

Validation of Emotional Intelligence's Scale in Indian Context

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The intention of this paper is to exhibit the reliability and validity of Emotional Intelligence scale developed by Goleman (1998). A sample of 549 respondents filled the emotional intelligence scale. This scale contains 32 statements describing the individual's emotional stability and how he or she is capable of manage their emotions. A person with high emotional intelligence supposes to manage emotions in every situation and face other individual's unpredictable emotions as well. Emotional intelligence now days very important at work place to develop understandings between employees. Statements include in this emotional intelligence's scale represent the emotional stability and managing emotions. This paper tries to represent this scales validity and reliability in Indian context.

Key Words: Emotional Intelligence, Reliability, Scale, Validity

I INTRODUCTION

Emotional Intelligence (EI) has signified so many things to different people, like it is about being nice to others. On the other hand, some people perceive it as a dilemma and hard to believe how emotions can be intelligent. Emotional intelligence is sign of stability and success in life sphere, including work life as well. Goleman (1998) has considered emotional intelligence as a gift for recognizing one's own feelings and those of others, for proper organizing emotions in ourselves and in our link. The term "emotional intelligence" was first noticed approximately in 1995 with the help of publication by Daniel Goleman's best-selling book that set out some powerful case such as self-awareness, self-discipline, and empathy. Mayer and Salovey (1997) claimed that emotional intelligence defines as the capability to explain and concern the emotion and also mixing the feelings with thinking. Consequently, it is the ability to identify emotions, to contact and to produce emotions to aid thought, to gain emotional knowledge and thoughtfully control emotions to promote emotional and intellectual growth. Mayer, Caruso & Salovey (2000) have given running definition of emotional intelligence as 'an ability to recognize the meanings of emotions and their relationships and to reason and solving the problem on the basis of them'. Based on BarOn's (2000) work, "emotional intelligence is an array of non-cognitive capabilities, competencies and skills that influence one's ability to succeed in cop up with environmental demands and pressures". Bar-On & Parker (2000) contains interpersonal (e.g. empathy), intrapersonal qualities (e.g. emotional self-awareness), stress management (e.g. tolerance to stress), adaptability (e.g. problem-solving) and general mood.

Intelligence is largely related with the talents like come across a relationship acknowledge the motive behind the whole thing and connects to conceptual thinking. Emotions are composed of moods, guess of others' states of mind, feelings and energy. Emotional Intelligence (EI) is described as an aptitude to feel something, interact as it has been thought, remember and learn emotions from others and manages and understands our emotions in every situation. Emotions are developing with occurrence and damage too, may be due to directions given by the others like institutions and society etc. Each and every emotion set in order the entire behavioural responses so that people understand it and reflects it in their relationships. Emotional intelligence is renowned as an ability to find reason behind every behavioural prototype and explanation of associated problems. Chastukina (2002) has demonstrated that person who is emotionally intelligent can get more success with the aid of concentration and available education which is not separate from the actions and shows an appropriate relation between opinions and the actions.

II DIMENSIONS OF EMOTIONAL INTELLIGENCE

Goleman (1995) has portrayed the key components of emotional intelligence as self-awareness, empathy, motivation, self-regulation and social skills that further concurred that a learning potential who foot on emotional intelligence fallout in stupendous performance at work. Emotional intelligence establishes individual prospective for learning the qualitative and practical skills with the help of these five basics. The blend model by Goleman (2010) of emotional intelligence is extensively used for measuring emotional intelligence. It takes up a mixture of four competencies which are shown in Figure.



Figure 1: Goleman's Emotional Intelligence competencies
Source: Goleman (2010)

III SCALE RELIABILITY AND VALIDITY

According to the study, confirmative factor analysis were also performed on the scale developed by Goleman (1998). Here also obtained results were compared to goodness of fit indices recommended by (Bentler and Bonett's 1980). This part of analysis includes observed variables (all constructs of Emotional Intelligence) and latent variable (Emotional Intelligence) based on the previous literature and instrument developed by Goleman (1998). The emotional intelligence scale includes 32 statements on four point scale represents four constructs. Figure-4.3 (first order CFA) gave you an idea about an over identified recursive model in which 32 items of scale represent four dimensions or constructs containing 528 different sample moments. For this measurement model, the regression weights are 28, variances are 36 and covariances are 6 hence total 70 parameters are estimated. Degree of freedom is calculated as $(528 - 70 = 458)$ and chi square and goodness of fit indices are also calculated for this model. In Table-4.5, figure verdict the absolute fit indices and incremental fit indices like CMIN/df value (1.460) and in GFI (0.930), TLI (0.978), AGFI (0.919) and RFI (0.933) all values are greater than 0.90 that is also acceptable (Bentler and Bonett's 1980, Bentler, 1990) and for badness fit of model, the value of RMSEA (0.029) is also less than 0.08 (Steiger, 1998) showed overall good fit of model. As mentioned earlier, greater the value of GFI shows better fit of model (Ho, 2006) and the value of GFI in this model (0.956) also give an idea that model is more close to perfect fit and the value of RMSEA (0.029) of model represents excellent fit (Ho, 2006) which explains discrepancy stuck between actual and predicted coverage. Marsh et al. (2004) suggested that cut off value > 0.90 not always showed equally good indices for all models. For the validity of the model there should be some other aspects also works equally and researcher must consider these aspects as well (Bentler, 1998). Acceptable range of incremental fit indices ranged between 0 to 1 (Malhotra & Dash, 2010) where value near signifies poor fit whereas value near 1 signifies good fit of model. The present measurement model also showed a better model fit of data.

Table-1: Fitness Indices of Model

Fit Indices	Recommended	Measures of proposed model	Remarks
CMIN/df	<5.0	1.460	Accept the model
GFI	>0.90	0.930	Good Fit
TLI	>0.90	0.919	Good Fit
AGFI	>0.90	0.933	Good Fit
RFI	>0.90	0.978	Good Fit
RMSEA	<0.08	0.029	Close Fit

The standardized regression weights (factor loadings of each items in scale) showed values more than 0.5 or ranging between 0.9 to 1 [see in Table-1] which is also good for scale reliability and validity. The unstandardized regression weights are also significant ($p < 0.05$) in table by CR (Critical Ratio) and p value [see in Table-1]. The value presented in table shows that all 32 statements significantly symbolize by their relevant latent construct.

In this measurement scale, for checking the convergent validity of the measurement model also CR and AVE are used. The value recommended for Construct reliability is more than 0.7 and for Average Variance Explained is more than 0.5 (Black & Anderson, 2009) also attained by this CFA results. Discriminant validity also checked in present study by comparing AVE's (Average Variance Explained) of the constructs with their relevant Maximum Shared Variance

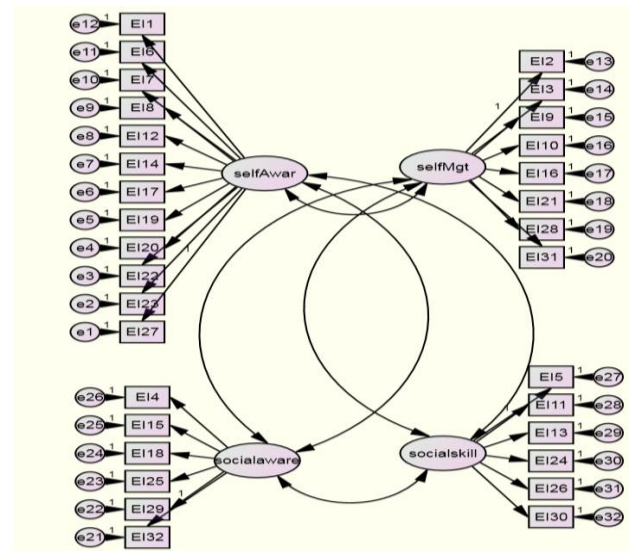


Figure-2: First Order CFA Model For EI Scale

(MSV) and Average Shared Variance (ASV), MSV and ASV both should be lower than AVE (Black & Anderson, 2010). Table-3 showed all values related to reliability and validity. CR values are for every construct signify that there is no reliability issue in this particular scale. AVE above 0.5 also support the above idea that emotional intelligence scale's reliability conditions are fulfilled. For validity of this scale, convergent validity and discriminant validity conditions are also satisfied by MSV and ASV values because they both are low than AVE value [see Table-3].

Table-3 Reliability and Validity Parameters for EI's Scale

Construct	CR	AVE	MSV	ASV
<i>Self management</i>	0.91	0.56	0.334	0.221
<i>Self awareness</i>	0.94	0.58	0.334	0.283
<i>Social awareness</i>	0.88	0.56	0.274	0.229
<i>Social skills</i>	0.88	0.55	0.293	0.235

The Figure-2 represent that the emotional intelligence has four factors and their respective observed variables. The factors or latent variables of emotional intelligence are self awareness, social awareness, social skills and self management. The correlation coefficient of all these latent constructs are positive as shown [see Figure-2]. As stated above, it is recommended that items who has factor loadings less than 0.50 (Black & Anderson, 2009) were removed from scale but in this model also not a single item has factor loading less than 0.50 infact factor loading are very high [see Figure- 2].

IV CONFIRMATORY FACTOR ANALYSIS (SECON ORDER) RESULTS FOR EMOTIONAL INTELLIGENCE

As per the first order CFA results, better model fit values and all fulfil conditions of validity and reliability suggested to perform further second order CFA so that researcher can also validate that all four constructs (self awareness, social awareness, social skills and self management) represent the Emotional Intelligence. Figure-3 explained that second order measurement model contains four factors from first order CFA and one latent variable (emotional intelligence) in second order factor. The model fit indices for second order CFA are also satisfactory loading [CMIN/df= 1.509, GFI= 0.927, AGFI= 0.916, RFI= 0.930, TLI= 0.975 and RMSEA= 0.029] as in first order factor CFA. All the values in this model also ranging between 0 to 1, in fact more close to value 1 that shows a good fit model. A slightly variation found in values of both models fit, caused may be the little difference in the degree of freedom. Also, the results demonstrates that all 32 items in scale correctly assembled in to one variable named emotional intelligence with four constructs and with no cross loading. Hence, after considering all results it can be conclude that all four constructs expline emotional intelligence variable very well and emotional intelligence's scale by Goleman (1998) also valid in Indian context.

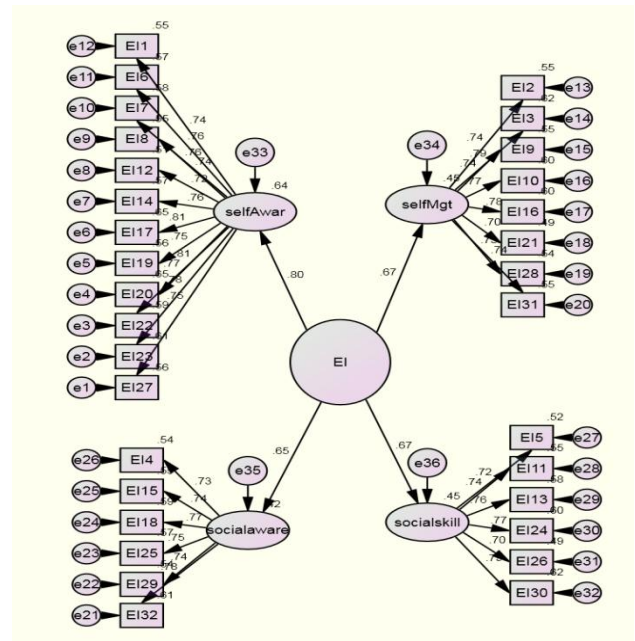


Figure-3: Second Order CFA Model For EI Scale

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