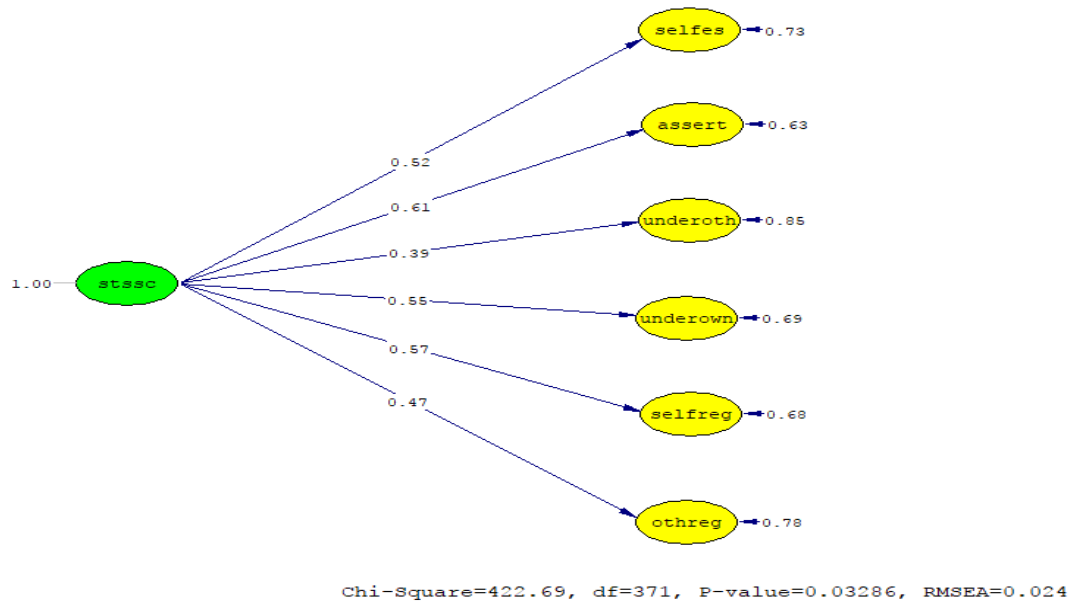
Structural Model 4.3, Relationships between latent variables in SSEST model

The SSEST model enjoyed a good fit. All fit indices (Table 4.15) proved that the model was an acceptable one; except for the significant results of the chi-square (χ^2 (371) = 422.69, p < .05). However, its ratio over the degree of freedom; i.e. 422.69 / 371 = 1.13, was lower than 3; another indication of the fit of the model. The root mean square of error approximation (REMSEA) value of .024 and its 90 % confidence intervals of .0075 and .034 were all lower than .05. The probability of close fit (PCLOSE = 1) was higher than .05. All these results proved fit of the model.

Table 4.15

Model Fit Indices

Fit Indices	Labels	Statistic	D.F.	P-Value	Criterion	Conclusion
Absolute	X^2	422.69	371	.0328	>.05	Bad Fit
	X^2 Ratio	1.13	---	---	<=3	Good Fit
	SRMR	.043	---	---	<=.10	Good Fit
	RMSEA	.043	---	---	<=.05	Good Fit
	90 % CI	.007, .034	---	---	<=.05	Good Fit
	PCLOSE	1	---	---	=>.05	Good Fit
	GFI	.94	---	---	=>.90	Good Fit
Incremental	RFI	.90	---	---	=>.90	Good Fit
	CFI	.97	---	---	=>.90	Good Fit
	IFI	.97	---	---	=>.90	Good Fit
Sampling Adequacy	Critical N	258.60	---	---	=>200	Adequate

The goodness of fit (GFI), comparative fit (CFI), incremental fit (IFI) indices were all higher than .90, and standardized root mean residual (SRMR) all supported the fit of the model. And finally, the critical N value of 258.60 was higher than 200; indicating that the present sample size was adequate for running CFA.

4.4 Discussion

The present section is devoted to discussing the study findings with regard to findings of previous similar studies with the same or different results.

The first research question of the study aimed at finding whether the components of the Persian version of the Situational Socio-Emotional Competencies Development Test (SSECDT) developed by Sala-Roca et al. (2016) contributed to the reliability of the test.

Results of data analysis revealed that the Persian version of the test enjoyed a total Cronbach's alpha reliability of .831, while the reliability indices for the components of the test such as self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation and others' emotional regulation were .805, .712, .864, .656, .733 and .829, respectively. All of the reliability indices mentioned above are above .60 which is regarded as the cutting degree for the acceptable reliability index (Field, 2018).

When components of a test have internal consistency, the whole test is considered reliable (Goodwin & Goodwin, 2016) and therefore, the present Persian SJT could be considered reliable due to the aforementioned features; comprising the components and items which enjoy high reliability index. Among the subcomponents the highest reliability belongs to *Understanding others' emotions* (α=.864) and the lowest reliability index in was reported for understanding own emotions (α=.65). This finding is also supported by the practical work and the previous research recorded in the literature, though the number of components in this test is more than the components of previously developed and validated SLTs. Based on the results of the meta-analysis done by Christian, Edwards, and Bradley (2010) and the report given in this regard by Lievens et al. (2008) most of the studies recorded on SJT have focused on job-related scenarios and have chiefly testes two to three constructs; e.g., McGrew and Bond (1995) tested assertiveness through expert judgment validity and Shefie et al. (2018) have included self-efficacy and assertiveness level in their test aiming at enhancing these two traits in the bullied victims at schools. Huang's (2010) SJT only focused on self-esteem of the subjects taking part in the study and used Rosenberg's (1965) self-esteem questionnaire. Though all the aforementioned tests and questionnaires have reported high reliability index, they have been confided to one, two, or at most three variables, components or latent constructs.

The test performance of the Iranian normal children as participants of the study proves the significance of all the six test components, meanwhile it highlights the relative importance of understanding others' emotions, others' emotional regulation, and self-esteem.

Sahu et al. (2019) argue that any test or questionnaire used as an assessment too for evaluating psychosocial problems should have high reliability as the results of the test are used for the diagnosis and treatment process. From this perspective, the present SJT takes both support of the previous scholars (Amiri & Birjandi, 2015; Burns et al., 2019; Cypress, 2017; Muris et al., 2003; Sahu et al., 2019; Souza et al., 2017) and is considered valuable to be used in the educational and clinical centers.

Despite the criticism of some scholars concerning the insufficiency of Cronbach's alpha as a measure of reliability index for the SJTs (Lievens et al., 2016; McDaniel & Nguyen, 2001; Sorrel et al, 2016) the present findings concerning internal consistency showed high reliability of the individual components of the test and the total reliability (internal consistency) of the test. This can also take support from the results and findings of the studies done by Burns et al., (2019) and Sahu et al. (2019) asserting that Cronbach's alpha is a significantly reliable measure of reliability index.

The second research question of the study was an attempt to find if the test developed by Sala-Roca et al. (2016) had expert judgment validity based on content-related evidence. The findings of the study revealed that the five experts who evaluated the test based on content-related evidence had high internal consistency in their ratings (see chapter three Table 4.1, Table 4.2 and Table 4.10). Also, the results of the correlation coefficients showed that there were significant agreements between the raters on all the components of the test including self-esteem, assertiveness, understanding others' emotions, self-regulation, others' emotional

regulation, and understanding own emotions. Likewise, in terms of the effectiveness of all choices given for the items in the questionnaire, the results showed that in terms of the choice effectiveness, the five experts were in terms of agreement. These findings in terms of expert judgment validity can take support from the views of some of the scholars, statisticians, and psychometrists: Amiri and Birjandi (2015) who employed expert judgment validity for measuring the validity of an inter-language pragmatic test which is an SJT and highly similar to the present SSECDT found that expert judgment validity could be reliable in case it is based on content related evidence and if it is done by informed experts. Berk (1990) has also stressed that expert judgment validity enhances the content validity of the test and could be used instead of content validity index in the situational test such as inter-language pragmatics and psychological scenario-based questionnaires used in the job-related interviews.

The present study findings, in terms of expert judgment validity, are also in line with McGrew and Bond's (1995) study on assertive community treatment in which they employed expert judgment validity as a measure of their instrument's validation. In this regard, Landeta (2006) argues that expert judgment validity is the same as Delphi method in social sciences and could be reliable for validity index of tests and questionnaires. Other researchers and research method experts (Boyatzis, 2008; Creswell & Clark, 2017; Cypress, 2017; Field, 2018) and psychometrists (Goodwin & Goodwin, 2016; Khine, 2013; Ljungberg, et al., 2015; Nestor & Schutt, 2018; Whetzel & McDaniel, 2009) also believe that Delphi method which is manifested in expert judgment validity is a reliable measure of validity which is rooted in content related relevance.

The third research question of the study aimed at finding if the Persian version of the SSECDT developed by Sala-Roca et al. (2016) had internal validity based on the participants'

responses. To find the internal validity of a questionnaire or a test which enjoys ratio or ordinal data (Creswell & Clark, 2017; Cypress, 2017; Field, 2018; Mousavi, 2012; Bachman, 2005; Bae & Bachman, 2010) suggest an EFA. Hence, the present study analysis methods in terms of calculating the internal validity of the test could be confirmed. The EFA which was run relied on varimax rotation using principal axis factoring method. It is worth mentioning that the assumption of sampling adequacy, which is a prerequisite for EFA (Field, 2018), was met. The KMO index of .780 was higher than .60 (see Table 4.11) which is considered as an acceptable value. The results of EFA revealed that the 29 items of the SSECDT loaded under the six extracted factors (self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation, and others' emotional regulation). As the results showed that all items loaded under their respective factors and all items had large contributions to their factors (=>.50), it was concluded that the test enjoyed a significant internal validity. This is in line with the ideas presented by research method experts who emphasize the value of internal validity (Borich & Tombari, 2019; Burns et al., 2019; Farhady, 2006; Creswell & Clark, 2017; Mousavi, 2012).

The fourth research question of the study was an attempt to see whether the SSECDT developed by Sala-Roca et al. (2016) enjoyed construct validity. To answer this question a confirmatory factor analysis (CFA) was run using LISREL 8.8 in order to probe the trait structure of the test. The model investigated in this regard, included six latent variables; i.e. self-esteem, assertiveness, understanding others' emotions, understanding own emotions, self-regulation and others' emotional regulation which tapped on a higher order latent variable labeled as "SSECDT". Each latent variable was measured through five indicators (items) except for assertiveness which was measured through 4 indicators. All these results proved fit

of the model and it is worth mention that the goodness of fit (GFI), comparative fit (CFI), incremental fit (IFI) indices were all higher than .90, and standardized root mean residual (SRMR) all supported the fit of the model. The related analysis (see Table 4.15) also showed that the present sample size was adequate for running CFA. Employing CFA to estimate construct validity of SJTs have been a controversial topic among researchers (Christian et al., 2010; Lievens & Chan, 2017; Lievens et al., 2008; McDaniel & Nguyen, 2001; Ravand & Robitzsch, 2015; Sorrel et al., 2016).

In fact, as mentioned before, some researchers suggest cognitive diagnostic modes (CDM) for calculating the construct validity of the SJTs instead of CFA and argue that CFA is good for the uni-dimensional tests (Lievens & Chan, 2017; Lievens et al., 2008; McDaniel & Nguyen, 2001; Robitzsch et al., 2014; Sorrel et al., 2016) while GJTs are multi-dimensional. Such scholars mainly propose CDM packages relying on Generalized Deterministic-input, noisy-and-gate model (G-DINA) (de la Torre, 2011). Conversely, Ravand and Robitzsch (2015) argue that compared to the traditional IRT models and CTT oriented analyses, the cognitive diagnostic modes (CDM) proposed for measuring reliability and validity of SJTs cannot be used extensively because of their novelty and expensiveness. Another problem of CDM is the sample size to be used in the analysis. Ravand and Robitzsch (2015) argue that the data for CDM to be calculated through G-DINA should be elicited from at least a randomly selected sample of 5000 (Ravand & Robitzsch, 2015; Rupp &Templin, 2008a), while CFA can be used with the sample sizes as small as 70 (Jung & Lee, 2011), though most sample size studies argue that CFA requires the minimum sample size of 150 to 200 (Beavers et al., 2013; Berk, 1990; Guadagnoli & Velicer, 1988; Hogarty et al., 2005). The present study tested the

SSECDT with 250 normal children in the Iranian context and the test showed significant

construct validity ensued from the CFA which was run in this respect.

V. Conclusion, Implications, Limitations, and Suggestions for Further Research

5.1 Introduction

In the first part of Chapter V, restatement of the problem, as well as research questions, hypotheses, and an overview of the procedures followed for the study, will be presented. In the second part, the study conclusion is presented which is followed by the third part which encompasses pedagogical implications. In the fourth part of chapter V limitation will appear, and finally, in the fifth part of this chapter, suggestions for further research will be dealt with.

The present study was an attempt to investigate reliability and construct validity of situational test of socio-emotional competencies in the Iranian context. Considering the review of the related literature and what happens in real situations, the researcher put forward the following research questions:

1. Do the components of the Situational Socio-Emotional Skills Test (SSEST) developed contribute to the reliability of the test?

2. Does the SSEST developed have expert judgment validity based on content-related evidence?

3. Does the SSEST developed have internal validity based on the participants' responses?

4. Does the SSEST developed enjoy construct validity? (What are the trait structures of the SSECDT developed?)

To answer the questions set, at first a thorough review of the literature related to different underlying components of the SSECDT developed by Sala-Roca et al. (2016) such as self-esteem, assertiveness, self-understanding, self-regulation, empathy and emotional regulation of others was done and then the Persian version of the test was put to the scrutiny of five experts who were PhD holders in psychometrics and psychology. They presented their views about each item and its choices based on a validation form which included situations, items, factors

and scales. Then, based on the results of expert judgment validly some modifications were done to adapt the test to the Iranian culture and context; four items were omitted and the Persian test included 29 items. Then, the results of the intra-class correlation coefficients showed that there were significant agreements among the experts (raters) concerning the components of the test. In the next phase, the test was piloted among 50 normal children (with the age range of 12 to 15) in the Iranian context. The results proved the significant reliability of the test.

To run the research a non-experimental exploratory study was designed and the modified reliable Persian test was administered to 250 normal children (with the age range of 12 to 15) randomly selected from both boys (36.8 %) and girls (63.2 %) studying at different educational centers (high schools) in Tehran from various districts. The collected data were analyzed through employing a) Cronbach's alpha for the purpose of estimating reliability of the test, b) intra-class correlation coefficients to find the internal consistency of the ratings of the five experts who evaluated the test based on content-related evidence, c) an exploratory factor analysis (EFA) to calculate the internal validity of the test, and finally d) a confirmatory factor analysis (CFA) which was run using LISREL 8.8 in order to probe the trait structure of the Persian version of the test.

5.2 Conclusion

The results of data analysis revealed that the Persian version of the SJT developed by Sala-Roca et al. (2016) under the name of Situational Socio-Emotional Competences Development Test (SSECDT) firstly enjoyed significant internal consistency as the findings showed high degrees of reliability indices for the components of the test. In fact, it was revealed that the six components of the test contributed to the total reliability index of the test. This was

done through Cronbach's alpha and the results were satisfactory and reliable based on the arguments of reliability presented by different scholars (Borich & Tombari, 2019; Creswell & Clark, 2017; Cypress, 2017; Field, 2018; Goodwin & Goodwin, 2016).

Secondly, the results of data analysis revealed that the test had significant expert judgment validity based on Delphi method. In fact, the five experts who scrutinized the test not only agreed up on 29 out of 33 items of the test, but also they agreed upon the choice effectiveness of the test items. This strengthens the validity of the test based on the views presented by different authors (Berk, 1990; Burns et al., 2019; Cypress, 2017; McGrew & Bond, 1990; McCrudden et al., 2019; Sahu et al., 2019).

In addition, expert judgment validity relies on the content-related evidence, therefore, the content validity of the test is also supported when the expert judgment validity increases (Borich & Tombari, 2019). According to Berk (1990), content-related evidence of validity is a central concern during 'instrument' development and expert professional judgment should play an integral part in developing the test items and definition of what is to be measured.

Thirdly, the exploratory factor analysis (EFA) which was run to find internal validity of the test through varimax rotation using principal axis factoring method, showed that the test had significant degree of internal validity. In this regard, the results of KMO for each item further supported the adequacy of sample for each item and this revealed that EFA has been an appropriate measure of internal validity for this test. Field (2018) argues that EFA works well in case most of the test items could load under their respective extracted factors. Fortunately, this happened in the current analysis and all the items of the test loaded under their respective factors having large contributions to their factors and all the six factors extracted could be considered significant as they contributed to the internal validity of the test. This enriches the

later interpretations of the test in decision making (McCrudden et al., 2019) and the role the test can play in the clinical and social contexts (Cypress, 2017).

The findings of the study revealed that the test developed had high internal validity. In this regard, Smith et al. (2019) argue that internal validity of a test could be confirmed through both qualitative and quantitative assessment methods of internal validity. In the quantitative assessment of internal validity the position the test takers hold across the test items would be taken into consideration (Field, 2018). Qualitative assessment which is possible through face, content, and response validation could be added to the quantitative validation to energize the validity of the test developed. This helps the test developers come to know about the examinees' thought patterns while responding to the test items.

Unfortunately little account of internal validity was found in the SJT-related literature covered by the present researcher and it seems that paying attention to the internal validity of such tests should be proposed. Jianda (2007) focused on the qualitative method of internal validity such as thinking aloud protocol and self-reports to increase his SJT of interlanguage pragmatics for Chinese students. Amiri and Birjandi (2015) confirmed that employing quantitative methods were also possible to assess internal validation of the SJTs, especially the multiple choice scenario oriented written tests. Following the trends of the quantitative methods, the present study findings also confirm that internal validity of the SJTs could be estimated through exploratory factor analysis (EFA).

In the fourth place, the data analysis results showed that the developed test enjoyed significant construct validity as the confirmatory factor analysis (CFA) investigated a model which included six latent variables; i.e. self-esteem, assertiveness, understanding others'

emotions, understanding own emotions, self-regulation and others' emotional regulation. In addition, these variables tapped on a higher order latent variable labeled as "SSECDT".

Checking the construct validity of the SJTs is of paramount importance (Lievens et al., 2008; Sorrel et al., 2016; McDaniel & Nguyen, 2001). However, there has been a lot of controversy over this notion: Some scholars (Christian et al., 2010; Lievens et al., 2008; Sorrel et al., 2016) have questioned using CFA in estimating the validity of such tests on the ground that they think CFA could work well with the uni-dimensional tests, while they consider SJTs as multi-dimensional ones. They assert that Cognitive Diagnostic Model (CDM) could be used instead. However, Ravand and Robitzsch (2015) argue that compared to the traditional IRT models and CTT oriented analyses, the cognitive diagnostic modes (CDM) proposed for measuring reliability and validity of SJTs cannot be used extensively because of their novelty and expensive software. In addition, although Rupp and Templin (2008b) account CDM as a reliable and useful model of estimating construct validity of SJTs, they argue that the results of CFA is not that much different from the results of CDM, meanwhile, CFA is more user friendly and less complicated.

5.3 Implications

The present study clarified that the SSECDT developed by Sala-Roca et al. (2016) was both reliable and valid in the Persian context. Likewise, it was revealed that the variables tested by this questionnaire and the scenarios employed in developing it, were able to tap the constructs the test intended to measure, the components of socio-emotional competences. Therefore, according to the results of the present study, some implications for the SSECDT in

the clinical and educational centers in terms of testing socio-emotional competences among children and young learners living in the normal situations can be suggested.

5.3.1 Implications for Clinical Centers

First of all, this test could be used in the clinical centers to diagnose the socio-emotional ability (competence) of the children (age of 12 to 15). This might be helpful in finding their likely issues and delving into the area of their psychological problems. Such tests could be used to study some aspects of the emotional intelligence of children with disruptive behaviors (Esturgó-Deu & Sala-Roca, 2010).

Disruptive behavior of the children in care or out of care could have different reasons. The present test could help psychologists in more careful diagnosis in this regard. For instance children with low self-regulation or low self-esteem could be diagnosed by the test and follow-up consultation sessions. Huang (2010) in his meta- analysis of previous studies on self-esteem found that for young individuals this is a high risk problem which needs appropriate diagnosis and proper measures to be taken. Likewise, MacDonald and Leary (2012) account self-esteem as one of the significant traits discriminating individual differences. The same is with other variables such as assertiveness, self-understanding, self-regulation, empathy and emotional regulation of others as components of the present test. Hence, psychologists can make use of the test and its interpretations in to enrich their diagnosis concerning the emotional status of the children in need, residential care children (Oriol, Sala-Roca & Filella, 2014), normal children, and out-of-care individuals who are in need of social support (Sala-Roca, Biarnés, García & Sabates, 2012).

A lot of social problems of the individuals might beck to the weakness of socio-emotional competences (Palvia, Baqir & Nemati, 2018; Scardigno, 2020). In addition, Shedu (2019) has found the relationship between socio-emotional and social competences of grown up people and their peer acceptance in childhood. Such research represent the significance of socio-emotional competencies in the individuals' various aspects of social life. The concept of emotional competencies embedded in the socio-emotional competencies and their influence on the social behavior of people are of paramount significance (Sethi & Moosath, 2018). The SSECDT could be helpful in term of clinical and psycho-social research in this respect.

5.3.2 Implications for Educational Centers

The present test which was translated and validated in the Iranian context, could be used in schools and educational centers. Consultants and school counselors can make use of the test in evaluating the emotional aspects of the children with whom they are in close contact. A lot of misbehaviors of the youth and children are rooted in their lack of self-esteem (Huang, 2010; MacDonald & Leary, 2012; Orth & Robins, 2014; Robins, et al., 2002). Likewise, assertiveness level plays a significant role in controlling bullied behavior of school students (Etheridge, 2010;

Shafie et al., 2018). Likewise, Assertive community treatment is not possible unless a well-organized diagnosis of the subjects' assertively level is available (McGrew & Bond, 1995). Canter (2010) also stresses that through assertive discipline, managers can induce positive behaviors in the school classrooms. The SSECDT as a reliable and valid instrument can be helpful in this respect.

Low self-regulation might cause learning problems for individuals in different educational levels (Gross, 1999). Likewise, there are some accounts of the relationship between high self-regulation, high self-esteem, and perceived learning competences among school students (Ohr, Webster & De LA Garza, 2014) and enhancing school readiness through promotion of self-regulation among kids (Ursache, Blair & Raver, 2012). Hence, the SSECDT as a reliable and valid diagnostic instrument and an educational aid can be helpful for both counsellors and teachers.

Also, learning development and social behaviors of the individuals could be affected by their understanding of others' emotions (Harmon-Robins, 2016; Taylor & Taylor-Allen, 2007). Another factor which may affect learners' social judgment and educational development is that of self-understanding (Damon & Hart, 1991; Hart & Fegley, 1995). Likewise, the ability to regulate others' emotional status could have both individual and social positive consequences (English et al., 2017). In addition, Reeck, Adams and Ochsner (2016) assert that social regulation of emotions plays a significant role in the educational and social contexts. The same idea has been highlighted in Fischer and Manstead's (2016) study concerning the social functions of emotion and regulation emphasizing that recognition of children's emotional status and socio-emotional competencies could pave the way for developing a more regulated, less stressful social context.

Considering the afore-mentioned perspectives in the research concerning emotional intelligence, the existence of a situational socio-emotional competences development test in any society and in all languages seems important and necessary. Accordingly, the existence of the present SSECDT in the Persian context with high internal consistency, expert judgment validity, internal validity, and construct validity can shed some lights on the dark sides of the

123

research in the emotional intelligences in general and investigating socio-emotional competences of Iranian children in particular.

5.4 Limitations

The present study was faced with some limitations which are as follows:

a. The number of participants in the present study was limited to 250 children, which in comparison to the huge numbers of individuals which might be subject to the concept of socio-emotional competencies as the likely test takers around the world and in Iran, represents a small population. This might affect the generalizability of the findings of the study. That is why the results might be generalized cautiously.

b. The test takers had to take the test in the school setting where the educational policies and the presence of their teachers and school authorities, as usual, might have affected their performance. Because of the limiting polices in the department of education in Iran, it was not possible to discuss different aspects of the test and its likely outcomes vastly to the families and the children taking part in the study. Therefore, following the test administration, the researcher could just once meet the children at school and present the test outcome to them. This might have partially affected the students' expectation of the test results.

c. Testing 50 participants and then 250 participants in the first and second phases of the study was hard work in its own turn and required firm programming and administrative measures. Briefing the participants also was a tough job and more importantly, briefing the authorities of the educational department who were too pessimistic about running research in the

schools , especially when the researcher is studying abroad were similar to climbing the Everest.

d. The researcher had to focus on only normal children with the age of 12 to 15 in this study as it was not possible to run the test in the center taking care of children with residential care, nor was it possible to administer the test to the out-of-care children who are labeled as the child labor victims in Iran and are manipulated by well-organized mafia.

5.5 Suggestions for Further Research

The findings of the present study have some limitations as mentioned above and further research is needed for investigations:

1. The criteria based on which the situations and items were selected in developing the test were clarified in the present study following the test development process done in Spain (Sala-Roca et al., 2016). Further studies might be carried out to check the presence and usefulness of this criteria in other contexts and modify the test developed to be used in the related studies in the likely contexts.

2. The reliability and validity of the SSECDT were calculated through Delphi method, Cronbach's alpha, CFA, and EFA. Other methods of estimating reliability and validity such as the ones presented by CDM supported philosophies could be employed to further investigate the reliability and validity of SJTs. In this regard, Structural Equation Modelling (SEM) (Field, 2018) and Generalized Deterministic-input, noisy-and-gate model (G-DINA) (de la Torre, 2011) could be used by other researchers.

3. The present test found six variables of self-esteem, assertiveness, self-regulation, understanding self-emotions, understanding others' emotions, and regulation of others'

emotions as the main factors checking the children's socio-emotional competencies. Further research can focus on the other probable variables such as empathy, self-confidence, and self-evaluation in this respect.

4. The subjects taking part in the study were all normal children. Future studies might be able to administer the test to the children in residential care or out-of- care children or even the child labor victims. Such studies not only enriches the reliability index of the test and provides the researchers with more accurate validity estimates in this regard, but also paves the ground for more psycho-social research about the current status of both home-care and out-of-care children, their emotional issues, and their likely life problems and outfalls. The results of such studies could help the psychologists and rehabilitation centers to design preventive measures as well as treatment programs for the individuals in need.

5. Though the age and gender of students were controlled in this research. The researcher had to assume that no significant difference exists between male and female participants in this study. The age and gender of the learners could be taken into consideration in another study of the same type with a bigger size to present more generalizable results and findings.

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VII. Appendices

Appendix A

Situational Socio-Emotional Competences Development Test

Josefina Sala, Gemma Filella, Xavier Oriol, Agnès Ros, Esther Secanilla, MontserratRodríguez and Anna Soldevila

The Situational Socio-emotional Skills test (SECD) assesses six socio-emotional skills (self-esteem, assertiveness, self-understanding, self-regulation, empathy and emotional regulation of others) by introducing a number of situations which testees must say how they would respond to. The test consists of five short stories or situations from everyday life with different questions. The everyday situations are: "Where shall we go for our end-of-year trip?", "Groupwork", "I have moved to a new city and am looking for new friends", "The party" and "They don't buy me what I asked for". For every situation, testees are asked six questions, each with five different responses (they have to select one). Students must put themselves in the shoes of the character and answer honestly regarding how they would react in the situation in question. In total, the test comprises 33 questions aimed at assessing the above skills. It takes between 15 and 30 minutes, and is therefore completed in a single session.

The test presented below is the result of work done by a team of researchers belonging to the IARS group and has been validated and collected by members of the IARS team (Josefina Sala, Gemma Filella, Xavier Oriol, Agnès Ros, Anna Soldevila, Esther Secanilla, Montserrat Rodríguez; Nair Zárate, Antoni Peregrino) and the GROP group (Núria Pérez). The test was developed within the framework of a project funded by the Ministry of Economy and Competitiveness (EDU2013-43326-R). It is currently being piloted in order to test its psychometric properties and adjust its measurements.

SITUATIONAL SOCIO-EMOTIONAL SKILLS TEST

In this test, you will find five short stories presenting everyday situations that any boy or girl could find themselves in. Each story has situations with five different responses (a, b, c, d, e and f). Put yourself in the place of the characters and answer truthfully about how you would react to each situation. Choose the answer that most closely matches what you would do for each situation. Remember that there are no right or wrong answers, only different ways of reacting. The results obtained in this test are used to reflect on how we respond to social and emotional situations. For the exercise to be useful it is very important that you respond truthfully to all questions. Remember that the answers will be treated confidentially.

We hope that you find the test interesting and would be happy to send you the results if you wish to receive them. The test takes between 15 and 30 minutes to complete.

Remember to click *Send* when you finish, or your answers will not be registered.

Thank you for your participation!

WHERE SHALL WE GO FOR OUR END-OF-YEAR TRIP?
1. It's June and you have met your friends to decide where to go for the end-of-year trip. You go into the cafeteria where you have arranged to meet and most of them are already there. You say hello but none of your mates respond. What do you think?
1. *They're ignoring me.*
2. *They're joking around with me.*
3. *They don't want me to go on the trip with them.*
4. *They're so excited that they didn't hear me.*
5. *Maybe they don't want me in the group.*

2. One of the girls in the group suggests going to the beach. She says her aunt and uncle have a house there and they would let you all have it for a week. You suggest going camping in the mountains. The girl who suggested going to the beach says to you, in a rude tone: "What a terrible suggestion!" How do you respond?
1. *I feel bad but I don't say anything.*
2. *I ask her why she thinks it's terrible.*
3. *I listen to her arguments and defend my suggestion.*
4. *I answer her rudely.*
5. *I calmly say: "Going to the mountains may be a terrible idea to you but going to the beach is a terrible idea to me".*

3. One of your mates tells the girl that there are better things to do than get dressed up and hook up with someone.
How do you think the girl must feel?
1. *Bad.*
2. *Embarrassed.*

158

    3. Angry.
    4. She doesn't care.
    5. I don't know.

4. A boy in the group says he likes the idea of spending a few days at the beach partying and hooking up with people.
A heated argument begins. How do you feel?
    1. Nervous.
    2. Bad.
    3. A little bad about the argument, but also good because I can see that others also like the idea of going camping.
    4. Overwhelmed.
    5. I don't know.

5. And what do you do?
    1. I leave.
    2. To avoid getting more stressed out I distract myself by looking at my phone.
    3. I join in the argument because I'm angry too.
    4. I go to the toilet to calm down and then I try to calm everyone else down.
    5. I take a deep breath and tell myself that everything will sort itself out.

6. In the end, as there is no agreement, you decide to split into two groups. You leave the cafeteria talking to John. He is very upset, very angry and hurt that the group has ended up splitting. What do you say to him?
1. That he shouldn't worry because everything will sort itself out.
2. "What mates we've got!"
3. That it would have been worse forcing someone to go somewhere they don't want to go.
4. I make him laugh by saying something stupid.
5. That it's pathetic that as friends we can't agree.

GROUPWORK

7. It's two months until the end of the school year and your teacher suggests the class participate in the student show for the school's open day. When she asks which students would be willing to participate, some of your classmates start to sign up. What do you do? Do you sign up?
    1. No, because I'll do it wrong for sure.
    2. I sign up, because it'll be fun.
    3. I'll take part if I have to.
    4. It makes me feel very embarrassed participating in things like this.
    5. It might be good, so I sign up.

8. Apart from the show, the class is going to make a comic to explain how the year went. Mary, who can draw very well, says she will do all the drawings. Anna, who also loves drawing, looks put out when Mary assigns herself the job. How does Anna feel?
    1. She feels terrible.
    2. She's angry.
    3. She's hurt.
    4. She doesn't care.

5. I don't know.

9. Mary begins to draw the first sketch and draws Peter, one of your classmates, with a huge nose. Peter gets really angry and wants to rip up the comic. Peter is next to you, what do you say to him?

1. *"In a minute she'll make fun of someone else"*
2. *"Mary is a disgrace"*
3. *"It's not important, it's only a picture!"*
4. *I say something funny to make him laugh.*
5. *"It's your problem if you can't take a joke".*

10.   In one of the other cartoons you're the target. Mary has drawn you with elephant ears, which makes the whole class start laughing. How do you feel?

1. *Sad.*
2. *Bad.*
3. *Humiliated.*
4. *Embarrassed.*
5. *I don't know.*

11.   Seeing your classmates laughing at your ears starts to make you feel bad... What do you think?

1. *I'm going to get her.*
2. *She can go to...*
3. *I try to take it as a joke.*
4. *She didn't have bad intentions.*
5. *I distract myself by doing something else.*

12.   What do you say to her?

1. *I protest, saying my ears aren't like that.*
2. *When I've calmed down I go and talk to her and tell her it made me angry.*
3. *I tell her it bothers me and she should erase it.*
4. *It bothers me but I don't say anything.*
5. *I insult her and rip up the drawing*

I HAVE MOVED TO A NEW CITY AND AM LOOKING FOR NEW FRIENDS

13. Your family has to move to a new city. Your parents have been offered a good job in another city and they have accepted it. This means that you will have to go to a new school, make new friends, etc. What do you think?

1. *I think it will be very difficult for me to make new friends.*
2. *I'm sure I will feel very lonely.*
3. *I think that even if it's hard, I'll work it out.*
4. *I'm totally convinced that it won't be a problem.*
5. *I make friends easily.*

14. Your sister rebels and tells your parents she doesn't want to leave, that her friends are here, that she can't adapt to a new school, that she won't be able to make new friends and she wants to stay here and live with Grandma, even though she's old and can't take care of her. What do you do? Do you say something to your sister?

160

1. *I tell her it's for the good of the family and also that Grandma is ill.*
2. *I distract her talking about how we'll decorate her new room.*
3. *I hug her and tell her it's not as bad as it seems.*
4. *I tell her she's absolutely right and that it's not fair.*
5. *I tell her we'll come to see our friends often.*

15. By contrast, your younger brother is happy. He says he's really excited about going to a new school and leaving the one he's at now. Why do you think he feels like this?
1. *He doesn't even know that.*
2. *Perhaps he didn't like his school for some reason.*
3. *Because he's young, he's not so concerned about making new friends.*
4. *Because he's immature.*
5. *I don't know.*

16. Your friends have made you a big farewell picture that makes you really happy. You plan to hang it in your room so that every day when you wake up, you remember that there are people who love you and are with you. The day you leave your Dad tells you that there's not enough space in the car and it has to stay at Grandma's. How do you feel?

1. *Bad.*
2. *Disappointed.*
3. *Really angry.*
4. *Like crying.*
5. *I don't know.*

17. And what do you say to your Dad?
1. *It's very important to me to take the picture.*
2. *I'd rather leave some clothes behind and take the picture.*
3. *If the picture is staying I am too.*
4. *I complain, saying it's not fair.*
5. *I don't say anything.*

18. Despite your insistence, your Dad decides to leave the picture at Grandma's and tells you the first day that you go back to visit you will pick it up. What do you think?
1. *In a few weeks we'll see Grandma again and I'll pick it up then.*
2. *It's best if I turn my MP3 on and start listening to music.*
3. *My Dad is confused and doesn't understand the importance of the picture to me.*
4. *I'm not going to talk to him all day.*
5. *I'm going to ruin the trip for him.*

19. When you pack your Mum tells you that for Christmas you're going to get clothes, because you're too old for toys. But you wanted something else. What do you do?

1. *I tell them I don't agree and I'd rather, they gave me money.*
2. *I protest, saying it isn't fair.*
3. *I tell them that's not the present I want.*
4. *I get up and I leave.*
5. *I pull a long face.*

THE PARTY
20. It's carnival time and the school is having a party. You form groups in class to dress up

in similar costumes. You arrange to meet your group after class to decide what to dress up as. One classmate suggests dressing up as chickens. You don't like the idea at all. What do you do?

1. *I tell him I don't like the idea and ask him if we can dress up as something else.*
2. *I tell him it's a terrible idea.*
3. *I don't dare say anything.*
4. *I tell him I don't like the idea.*
5. *I protest, saying it's a costume for freaks.*

21. You suggest dressing as a character from your favorite TV series. You love the idea, but no one listens to you. What do you think?

1. *They have the right to have a different opinion.*
2. *They don't like my idea.*
3. *They're ignoring me.*
4. *My ideas are not good enough.*
5. *I'll explain it again to persuade them.*

22. In the end, your group goes for the idea you dislike so much, the chicken. How do you react?

1. *I don't like it, but I have no choice.*
2. *I think that if most people think dressing as a chicken is okay, it's not such a bad idea.*
3. *I get really angry.*
4. *I try not to worry about it, it's not worth getting upset about.*
5. *I think there's no way I'm dressing up with them.*

23. The day arrives and the chicken costume is a success. How do you feel?

1. *Good.*
2. *Happy to have agreed with the suggestion.*
3. *Bad.*
4. *Embarrassed.*
5. *I don't know.*

24. One of your classmate's costumes is falling apart: his crest and tail have fallen off, and he can hardly walk. How do you think he feels?

1. *He's dying of embarrassment.*
2. *I ignore him, I don't care how he feels.*
3. *I think he maybe doesn't care.*
4. *He probably finds it funny.*
5. *I don't know.*

25. Your classmate is complaining because his costume is falling apart. What do you do?

1. *I try to calm him down, telling him it's not important.*
2. *I help him fix his costume.*
3. *I don't do anything.*
4. *I laugh about it.*
5. *I take my costume apart as well to make him laugh.*

26. When you're leaving the party a classmate asks if you're going to sign up for the open day show, what do you say?

1. *It might be good, so I'll sign up.*

THEY DON'T BUY ME WHAT I ASK FOR

27. **Next week is your birthday and you want your parents to buy you something you're really excited about. You bring up the subject during dinner and say what present you'd like. Your brother says you're the black sheep of the family and you don't deserve a present. What do you think?**
    1. *He's right.*
    2. *He's jealous of me.*
    3. *My family never listen to me.*
    4. *It's not true, my family appreciate me.*
    5. *He's trying to provoke me.*

28. **How do you take it?**
    1. *I get angry and answer him back.*
    2. *I ignore him.*
    3. *I don't give it any importance.*
    4. *I count to ten before saying anything.*
    5. *I change the subject so I don't get annoyed.*

29. **Your parents tell you that you're getting older and they're thinking about giving you trousers and a jacket, which is what you need right now. What do you do?**
    1. *I tell them it's not the present I want.*
    2. *I protest, saying it isn't fair.*
    3. *I get up and leave.*
    4. *I pull a long face.*
    5. *I tell them I don't agree and I'd rather they gave me money*

30. **The next day you go to class angry and when your friends ask you why, you explain what happened. One of your (female) friends tells you that you get upset too easily and you should be ashamed of yourself; when she wants something she saves up and buys it herself instead of waiting for people to give her everything. How do you feel?**
    1. *Angry.*
    2. *Misunderstood.*
    3. *Bad.*
    4. *Terrible.*
    5. *I don't know.*

31. **One of your classmates, John, answers the girl saying that if her parents don't give her what she wants for her birthday, they're stingy. The girl doesn't say anything. How do you think the girl feels?**
    1. *Hurt.*
    2. *Bad.*

3. *Embarrassed.*
4. *These things don't affect her.*
5. *I don't know.*

32. Rose, another classmate, is upset by John's comments and begins to criticize him, saying he's mean and having a go at his family. The atmosphere is beginning to get tense. What do you do?
1. *I say something to calm her down.*
2. *I say that both of them are partly right, that all families are different.*
3. *I join in the argument.*
4. *I leave so I don't have to hear them.*
5. *I change the subject.*

33. When you're on your way home you think that as you're going to live in another city, you'll be going to another school there. What do you think?
1. *I think that even if it's hard, I'll work it out.*
2. *I think it will be very difficult for me to make new friends.*
3. *I make friends easily.*
4. *I'm sure I will feel very lonely.*
5. *I'm totally convinced that it won't be a problem.*

ítems	Situation		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5
		Appendix B					
		Expert Judgment Validation Results					
1	TRIP1	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)	×	×	×	×	
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					×
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
2	TRIP2	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)	×	×	×	×	×
		(OTHER EMOTIONS REGULATION)					
3	TRIP3	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING		×	×	×	×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)	×				
4	TRIP4	(REGULATION-ASSERTIVITY)					

#	Name	Category					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)	×				
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)		×	×	×	
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					×
		(OTHER EMOTIONS REGULATION)					
5	TRIP5	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)			×		
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)	×	×		×	×
		(OTHER EMOTIONS REGULATION)					
6	TRIP6	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING	×	×			
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)			×	×	×
7	GROUP 1 WORK	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)	×				
		(ASSERTIVENESS)		×	×	×	×
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					

#	Group	Category					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
8	GROUP WORK2	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING		×	×	×	×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)	×				
9	GROUP WORK3	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)	×	×	×	×	
10	GROUP WORK4	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)	×	×	×		×
		(ASSERTIVENESS)				×	
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
11	GROUP WORK5	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					

167

#	Name	Skill					
		(ASSERTIVENESS)	×				
		(SELF EMOTION UNDERSTANDING)			×		
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)		×		×	×
		(OTHER EMOTIONS REGULATION)					
12	GROUP WORK6	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)	×	×	×	×	
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					×
		(OTHER EMOTIONS REGULATION)					
13	NEW CITY1	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)		×	×	×	
		(ASSERTIVENESS)					×
		(SELF EMOTION UNDERSTANDING)	×				
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
14	NEW CITY2	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING	×				
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)		×	×	×	×

#	City	Category					
15	NEW CITY3	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING		×	×	×	×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)	×				
16	NEW CITY4	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)	×	×	×		×
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)				×	
		(OTHER EMOTIONS REGULATION)					
17	NEW CITY5	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)		×	×	×	×
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)	×				
		(OTHER EMOTIONS REGULATION)					
18	NEW CITY6	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)	×				

#	Name		1	2	3	4	5
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)		×	×	×	×
		(OTHER EMOTIONS REGULATION)					
19	NEW CITY7	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)	×				
		(ASSERTIVENESS)		×	×	×	×
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)	×	×	×	×	
		(OTHER EMOTIONS REGULATION)					
20	PARTY1	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)	×				
		(ASSERTIVENESS)		×	×	×	
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					×
		(OTHER EMOTIONS REGULATION)					
21	PARTY2	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)	×				
		(SELF EMOTION UNDERSTANDING)		×		×	×
		OTHER EMOTION UNDERSTANDING			×		
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
22	PARTY3	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)		×	×	×	×

#	PARTY						
		(ASSERTIVENESS)	×				
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
23	PARTY4	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)	×	×	×	×	×
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
24	PARTY5	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING	×	×		×	
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)			×		×
25	PARTY6	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING	×				×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)		×	×	×	

#	Name	Category					
26	PART 7	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)	×		×	×	×
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)	×	×	×		×
		(OTHER EMOTIONS REGULATION)					
27	BUY1	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)		×	×		×
		(ASSERTIVENESS)	×				
		(SELF EMOTION UNDERSTANDING)				×	
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
28	BUY2	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)	×				
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)		×	×	×	×
		(OTHER EMOTIONS REGULATION)					
29	BUY3	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		******	(ASSERTIVENESS)	×	×	×	×	×
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					

	******	(SELF EMOTION REGULATION)	×	×	×	×	×
		(OTHER EMOTIONS REGULATION)					
30	BUY4	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)			×		
		(SELF EMOTION UNDERSTANDING)	×	×		×	×
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)					
31	BUY5	(REGULATION-ASSERTIVITY)					
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING		×	×	×	×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)	×				
32	BUY6	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)					
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING	×				×
		(SELF EMOTION REGULATION)					
		(OTHER EMOTIONS REGULATION)		×	×	×	
33	BUY7	(REGULATION-ASSERTIVITY)	×	×	×	×	×
		(COMPREHENSION)	×	×	×	×	×
		(SELF-ESTEEM)					
		(ASSERTIVENESS)					
		(SELF EMOTION	×	×	×		×

		UNDERSTANDING)					
		OTHER EMOTION UNDERSTANDING					
		(SELF EMOTION REGULATION)	×	×	×	×	
		(OTHER EMOTIONS REGULATION)					

Appendix C

Expert Judgment Validation Results (Choice Effectiveness)

Items	SCALES (Construct)		EXPERTS' CHOICE						DIFFERENCES OF EACH EXPERT RESPECT MEDIAN					
			Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Media	MEDIAN	expert 1	expert 2	expert 3	expert 4	expert 5
Situation: TRIP														
1	SELF-ESTEEM	Choice A	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice B	4	3	4	4	3	3.6	**4**	0	1	0	0	1
		Choice C	1	1	1	1	0	0.8	**1**	0	0	0	0	1
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	1	1	1	0	1	0.8	**1**	0	0	0	1	0
2	SELF EMOTION REGULATION	Choice A	1	0	1	1	0	0.6	**1**	0	1	0	0	1
		Choice B	5	4	4	4	5	4.4	**4**	1	0	0	0	1
		Choice C	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice D	0	0	1	0	1	0.4	**0**	0	0	1	0	1
		Choice E	3	3	3	3	3	3	**3**	0	0	0	0	0
3	OTHER EMOTION UNDERSTANDING	Choice A	1	0	1	1	0	0.6	**1**	0	1	0	0	1
		Choice B	1	1	3	2	1	1.6	**2**	1	1	1	0	1
		Choice C	1	0	1	0	0	0.4	**0**	1	0	1	0	0
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
4	SELF EMOTION UNDERSTANDING	Choice A	1	0	1	1	0	0.6	**1**	0	1	0	0	1
		Choice B	1	1	2	1	0	1	**1**	0	0	1	0	1
		Choice C	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice D	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
5	SELF EMOTION REGULATION	Choice A	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice B	2	2	2	3	2	2.2	**2**	0	0	0	1	0
		Choice C	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice D	4	4	3	4	5	4	**4**	0	0	1	0	1
		Choice E	5	5	5	5	5	5	**5**	0	0	0	0	0
6	OTHER EMOTIONS REGULATION	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	1	1	1	3	1	1.4	**1**	0	0	0	2	0
		Choice C	4	5	4	4	5	4.4	**4**	0	1	0	0	1
		Choice D	3	2	2	3	3	2.6	**3**	0	1	1	0	0
		Choice E	2	4	4	3	3	3.2	**3**	1	1	1	0	0
Situation: GROUPWORK														
		Choice A	0	0	0	0	0	0	**0**	0	0	0	0	0

175

#	Category	Choice												
7	ASSERTIVENESS	Choice B	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice C	3	3	3	2	3	2.8	**3**	0	0	0	1	0
		Choice D	1	1	1	0	1	0.8	**1**	0	0	0	1	0
		Choice E	5	4	4	3	4	4	**4**	1	0	0	1	0
8	OTHER EMOTION UNDERSTANDING	Choice A	1	2	1	0	2	1.2	**1**	0	1	0	1	1
		Choice B	2	4	3	1	3	2.6	**3**	1	1	0	2	0
		Choice C	3	1	1	1	0	1.2	**1**	2	0	0	0	1
		Choice D	4	2	5	4	3	3.6	**4**	0	2	1	0	1
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
9	OTHER EMOTIONS REGULATION	Choice A	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice B	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice C	5	4	5	5	5	4.8	**5**	0	1	0	0	0
		Choice D	4	5	4	4	5	4.4	**4**	0	1	0	0	1
		Choice E	1	1	1	1	1	1	**1**	0	0	0	0	0
10	SELF -- ESTEEM	Choice A	1	0	0	0	0	0.2	**0**	1	0	0	0	0
		Choice B	1	1	1	1	0	0.8	**1**	0	0	0	0	1
		Choice C	2	0	0	0	0	0.4	**0**	2	0	0	0	0
		Choice D	5	5	4	4	2	4	**4**	1	1	0	0	2
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
11	SELF EMOTION REGULATION	Choice A	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice B	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice C	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice D	5	4	5	4	5	4.6	**5**	0	1	0	1	0
		Choice E	4	3	1	1	2	2.2	**2**	2	1	1	1	0
12	ASSERTIVENESS	Choice A	3	2	3	3	2	2.6	**3**	0	1	0	0	1
		Choice B	4	5	5	5	3	4.4	**5**	1	0	0	0	2
		Choice C	4	2	4	3	3	3.2	**3**	1	1	1	0	0
		Choice D	3	1	1	1	1	1.4	**1**	2	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
	Situation: NEW CITY													
13	SELF-ESTEEM	Choice A	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice B	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice C	4	5	4	4	5	4.4	**4**	0	1	0	0	1
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	3	3	3	3	4	4	**4**	1	1	1	1	0
14	OTHER EMOTION REGULATION	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	3	3	3	3	4	3.4	**3**	1	0	0	0	1
		Choice C	5	4	5	5	5	4.8	**5**	0	1	0	0	0
		Choice D	1	1	1	1	0	0.8	**1**	0	0	0	0	1
		Choice E	4	4	4	4	5	4.2	**4**	0	0	0	0	1
15	OTHER EMOTIO	Choice A	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice B	3	3	3	4	4	4	**3**	0	0	0	1	1

#	Category	Choice												
	N UNDERSTANDING	Choice C	4	5	5	5	5	4.8	**5**	1	0	0	0	0
		Choice D	1	3	1	1	1	1.4	**1**	0	2	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
16	SELF EMOTION UNDERSTANDING	Choice A	1	1	2	1	1	1.2	**1**	0	0	1	0	0
		Choice B	2	5	5	5	5	4.4	**5**	3	0	0	0	0
		Choice C	1	2	1	1	2	1.4	**1**	0	1	0	0	1
		Choice D	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
17	ASSERTIVENESS	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	5	5	3	4	3	4	**4**	1	1	1	0	1
		Choice C	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice D	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice E	0	1	1	0	1	0.6	**1**	1	0	0	1	0
18	SELF EMOTION REGULATION	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	4	3	3	3	4	3.4	**3**	1	0	0	0	1
		Choice C	3	2	2	3	3	2.6	**3**	0	1	1	0	0
		Choice D	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
***19	ASSERTIVENESS	Choice A	5	4	4	4	5	4.4	**4**	1	0	0	0	1
		Choice B	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice C	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice D	4	4	4	4	4	4	**4**	0	0	0	0	0
		Choice E	1	1	1	1	1	1	**1**	0	0	0	0	0
	SELF-EMOTION REGULATION	Choice A	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice B	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice C	4	5	4	4	5	4.4	**4**	0	1	0	0	1
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	3	3	3	3	3	3	**3**	0	0	0	0	0
		Choice A	1	1	1	1	1	1	**1**	0	0	0	0	0
Situation: PARTY														
20	ASSERTIVENESS	Choice A	5	4	4	4	5	4.4	**4**	1	0	0	0	1
		Choice B	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice C	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	1	1	1	1	1	1	**1**	0	0	0	0	0
21	SELF EMOTION UNDERSTANDING	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	2	2	2	2	2	2	**2**	0	0	0	0	0
		Choice C	0	1	0	1	1	0.6	**1**	1	0	1	0	0
		Choice D	0	0	0	1	1	0.4	**0**	0	0	0	1	1
		Choice E	5	4	4	4	5	4.4	**4**	1	0	0	0	1
22	SELF-ESTEEM	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	3	2	3	2	2	2.4	**2**	1	0	1	0	0
		Choice C	1	1	0	0	1	0.6	**1**	0	0	1	1	0

#	Category	Choice						Avg	Bold					
	(blue)	Choice D	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice E	5	4	4	3	3	3.8	**4**	1	0	0	1	1
23	SELF EMOTION UNDERSTANDING	Choice A	3	3	3	3	3	5	**3**	0	0	0	0	0
		Choice B	1	2	3	4	3	2.6	**3**	2	1	0	1	0
		Choice C	0	0	1	1	0	0.4	**0**	0	0	1	1	0
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	3	4	3	2	4	3.2	**3**	0	1	0	1	1
24	OTHER EMOTION UNDERSTANDING	Choice A	4	4	5	5	4	3.6	**4**	0	0	1	1	0
		Choice B	5	5	4	5	5	4.8	**5**	0	0	1	0	0
		Choice C	1	2	1	1	1	1.2	**1**	0	1	0	0	0
		Choice D	0	1	1	1	1	0.8	**1**	1	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
25	OTHER EMOTION REGULATION	Choice A	1	1	1	1	0	0.8	**1**	0	0	0	0	1
		Choice B	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice C	3	4	4	3	4	3.6	**4**	1	0	0	1	0
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
***26	SELF EMOTIONS REGULATION	Choice A	5	4	4	5	5	4.6	**5**	0	1	1	0	0
		Choice B	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice C	0	0	1	0	0	0.2	**0**	0	0	1	0	0
		Choice D	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice E	4	3	3	4	4	3.6	**4**	0	1	1	0	0
	ASSERTIVNESS	Choice A	5	4	4	5	5	4.6	**5**	0	1	1	0	0
		Choice B	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice C	0	0	1	0	0	0.2	**0**	0	0	1	0	0
		Choice D	1	1	1	1	1	1	**1**	0	0	0	0	0
		Choice E	4	3	3	4	4	3.6	**4**	0	1	1	0	0
Situation: BUY														
27	SELF ESTEEM	Choice A	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice B	4	3	3	2	1	2.6	**3**	1	0	0	1	2
		Choice C	2	3	1	0	0	1	**1**	1	2	0	1	1
		Choice D	5	5	5	4	5	4.8	**5**	0	0	0	1	0
		Choice E	3	3	3	3	3	3	**3**	0	0	0	0	0
28	SELF EMOTIONS REGULATION	Choice A	0	0	0	0	0	0	**0**	0	0	0	0	0
		Choice B	2	1	3	4	3	2.6	**3**	1	2	0	1	0
		Choice C	1	0	0	0	1	0.4	**0**	1	0	0	0	1
		Choice D	5	5	5	4	4	4.6	**5**	0	0	0	1	1
		Choice E	3	4	3	4	3	3.4	**3**	0	1	0	1	0

178

								Mean						
***29	SELF EMOTION REGULATION	Choice A	3	1	1	1	1	1.4	**1**	2	0	0	0	0
		Choice B	1	1	2	1	2	1.4	**1**	0	0	1	0	1
		Choice C	4	5	4	3	5	4.2	**4**	0	1	0	1	1
		Choice D	5	4	5	5	5	4.8	**5**	0	1	0	0	0
		Choice E	3	2	3	3	3	2.8	**3**	0	1	0	0	0
	ASSERTIVENESS	Choice A	4	4	5	5	4	3.6	**4**	0	0	1	1	0
		Choice B	5	5	4	5	5	4.8	**5**	0	0	1	0	0
		Choice C	1	2	1	1	1	1.2	**1**	0	1	0	0	0
		Choice D	0	1	1	1	1	0.8	**1**	1	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
30	SELF EMOTION UNDERSTANDING	Choice A	3	3	4	3	4	3.4	**3**	0	0	1	0	1
		Choice B	0	1	3	2	1	1.4	**1**	1	0	2	1	0
		Choice C	0	1	1	0	0	0.4	**0**	0	1	1	0	0
		Choice D	1	1	2	1	2	1.4	**1**	0	0	1	0	1
		Choice E	4	5	5	4	5	4.6	**5**	1	0	0	1	0
31	OTHER EMOTION UNDERSTANDING	Choice A	1	2	1	1	1	1.2	**1**	0	1	0	0	0
		Choice B	4	5	5	5	5	4.8	**5**	1	0	0	0	0
		Choice C	3	1	2	3	1	2	**2**	1	1	0	1	1
		Choice D	1	2	1	1	1	1.2	**1**	0	1	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
32	OTHER EMOTION REGULATION	Choice A	1	1	1	0	0	0.6	**1**	0	0	0	1	1
		Choice B	1	0	2	1	0	0.8	**1**	0	1	1	0	1
		Choice C	2	3	3	1	2	2.2	**2**	0	1	1	1	0
		Choice D	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice E	0	0	0	0	0	0	**0**	0	0	0	0	0
***33	SELFEMOTIONS UNDERSTANDING	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice C	3	3	2	3	2	2.6	**3**	0	0	1	0	1
		Choice D	0	2	1	1	1	1	**1**	1	1	0	0	0
		Choice E	4	5	3	3	4	3.8	**4**	0	1	1	1	0
	SELF EMOTION REGULATION	Choice A	5	5	5	5	5	5	**5**	0	0	0	0	0
		Choice B	2	2	2	2	2	2	**2**	0	0	0	0	0
		Choice C	0	1	0	1	1	0.6	**1**	1	0	1	0	0
		Choice D	0	0	0	1	1	0.4	**0**	0	0	0	1	1
		Choice E	5	4	4	4	5	4.4	**4**	1	0	0	0	1
33	36	180 options							**MEAN DIFF**	0.25	0.29	0.20	0.35	0.41

Persian Version of SSECDT

(Situational Socio-emotional Skills test (SSEST)

به نام خدا

پرسشنامه مهارت های اجتماعی- عاطفی

پرسشنامه های مهارت های اجتماعی- عاطفی آزمون هایی هستند که که با معرفی یک سری موقعیت ها به مراجعان، شش مهارت اجتماعی- احساسی(عزت نفس، ابراز وجود، توانایی درک هیجانات شخصی, تعدیل هیجانات شخصی ،توانایی درک هیجانات دیگران و تعدیل هیجانات در دیگران) را مورد ارزیابی قرار می دهد و شرکت کنندگان باید بگویند نسبت به آن موقعیت چگونه واکنش نشان می دهند .

این آزمون شامل ۵ داستان کوتاه از موقعیت هایی است که در زندگی به صورت روزانه اتفاق می افتد. از شرکت کنندگان ۶ سوال پرسیده می شود که هرکدام دارای 5 پاسخ متفاوت است و از جواب ها باید یکی را انتخاب کنند. پاسخ دهندگان باید خودشان را جای آن موقعیت بگذارند و با توجه به آن موقعیت صادقانه پاسخ دهند که چه عکس العملی از خود نشان می دهند .به طورکلی آزمون شامل ۲۳ سوال است و هدف ارزیابی مهارت های بالا است. مدت زمان پاسخگویی به این آزمون بین ۲۳-۱۵ دقیقه است و بنابراین دریک جلسه تمام می شود. به یاد داشته باشید که هیچ پاسخ درست یا غلطی وجود ندارد، فقط نحوه نشان دادن عکس العمل متفاوت است. . مدت زمانی که صرف انجام این ازمون می شود ۱۵ الی۲۳ دقیقه خواهد بود.

نتایج به دست آمده در این آزمون برای نشان دادن اینکه چگونه به موقعیت اجتماعی و احساسی پاسخ میدهیم استفاده میشود. برای این که فعالیت شما مفید واقع شود، پاسخ صحیح شما به تمام سوالات بسیار مهم است. به خاطر داشته باشید که پاسخها محرمانه باقی میمانند.

برای تعطیلات سال نو کجا برویم؟

۱- ماه اسفند است و شما با همکلاسی های خود ملاقات کرده اید تا تصمیم بگیرید که برای اردوی سال نو به کجا سفر کنید. شما به کافی شاپ یعنی همان جایی که قرار گذاشته اید همدیگر را ملاقات کنید میروید. بیشتر دوستان در آنجا حضور دارند. شما سلام می‌کنید، اما هیچ یک ازهمکلاسی هایتان پاسخی نمی‌دهند. شما چه فکر می‌کنید؟

١. آنها من را نادیده می‌گیرند.

٢. آنها با من شوخی می‌کنند.

٣. آنها نمی‌خواهند با آنها سفر کنم.

۴. آنها خیلی هیجان زده بودند صدای من را نشنیدند.

۵. شاید آنها من را در این گروه نمی‌خواهند.

۲-یکی ازهم گروهی ها پیشنهاد رفتن به شهر ساحلی را می‌دهد. او می‌گوید عمو و عمه‌اش خانه‌ای دارند که به

شما اجازه می‌دهند همه شما برای یک هفته به آنجا بروید. شما پیشنهاد می‌کنید به یک کمپینگ در کوه‌ها بروید. کسی که پیشنهاد رفتن به ساحل را داده با لحن گستاخانه‌ای می‌گوید "چه پیشنهاد بدی" شما چه عکس العملی از خود نشان می‌دهید؟

1. من احساس بدی می‌کنم، اما چیزی نمی‌گویم.
2. من از او می‌پرسم چرا فکر می‌کنی پیشنهاد من بد است.
3. من به استدلال های او گوش می‌دهم و از پیشنهادم دفاع می‌کنم.
4. به صورت گستاخانه‌ای به او جواب میدهم.
5. من آرام می‌گویم: ممکن است ایده رفتن به کوه برای شما یک ایده بدی باشد اما برای من هم رفتن به ساحل وحشتناک است.

٣*-یکی از دوستانتان به خواهر یا دخترخاله اش می گوید که کارهای بهتری برای انجام دادن وجود دارد تا اینکه لباس باز بپوشد و با کسی ارتباط داشته باشد. فکر می کنید دختر باید چه احساسی داشته باشد؟

1. بد
2. خجالت زده
3. خشمگین
4. او اهمیتی نمی دهد
5. من نمی دانم

٤- پسری در گروه می‌گوید که علاقه دارد چند روزی را در مهمانی‌های ساحلی سپری کند و با مردم در ارتباط باشد. بحث داغی شروع می‌شود. چه احساسی دارید؟

1. عصبی هستم
2. بد
3. کمی بد در مورد بحث داغ، اما همنطوری خوب هست، زیرا من می‌توانم ببینم که دیگران نیز ایده رفتن کمپینگ را دوست دارند.
4. سراسیمه
5. من نمی دانم

٥- و چه کاری انجام می دهید؟

1. آنجا را ترک می کنم.
2. برای اینکه بیشتر از این مضطرب نشوم با نگاه کردن به تلفنم حواسم را پرت می کنم.
3. من هم وارد این بحث می شوم چون عصبانی هستم.
4. من به سرویس بهداشتی می روم تا آرام شوم و سپس سعی می کنم دیگران را آرام کنم.
5. نفسی عمیق می‌کشم و به خود می‌گویم که همه چیز مرتب خواهد شد .

٦- در پایان به توافق نمی‌رسید و تصمیم می‌گیرید به دو گروه تقسیم شوید.کافی شاپ را ترک می‌کنید و با علی صحبت می‌کنید . بسیار عصبانی است و از به هم خوردن گروه آزرده خاطر است. به او چه می گویید؟

١. او نباید نگران باشد، زیرا همه چیز مرتب خواهد شد .

٢. چه دوستانی ما داریم.

٣. اگر کسی را مجبور به رفتن به جایی کنیم که علاقه ندارد، بدتر می‌شود.

٤. با گفتن مطالب احمقانه او را مجبور به خندیدن می‌کنم.

٥. این باعث تاسف است که به عنوان دوست نمی توانیم به تفاهم برسیم.

کار گروهی

٧-دو ماه تا پایان سال تحصیلی باقی مانده است و معلم شما پیشنهاد می کند که همه‌ی دانش آموزان این کلاس در نمایشگاه دانش آموزی برای روز بازگشایی مدرسه شرکت کنند. وقتی که او می پرسد که کدامیک از دانش آموزان مایل به شرکت در این نمایشگاه هستند، برخی از همکلاسی‌های شما شروع به ثبت نام می کنند. چه کار می‌کنید؟ آیا شما ثبت نام می‌کنید؟

١. نه، چون مطمئن هستم این کار را اشتباه انجام میدهم.

٢. من ثبت نام می کنم، چون سرگرم کننده خواهد بود.

٣. اگر مجبور باشم ثبت نام میکنم.

٤. اگر بخواهم شرکت کنم باعث می شود که احساس خجالت و شرمساری و مواردی مثل این داشته باشم.

٥. ممکن است خوب باشد، بنابراین من ثبت نام می کنم.

٨-صرف نظر از اجرای نمایشگاه، بچه های کلاس می‌خواهند به صورت طنز بیان کنند که چگونه سال تحصیلی را سپری کرده اند. مریم که نقاش خوبی است، می‌گوید او تمام نقاشی‌ها را می‌کشد .سا را که خودش هم نقاشی کردن را دوست دارد وقتی مریم اعلام حضور میکند، به نظر می آید که ناراحت شده است. سا را چه احساسی می کند؟

١. او احساس بدی می‌کند.

٢. او عصبانی است.

٣. او صدمه دیده است.

٤. او اهمیت نمی‌دهد.

٥. من نمی‌دانم.

٩-مریم شروع می‌کند به کشیدن اولین طرح و چهره ،رضا را نقاشی می‌کند که دارای بینی بزرگی است. رضا واقعا عصبانی می شود و میخواهد نقاشی را پاره کند.رضا در کنار شما است، به او چه می گویید؟

١. در یک لحظه او باعث شد دیگران بخندند

٢. مریم باعث ننگ است.

٣. مهم نیست، فقط یک عکس است.

٤. من یک چیز خنده دار می گویم تا او بخندند.

٥. اینکه جنبه‌ی شوخی کردن را نداری، مشکل خودت است.

١٠-در یکی از کارهای دیگر مریم قصد دارد چهره ی شما را طراحی کند. او شما را با گوش‌های فیل کشیده است.

این امر باعث شده همه ی بچه های کلاس بخندند. شما چه احساسی دارید؟

1. غمگین.
2. بد.
3. تحقیر شده.
4. خجالت زده.
5. من نمی دانم.

۱۱-اینکه همکلاسی‌های شما با مشاهده گوش‌هایتان شمارا مسخره کنند با عث می شود شما احساس بدی داشته باشید. شما چه فکری می‌کنید؟

1. به حسابش می رسم.
2. او می تواند برود به جهنم
3. سعی می کنم این موضوع را به عنوان یک شوخی در نظر بگیرم.
4. او نیت بدی نداشت.
5. حواسم را با انجام کاری دیگر پرت می‌کنم.

۱۲-به او چه می گوئید؟

1. من اعتراض می‌کنم و می‌گویم گوشهایم شبیه فیل نیست.
2. وقتی به آرامش رسیدم با او صحبت می‌کنم و به او می گویم که عصبانی شدم.
3. من به او می‌گویم که آن نقاشی من را ناراحت کرده و باید پاکش کند.
4. من ناراحت می شوم، اما چیزی نمی گویم.
5. من به او توهین میکنم و نقاشی را پاره می‌کنم.

به شهر جدیدی نقل مکان کرده ام و به دنبال پیدا کردن دوستان جدید هستم

۱۳-خانواده شما مجبورند به شهر جدیدی نقل مکان کنند. به والدین شما کار خوبی در شهر دیگری پیشنهاد کرده‌اند و آن‌ها آن را پذیرفته‌اند. این به این معنی است که شما باید به مدرسه ی جدیدی بروید و دوستان جدید پیدا کنید، شما چه فکری می‌کنید؟

1. فکر می‌کنم پیدا کردن دوست جدید برایم بسیار دشوار است.
2. مطمئن هستم که احساس تنهایی می‌کنم.
3. فکر می‌کنم حتی اگر سخت هم باشد، این کار را انجام خواهم داد.
4. کاملا متقاعد شده‌ام مشکلی وجود نخواهد داشت .
5. به راحتی دوست پیدا می‌کنم.

۱۴-خواهر شما مخالفت می‌کند و به پدر و مادر شما می‌گوید که نمی‌خواهد برود. او نمی‌تواند خود را با مدرسه‌ی جدید وفق دهد و دوست پیدا کند. او می خواهد اینجا بماند و با مادر بزرگ زندگی کند، با وجود اینکه مادربزرگ پیر است و نمی تواند از او مراقبت کند. چه کار می کنید ؟ آیا چیزی به خواهرتان می‌گویید؟

۱. من به او می‌گویم این امر برای خانواده خوب است و مادر بزرگ هم بیمار است .

۲. من حواسش را با صحبت کردن راجع با دکوراسیون اتاق جدیدش پرت می‌کنم.

۳. بغلش می‌کنم و میگویم بد به نظر نمی‌رسد.

۴. من به او می‌گویم کار او کاملا درست است و این مساله منصفانه نیست.

۵. به او می‌گویم اغلب دوستانمان را خواهیم دید.

۱۵-برعکس ، برادر کوچکتر شما خوشحال است و می‌گوید واقعا در مورد رفتن به مدرسه ای جدید هیجان زده است. چرا فکر می‌کنید او چنین احساسی دارد؟

۱. او حتی این را نمی داند.

۲. شاید به دلایلی مدرسه اش را دوست نداشته است.

۳. از آنجا که خیلی جوان است، او خیلی نگران پیدا کردن دوست جدید نیست.

۴. چون بالغ نیست.

۵. من نمی دانم.

۱۶-دوستانتان برای شما یک عکس خداحافظی تهیه کرده‌اند که شما را واقعا خوشحال می‌کند. شما قصد دارید که آن عکس را در اتاقتان آویزان کنید تا هرروزکه از خواب بیدار می‌شوید به یاد بیاورید کسانی هستند که دوستتان دارند و با شما هستند. روز اسباب کشی پدر به شما می‌گوید داخل ماشین به اندازه کافی جا برای آن عکس نیست و باید در خانه‌ی مادر بزرگ بماند. چه احساسی دارید؟

۱. بد.

۲. ناامید.

۳. واقعا عصبانی هستم.

۴. دوست دارم گریه کنم .

۵. من نمی دانم.

۱۷-و به پدرتان چه می گویید ؟

۱. برای من داشتن آن عکس بسیار مهم است.

۲. من ترجیح می‌دهم فراموش کنم و از خیر یک سری از لباس هایم بگذرم و عکس را بردارم.

۳. اگر عکس اینجا می‌ماند، من هم می‌مانم .

۴. من شکایت دارم، گفتم این عادلانه نیست.

۵. من چیزی نمی‌گویم.

۱۸-با وجود اصرار شما، پدرتان تصمیم می‌گیرد تصویر را در خانه‌ی مادربزرگ بگذارد و می گوید روزی اولی که برای دیدن مادر بزرگ برگردیم می توانی عکست را برداشته و با خود ببری. شما چه فکری می‌کنید؟

۱. چند هفته دیگر مادر بزرگ را دوباره خواهیم دید و من نقاشی را با خود خواهم برد.

۲. بهتر است MP3 خود را روشن کنم و شروع به گوش دادن به موسیقی کنم.

۳. پدرم در اشتباه است و اهمیت تصویر را برای من درک نمی کند.

۴. تمام روز با او صحبت نمی کنم.

۵. قصد دارم مسافرتش را خراب کنم .

جشن

زمان رسیدن جشن ها فرا رسیده است و قرار است در مدرسه جشن برگزار گردد. شما ترتیبی می‌دهید تا بعد از کلاس، گروه خود را ملاقات کنید تا تصمیم بگیرید چه لباسی برای نمایش بپوشید. یکی از همکلاسی‌ها می‌گوید که طرح لباسی که انتخاب می‌کنیم مثل جوجه باشد.

۱۹-شما این ایده را اصلا دوست ندارید، چه کار می کنید؟

۱. به او می‌گویم که این ایده را دوست ندارم و ای کاش بتوانیم چیز دیگری بپوشیم.
۲. به او می‌گویم این ایده بد است.
۳. من جرأت نمی‌کنم چیزی بگویم.
۴. به او می‌گویم من این ایده را دوست ندارم.
۵.من اعتراض می‌کنم و می‌گویم این لباس برای سیرک مناسب است.

۲۰-شما لباسی از مجموعه تلویزیونی مورد علاقه‌تان،کلاه قرمزی را پیشنهاد می‌دهید. این ایده را دوست دارید، اما هیچ کس به شما گوش نمی‌دهد. شما چی فکر میکنید؟

۱. آنها حق دارند نظرات مختلفی داشته باشند.
۲. آنها ایده من را دوست ندارند.
۳. آنها من را نادیده می‌گیرند.
۴. ایده‌های من به اندازه کافی خوب نیست.
۵. من دوباره ایده ام را توضیح خواهم داد تا آنها را متقاعد کنم.

۲۱-در نهایت گروه با همان ایده‌ای موافقت می کند که شما از آن متنفرید. چه عکس العملی از خود نشان می دهید؟

۱. آن ایده‌را دوست ندارم، اما من هیچ انتخابی ندارم.
۲. فکر می‌کنم پوشیدن لباس شبیه جوجه ایده‌ی خوبی است.
۳. واقعا عصبانی می‌شوم.
۴. سعی می‌کنم نگرا ن نباشم چون ارزش ناراحت شدن را ندارد.
۵. فکر می کنم هیچ راهی وجود ندارد. من هم مثل آنها لباس می‌پوشم.

۲۲-روز موعود فرا می‌رسد و لباس شبیه جوجه به موفقیت دست میابد. چه احساسی دارید؟

۱. خوب
۲. خوشحالم که با ان پیشنهاد موافقت کردم .
۳. بد
۴. خجالت زده
۵. من نمی دانم

۲۳-یکی از همکلاسی‌های شما درحال افتادن است و نقابش می‌شکند. دنباله لباسش افتاده است و به سختی می‌تواند راه برود. فکر می‌کنید او چه احساسی دارد؟

۱. او از خجالت می‌میرد.
۲. من او را نادیده می‌گیرم. برایم مهم نیست که او چه احساسی دارد.
۳. فکر می‌کنم برایش اهمیتی نداشته باشد.
۴. او احتمالا آن اتفاق را خنده‌دار بداند.
۵. من نمی‌دانم.

۲۴-همکلاسی شما شاکی است، زیرا لباس‌هایش درحال افتادن است. شما چه کار می‌کنید؟

۱. سعی می‌کنم او را آرام کنم و به او بگویم که مهم نیست.
۲. من به او کمک می‌کنم و لباسش را درست می‌کنم.
۳. من هیچ کاری نمی‌کنم.
۴. من بابت اتفاقی که برای لباسش افتاده است، می‌خندم.
۵. من لباس خودم را از هم جدا می‌کنم تا او را بخندانم.

چیزی که من ازشون درخواست کردم را نمی خرند

۲۵-هفته آینده روز تولد شماست و شما می‌خواهید پدر و مادرتان برای شما چیزی را بخرند که شما در واقع هیجان زده خواهید شد.ضمن صرف شام، شما موضوع را مطرح می‌کنید و می‌گویید چه کادویی دوست دارید. برادرتان به شما می‌گوید شما شایستگی گرفتن آن کادو را ندارید. شما چی فکر می‌کنید؟

۱. حق با او است.
۲. او نسبت به من حسادت می‌کند.
۳. خانواده من هرگز به حرف‌های من گوش نمی‌دهند.
۴. این درست نیست، خانواده‌ام از من قدردانی می‌کنند.
۵. او سعی دارد من را خشمگین کند.

۲۶-چطور برداشت می‌کنید؟

۱. عصبانی می‌شوم و جوابش را می‌دهم .
۲. اورا نادیده می‌گیرم.
۳. اهمیتی نمیدهم.
۴. قبل از انکه چیزی بگویم تا ۱۰ می‌شمارم.
۵. برای اینکه ناراحت نشوم موضوع را عوض می‌کنم.

۲۷-روز بعد با عصبانیت به کلاس می‌روید و زمانی که همکلاسیتان از شما علت عصبانیتتان را می‌پرسد، توضیح می‌دهید که چه اتفاقی افتاده است. یکی از دوستان شما می‌گوید که شما خیلی پرتوقع هستید و باید از خودتان شرمنده باشید ؛ زیرا زمانی که او چیزی را لازم دارد، باید از پس‌انداز خود آن چیزی را که لازم دارد بخرد نه اینکه

منتظر بماند مردم چیزی به او بدهند. چه احساسی دارید؟

١.   خشمگین

٢.   سو تفاهم شده

٣.   بد

٤.   وحشتناک

٥.   من نمی دانم

٢٨-یکی از همکلاسی‌های شما به نام (کریمی) به آن دیگری (امیدی) می گوید که اگر والدین او چیزی را که او می‌خواهد برایش تهیه نکنند،پس آن‌ها خسیس هستند.   امیدی چیزی نمیگوید. فکرمی‌کنید حالا امیدی چه احساسی می‌کند؟

١.   آسیب دیده

٢.   بد

٣.   خجالت زده

٤.   این چیزها او را تحت تاثیر قرار نمی‌دهد.

٥.   من نمی دانم.

٢٩-یکی دیگر از همکلاسی‌ها به نام رحیمی از حرف کریمی ناراحت شده و شروع به انتقاد کردن از او می‌کند و می‌گوید: او خسیس است و درحال ناراحت کردن خانواده‌اش است. یک جو ناراحت کننده‌ای ایجاد می‌شود. شما چه کار می‌کنید ؟

١.   چیزی می‌گویم تا او را آرام کند.

٢.   می‌گویم که هر دو آنها تا حدی حق دارند. خانواده‌ها متفاوت هستند.

٣.   وارد بحث می‌شوم.

٤.   انجا را ترک می‌کنم چون مجبور نیستم راجع به آن چیزی بشنوم.

٥.   موضوع را عوض می کنم.

Key to the Constructs:
1. Self-Esteem (items 1, 10, 13, 22, and 27)
2. Assertiveness (items 7, 12, 17, and 20)
3. Understanding Others' Emotion (items 3, 8, 15, 24, and 31)
4. Self-Emotion Understanding (items 4, 16, 21, 23, and 30)
5. Self-Emotional Regulation (items 2, 5, 11, 18, and 28)
6. Others' Emotional Regulation (items 6, 9, 14, 25, and 32)