

Development of Indigenous Scale of Emotional Intelligence and Evaluation of Its Psychometric Properties

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The present study was carried out to develop and validate an indigenous self-report measure of Emotional Intelligence. After pilot study, the factorial validity of the 72 items scale was determined on a sample of 1547 individuals (857 men and 690 women) recruited from different cities of Pakistan. The scale was subjected to principal component analysis using varimax rotation method and 56 items were retained in a 10 well defined factor structure, which collectively accounted for 62.7% of the total variance. The alpha coefficient of the scale was .95. The positive relationship of this indigenous scale with Bar-On (EQ-i, 1997) supported its convergent validity ($r = .686$). Construct validity was supplemented by finding its relationship with peer rating and correlation was found to be moderately positive ($r = .631$). The Scale of Emotional Intelligence (SEI) is a promising measure with good items homogeneity, internal consistency and a meaningful pattern of validity.

Keywords: emotional intelligence, reliability, validity, peer rating

Emotional intelligence (EI) has become a major topic of interest in the scientific circles after the publication of Goleman's bestseller book "Emotional Intelligence" in 1995. Three major approaches to defining and measuring emotional intelligence are prevalent in literature: Mayer and Salovey (1997) describe emotional intelligence as an ability to monitor one's own and others feelings and emotions, to manage and use emotions, to discriminate among them and to use this information to guide one's thinking and action; Goleman's model (1995) views the construct as a collection of emotional and social competencies that evaluates managerial performance and is measured by multi-rater assessment; and Bar-On's model (Bar-On, 1997a, 2000) describes the cross section of emotional and social competencies that influences behavior.

Since the last decade of 20th century, there has been increasing interest in the theoretical development and measurement issues of emotional intelligence. If a construct is not scientifically measured it becomes empirically useless, so the importance of EI has led scholars to develop a wide variety of measures with reference to mental health, academic, social and occupational success. Valid and reliable measures of EI appeared over the period of 20 years since the advent of Levels of Emotional Awareness Scale (LEAS) by Lane, Quinlan, Schwartz, Walker, and Zeitlin (1990), Toronto Alexithymia Scale (TAS-20) by Bagby, Parker, and Taylor (1994), Trait Meta-Mood Scale (TMMS) by Salovey, Mayer, Goldman, Turvey, and Palfai (1995), Emotional Accuracy Research Scale (EARS) by Mayer and Geher (1996), Bar-On (1997a) Emotional Quotient Inventory (EQ-i), Schutte Self Report Index (SSRI) by Schutte et al. (1998) and Multi Factor Emotional Intelligence Scale (MEIS) by Mayer, Caruso, and Salovey (1998) were published. The tradition of test development to measure EI did not stop in the 21st century as Mayer, Salovey and Caruso Emotional Intelligence Test (MSCEIT; 2002), and Petrides and Furnham (2001) Trait Emotional Intelligence Questionnaire (TEIQue).

Emotional intelligence measures are bifurcated into two main categories: to assess EI as an ability and as a trait. Self-report

trait measures of EI are very popular among researchers (Petrides & Furnham, 2001). Most of the measures have been developed in America, so there is a need to develop EI measures in other parts of the world as well. The difference in dealing with emotions is evident in Eastern (collectivistic) and Western (individualistic) cultures. In collectivistic cultures people are low in self disclosure and expression of emotions in order to keep the wellbeing of the group intact, while members of individualistic cultures express their emotions to help them out even if the outlet involves negative emotions toward others (Keiko, Ohara, Antonucci, & Akiyama, 2002; Mesquita, 2001; Niedenthal, Krauth-Gruber, & Ric, 2006). Nonverbal expression of emotions, labeling and prioritization of emotions is determined by cultural norms (SparkNotes, 2005). The cleft between Eastern and Western culture also leads to variability in different human traits (e.g., Emotional Intelligence), which needs to be studied in different cultures with respect to their environment, language, traditions and ways of upbringing of individuals.

As existing measures of EI were developed in America and Western Europe, so they are not culture fair and have limited application. Appropriateness of administering these measures outside North America and Western Europe could be questionable. Experts like MacCann, Matthews, Zeidner, and Roberts (2004) claim that emotional knowledge is a culturally learned trait. The generalizability of these tests in countries like Pakistan, where English is not the first language must be examined for biasness, because sometimes it is hard to find suitable substitute for a particular English word while translating the statements, which may change its meaning. Language barriers could also influence performance of individuals on these EI tests.

As an ability measure, EI has consensus scoring, which again is culture specific, as emotion recognition and perception is a function of societal norms. Another fact that limits the generalizability of ability measures is whether experts working in the field of emotions actually have high level of EI themselves, and that whether they know the correct answer or the most 'popular' answer (Day, 2004). It is not necessary that what is considered correct by American experts is perceived in the same way in other areas of the world as well. Ability measures of EI contains such material (e.g., work of art, people's voices and stories), that also restricts their application in non-American and non-Western cultures.

Keeping in view the importance of emotional intelligence,

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inappropriateness of administration of existing measures of EI on Pakistani population, and scarcity of work on scale development in Pakistan, the present study was planned to develop and validate the Scale of Emotional Intelligence (SEI) in Pakistani cultural context.

Study 1: Development of the Scale of Emotional Intelligence (SEI)

Study 1 was carried out in two parts. In part I items were generated and in part II items were factor analyzed to confirm the hypothetical structure of the scale.

Method

Part I: Generation of Items

Items were generated by adopting deductive approach. In order to get items generated by public, a proforma containing operational definitions of all 15 dimensions of emotional intelligence given by Bar-On (1997a, 2000) was prepared. Originally 155 items that sampled the domain of emotional intelligence were generated in Urdu language and pooled up. This pool of items was presented to 4 judges. After consensus, 80 items were finally selected on the basis of (a) fidelity to the construct (b) clarity (c) redundancy (d) reliability and (e) comprehensibility.

The response format of Emotional Intelligence Scale was decided to be a Likert type 4-point scale, where 1 = never true, 2 = sometimes true, 3 = often true and 4 = always true. High score on the scale represents high emotional intelligence and low score means low emotional intelligence.

Pilot study was carried out by engaging 30 subjects from Lahore city by following convenient sampling strategy. The age range of the participants was 20-50 years ($M = 33.47$, $SD = 9.19$) to ensure the comprehensibility and psychometric cleansing of the items. Kolmogorovo-Smirnov test of normality was applied and 8 out of 80 items were excluded due to non-normality. In the end, 72 items were used to confirm the theoretical structure and factorial validity of the scale.

Part II: Internal Consistency, Factor Structure, and Construct Validity of the Scale

Participants

Sample of 1600 individuals was recruited by using convenient sampling technique from nine major cities of Pakistan. Age of the sample ranged between 16-60 years ($M = 30.27$, $SD = 11.49$).

Procedure

A 72 item scale was distributed and participants were asked to fill it independently and honestly. Filled EI scale was collected either by hand or the participants posted it back in duly stamped envelopes. Out of 1600 participants, 1550 completed the questionnaire and were found appropriate to be used in factor analysis but during factor analysis three of the subjects were automatically excluded due to some missing values. Before factor

analysis of the data, certain assumptions (e.g., sample size, normality, out layer among cases and linearity) were tested and data was found to fulfill the criteria given by Field (2005).

Results

Items were factor analyzed. Data of 1550 participants was subjected to exploratory factor analysis by using Varimax rotation method. Initial analysis revealed the factor solution that converged in 33 iterations. Principal Component Analysis (PCA) yielded 15 factor solutions. We followed the criterion of Kaiser (1960) and 10 well defined, interpretable, clear and accurate factors were retained on the bases of scree plot, Eigen values > 1.0 and theoretical relevance. Eigen value for factor 1 was 23.011, whereas Eigen values for factors 2 to 10 were 4.559, 3.139, 2.827, 2.531, 2.178, 1.954, 1.886, 1.661, and 1.441 respectively and 62.7% of the variance was accounted for by the first 10 factors.

Ordinarily, rotation reduces the number of complex variables and enhances interpretation. However, in the present case rotated solution still included several complex variables. In the first factor there was maximum influx of variables and some of them had dual loadings. This scenario is not surprising, as the items were designed to measure the single construct, so the variables had high inter-correlations among themselves. Hence, the structure was interpreted keeping in view the inclusion criteria and theoretical relevance of the variables to respective factors. Last 5 factors (i.e., 11, 12, 13, 14, 15) remained undefined and were excluded as items loaded on these factors were not measuring a well defined single dimension; items measuring happiness (17, 18, 25, 29, 62, 63), self-actualization (10, 26, 27, 51, 66) and independence (30, 34, 35, 37, 38) were either loaded on factor of interpersonal skill (factor 1) or were scattered all over the structure and making no sense, so these 16 items were excluded as well from the final scale.

Final scale emerged with 56 items (Mien halat ka roshan pehlo daikhta/daikhti hon, mein koi bhi kaam kerne se pehle is ki mansoba bandi kerta/kerti hon, mein apni kamzorian aur khamiyon ka itraf baasani ker leta/leti hon, mein nakami ki soorat mein rota/roti hon meaning I see the positive side of circumstances, I plan before hand anything I intend to do, I easily admit my mistakes, I cry when I fail in 10 well defined factors namely Interpersonal Skill, Self Regard, Assertiveness, Emotional Self Awareness, Empathy, Impulse Control, Flexibility, Problem Solving, Stress Tolerance and Optimism. Ten items in the final scale required reverse coding (i.e., 7, 9, 13, 17, 26, 30, 42, 47, 48, and 49) (Table 2).

In order to find out the internal consistency of the total scale and subscales, reliability analysis was run on normative sample ($N = 1550$) which showed high internal consistency. Cronbach's alpha coefficient for the total scale was $\alpha = .95$ and was also found reasonably high for all 10 factors, ranging from $\alpha = .67$ (stress tolerance) to $\alpha = .91$ (interpersonal skill). Most of the item total correlations were $> .3$. An estimation of item to total correlation yielded that all the items were positively and significantly correlated with the total scale ($r = .139$ to $r = .791$) (Table 1).

There was also a high positive inter correlation between different subscales of SEI (Table 3).

Gender and age differences were the primary group-based differences that were examined with respect to total emotional intelligence, and women found to score higher as compared to men as revealed in t -test, $t(1548) = .713$, $p < .0001$ (Table 4). One way ANOVA revealed a significant effect of different age groups on EI

scores, $F(4, 1544) = 16.757, p < .05$. The age group 16-20 years had significantly lower mean score in comparison to other older age groups except for the group with age range of 41-50 years (Tables 5 and 6).

Table 1
Factor Structure and Reliability Estimates of SEI (N = 1547)

Original/ Final Items	Factors										Items-Total Scale		
	1	2	3	4	5	6	7	8	9	10	r		
(1)/(1)										.406		.593*	
(2)/(2)				.391								.685*	
(3)/(3)								.753				.322*	
(4)/(4)								.625				.535*	
(5)/(5)								.316				.750*	
(6)/(6)							.618					.655*	
(7)/(7)						.580						.556*	
(8)/(8)		.683										.448*	
(9)/(9)						.579						.457*	
(11)/(10)						.359						.633*	
(12)/(11)									.474			.455*	
(13)/(12)								.387				.601*	
(14)/(13)						.474						.674*	
(15)/(14)								.427				.613*	
(16)/(15)						.596						.139*	
(19)/(16)			.540									.392*	
(20)/(17)			.685									.535*	
(21)/(18)	.687											.715*	
(22)/(19)	.624											.608*	
(23)/(20)								.319				.683*	
(24)/(21)	.755											.776*	
(28)/(22)		.437										.692*	
(31)/(23)					.342							.664*	
(32)/(24)					.462							.404*	
(33)/(25)					.770							.350*	
(36)/(26)										.475		.521*	
(39)/(27)										.578		.527*	
(40)/(28)										.307		.755*	
(41)/(29)							.560					.653*	
(42)/(30)				.696								.431*	
(43)/(31)				.718								.530*	
(44)/(32)		.428										.598*	
(45)/(33)				.706								.171*	
(46)/(34)			.627									.181*	
(47)/(35)			.644									.373*	
(48)/(36)									.331			.642*	
(49)/(37)					.468							.605*	
(50)/(38)		.713										.540*	
(52)/(39)			.736									.345*	
(53)/(40)					.469							.586*	
(54)/(41)			.617									.186*	
(55)/(42)		.584										.557*	
(56)/(43)									.730			.340*	
(57)/(44)							.391					.791*	
(58)/(45)									.506			.451*	
(59)/(46)							.341					.675*	
(60)/(47)			.624									.217*	
(61)/(48)				.409								.624*	
(64)/(49)									.505			-.187*	
(65)/(50)									.369			.459*	
(67)/(51)	.819											.687*	
(68)/(52)	.685											.700*	
(69)/(53)	.794											.548*	
(70)/(54)	.709											.536*	
(71)/(55)	.832											.722*	
(72)/(56)		.590										.545*	
Scale Reliability Estimates				F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
No of items				8	6	7	5	5	5	5	5	5	5
Co-efficient Alpha				.91	.81	.80	.75	.75	.72	.85	.78	.67	.77
Subscales and Total Scale Correlations				.83*	.79*	.47*	.69*	.74*	.71*	.87*	.77*	.50*	.79*

* $p < .01$.

Table 2

Final Factors, Their Relative Items and Percentage of Variance (N = 1547)

Factor no	Factor label	Items	% age of variance
1	Interpersonal Skill	18, 19, 21, 51, 52, 53, 54, 55	31.96
2	Self Regard	8, 22, 32, 38, 42, 56	6.33
3	Assertiveness	16, 17, 34, 35, 39, 41, 47	4.35
4	Emotional Self Awareness	2, 30, 31, 33, 48	4.0
5	Empathy	23, 24, 25, 37, 40	3.52
6	Impulse Control	7, 9, 10, 13, 15	3.02
7	Flexibility	6, 20, 29, 44, 46	2.71
8	Problem Solving	3, 4, 5, 12, 14	2.62
9	Stress Tolerance	11, 36, 43, 49, 50	2.31
10	Optimism	1, 26, 27, 28, 45	2.00

Table 3

Correlations among Subscales of SEI (N = 1547)

Factors	IS	SR	ASS	ESA	EMP	IC	FLX	PS	ST	OPT
IS	-	.614*	.275*	.497*	.501*	.543*	.653*	.609*	.454*	.688*
SR	-	-	.179*	.506*	.627*	.489*	.693*	.546*	.405*	.596*
ASS	-	-	-	.240*	.232*	.345*	.383*	.376*	-.10*	.250*
ESA	-	-	-	-	.528*	.456*	.671*	.487*	.198*	.558*
EMP	-	-	-	-	-	.358*	.628*	.536*	.429*	.603*
IC	-	-	-	-	-	-	.603*	.577*	.271*	.503*
FLX	-	-	-	-	-	-	-	.662*	.355*	.691*
PS	-	-	-	-	-	-	-	-	.335*	.453*
ST	-	-	-	-	-	-	-	-	-	.375*

Note. IS (Interpersonal Skill), SR (Self Regard), ASS (Assertiveness), ESA (Emotional Self Awareness), EMP (Empathy), IC (Impulse Control), FLX (Flexibility), PS (Problem Solving), ST (Stress Tolerance), OPT (Optimism).

* $p < .001$.

Table 4

Means, Standard Deviations, and t-values of Scores of Men and Women on Total and Components of SEI

Scales	Gender	n	M	SD	t
Interpersonal skill	Men	860	25.65	6.32	.713
	Women	690	25.87	5.19	
Self regard	Men	860	16.00	4.68	4.180*
	Women	690	16.95	4.09	
Assertiveness	Men	860	17.34	5.05	7.981*
	Women	690	19.29	4.42	
Emotional self awareness	Men	860	15.10	3.26	4.535*
	Women	690	15.83	2.89	
Empathy	Men	860	14.55	3.61	1.473
	Women	690	14.82	3.48	
Impulse control	Men	857	14.53	3.61	5.950*
	Women	690	15.58	3.24	
Flexibility	Men	860	14.25	4.08	3.640*
	Women	690	14.96	3.52	
Problem solving	Men	860	14.44	3.81	7.518*
	Women	690	15.77	2.90	
Stress tolerance	Men	860	13.98	3.76	5.653*
	Women	690	12.99	3.08	
Optimism	Men	860	15.50	3.13	.933
	Women	690	15.35	3.23	
Total EI	Men	860	161.87	29.98	4.201*
	Women	690	167.42	25.72	

df = 1548. * $p < .001$.

Table 5
Analysis of Variance to see the Mean Difference of Five Age Groups on Total SEI (N=1550)

Sources	df	SS	MS	F
Between	4	51613.430	12903.357	16.757*
Within	1544	1188949.323	770.045	
Total	1548	1240562.753		

* $p < .05$.

Table 6
Post Hoc Test to see the Significant Comparative Mean Differences among Age Groups on Total SEI (N=1550)

Age groups (in years)	M. diff	SE	p	
16 to 20	21 to 30	-14.4252	1.8916	.001
	31 to 40	-7.5098	2.3342	.001
	41 to 50	-4.5044	2.6898	.94
	51 to 60	-13.1526	2.8709	.001
21 to 30	31 to 40	6.9154	2.0303	.001
	41 to 50	9.9208	2.4308	.001
	51 to 60	1.2726	2.6297	.69
31 to 40	41 to 50	3.0054	2.2789	.281
	51 to 60	-5.6428	2.9640	.57
41 to 50	51 to 60	-8.6483	3.2516	.008

Study 2: Convergent Validity of the Scale of Emotional Intelligence

In this study convergent validity of the Scale of Emotional Intelligence (SEI) was determined by finding correlation between SEI and Urdu translated 117-item version of Bar-On EQ-i (1997a). Convergent validity was supplemented by correlating scores of SEI with peer-rating on 5-point rating scale, measuring emotional intelligence.

Method

Participants

Participants in Part I of study were 60 students (hostel residents) of Punjab University (20 men and 40 women) having an age range of 17 to 26 years ($M = 22.12$, $SD = 2.24$). Systematic probability sampling technique was used as sample was taken from every 3rd room. In Part II of the study, raters were roommates, friends or subject fellows of the participants in Part I of the study and who had lived for at least 1 year in the same hostel with the individuals being rated and had ample opportunity to observe them. Purposive sampling technique was used to engage raters in the study. Rater's age ranged between 18 to 25 years ($M = 22.40$, $SD = 2.32$).

Instruments

a) *Scale of Emotional Intelligence (SEI)*: (See details in Study 1)
b) *Bar-On Emotional Quotient Inventory (Bar-On, EQ-i, 1997b)*. Akram and Ghous (2004) Urdu version of Bar-On (EQ-i, 1997a) was used. The Inventory was translated with the help of 12 bilingual experts and committee approach was adopted for the purpose of

content validity. The Cronbach's alpha for the scale was $\alpha = .92$.
c) *Peer Rating Scale (Thorndike, 1997)*. A 5-point rating scale was prepared following the guideline provided by Thorndike (1997). It is a graphic rating scale containing the definition of Trait Emotional Intelligence. Use of rating scales for research purpose and for obtaining criterion data for test validation is supported by experts (Anastasi & Urbina, 1997; Ozer & Reise, 1994; Thorndike, 1997).

Procedure

The 56 items SEI and 117 items EQ-i were administered to 60 students of Punjab University. Data was collected from students in the evening from their hostels. Participants were directed to read all instructions carefully and to complete both the questionnaires. Raters were asked to rate the subjects honestly without having any positive or negative feelings about them.

Results

In sub-scales of SEI as indicated in Table 7, highest correlation was found between Problem Solving and total EQ-i ($r = .668$, $p < .01$). There was also a high positive correlation between SEI and peer rating on Trait Emotional Intelligence ($r = .631$, $p < .01$). Correlations between sub-scales of SEI and peer rating ranged from ($r = .341$ for flexibility to $r = .585$ for stress tolerance, $p < .01$).

Table 7
Correlation of SEI and its Subscales with Bar-On (EQ-i) and Peer Rating (N= 60)

Scales	(EQ-i)Peer	Rating
Total SEI	.686**	.631**
Interpersonal skill	.391**	.443**
Self regard	.639**	.467**
Assertiveness	.314*	.064
Emotional self awareness	.567**	.466**
Empathy	.020	.132
Impulse control	.230	.447**
Flexibility	.351**	.341**
Problem solving	.668**	.432**
Stress tolerance	.408**	.585**
Optimism	.563**	.543**

* $p < .05$. ** $p < .01$.

Discussion

The study was carried out to develop and validate an indigenous scale of EI. Examination of the 10 factors emerged as a result of varimax orthogonal rotation revealed that they were quite comparable with the dimensions of the Social Emotional Intelligence model of Bar-On (1997a, 2000), on which Bar-On Emotional Quotient Inventory (EQ-i, 1997) was developed later on. Thus, the factorial validity of the scale was established on empirical, rational and theoretical grounds.

The Factors of SEI correlated with each other and correlations ranged from $r = .179$ between Self Regard and Assertiveness to $r = .693$ between Self Regard and Flexibility. The highest correlation between Self Regard and Flexibility is indicating that a person, who

feels good about him/her and is able to cope in a better way with the challenges and negative feedback, is likely to be self-reliant and can adapt and adjust his/her thinking, feelings, emotions, and behavior to changing conditions. Self-regard may produce confidence in a person to adjust to the new situations in a better way and to face the challenges successfully.

The present study also supported EI as a multidimensional attribute. The subscales have been found to correlate with the total scale (ranging from $r = .47$ for Assertiveness to $r = .87$ for Flexibility). This implies that each dimension has its specific variance and all scales are distinct from each other. In general, the present study supports the theoretical model of Social Emotional Intelligence by Bar-On (1997a, 2000).

Construct validity of the scale was revealed through group differences in gender and age as recommended by Day (2004). Women scored significantly higher than men on total Emotional Intelligence, Self-Regard, Assertiveness, Emotional Self-Awareness, Flexibility, and Problem Solving. There is a strong theoretical rationale to believe that gender differences appear in EI (e.g., Brackett, Warner & Bosco, 2005; Pugh, 2002; Thayer & Johnsen, 2000) and difference in EI in different age groups is supported by researchers (e.g., Bar-On, 1997b; Mayer, Caruso & Salovey, 1998). Thus average norms separately for 5 age groups on the basis of gender were developed.

The emotional intelligence literature supports that women tend to be better in expressing emotions, to correctly classify facial emotions and to differentiate among them, whereas men have difficulty in labeling their emotions. Results of the present study are in congruence with the earlier literature (e.g., Brackett, & Salovey, 2004; Brackett, Warner & Boso, 2005; Cavallo & Brienza, 2002; Charbonneau & Nicol, 2002; Ciarrochi, Chan, & Caputi, 2000; Dimberg & Lundquist, 1990; Eagly & Johnson, 1990; Mayer & Geher, 1996; Petrides & Furnham, 2000; Thayer & Johnsen, 2000). Women develop higher EI because of early parent-child interactions, sex roles and socialization process. Mothers not only speak more to daughters than to their sons about feelings, but also display a wider range of feelings to their daughters (Brody, 1985). For example, women in a country like Pakistan are usually encouraged to pay attention to emotions, to adjust in all types of circumstances and to inhibit the expressions of negative emotions openly. This might be the reason that women scored higher on Emotional Self-Awareness, Flexibility, and Impulse Control as compared to men. Significantly higher score of men on Stress Tolerance in the present study is supported by Bar-On, Brown, Kirkcaldy, & Thome (2000). Parents prepare boys to endure hardships with patience and courage and this might be the reason for men scoring higher on Stress Tolerance as compared to women. No significant differences between men and women were found on Interpersonal Skill, Empathy and Optimism. Absence of difference in Interpersonal Skill and Empathy might be due to the family/clan system in Pakistan, in which children both boys and girls are taught to live together, to love each other and to share sorrows and joys together and this lifestyle promotes empathic understanding equally in men and women.

According to the ability model, EI increases with age and experience (Mayer & Caruso, Salovey, 1998). Results of the present study showed significant differences in mean scores of the five age groups. Group 16-20 years had significantly lower mean scores except for group of 41-50 years. Further studies are required to make firm conclusions about the relationship among age, experience and emotional intelligence (Day, 2004).

The evidence for sufficient convergent validity was based on high positive correlation between the SEI and EQ-i. We may conclude that people who have higher problem solving ability tend to have higher emotional intelligence. Rating scales further supported the convergent validity of self-report measure of EI.

Limitations and Suggestions

There are certain limitations in the study that need to be addressed in future. Initially Exploratory Factor Analysis (EFA) was run to retain the final items in 10 factors. The Confirmatory Factor Analysis (CFA) can be run in future to test the fit between the EFA derived factors and the items in the independent sample to find support for the proposed 10 factors. The study has limited generalizability in the sense that sample for convergent validity comprised of students, so more representative community sample from all over the country may be selected for future research. Measures used in the study were self-report, so the factor of common method variance can not be ignored. More authentic results could be found in future by developing and applying performance based ability measure of EI on Pakistani sample.

Despite the limitations, a newly constructed scale appears to have high reliability and convergent validity. All this has important consequences for scale development process in Pakistan and all over the world. This scale though showed high correlation with Bar-On (EQ-i), but is of shorter length and needs less time to complete as compared to Bar-On EQ-i. This scale may be useful for studying the role of EI in different spheres of life in Pakistan.

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