# Development and Validation of Social Intelligence Scale for University Students

## Shazia Habib

Government College University

## Sadia Saleem and Zahid Mahmood

University of Management and Technology

The present research was undertaken to develop and validate the social intelligence scale. Attributes of social intelligence were elicited from 35 university students. After empirical validation, 431 university students were asked to rate themselves on the 98 item on a 4-point scale. Factor analysis revealed five factors namely; Social Manipulation (SM), Social Facilitation (SF), Social Empathy (SE), Extroversion (E), and Social Adaptability (SA). SM and SA appeared to be the two ends of social skills judged to be negative and positive. SM comprising rather devious set of items used to exploit others for selfish ends. SA represented honest and sincere interaction with others resulting in mutual benefit. SF was positively related to SE and SA whereas SM was not. Extroversion correlated highly with all factors. Construct validity was established with the help of Bar-On Emotional Quotient Inventory (Bar-On, 1997) and test retest reliability was also found to be satisfactory. The findings are discussed in terms of the factor structure and function of SI in the context of the culture.

Keywords: social intelligence, phenomenology, university student, collectivistic culture

Gardner (1983) presented the concept of multiple intelligence and his model of includes personal intelligence (interpersonal Intelligence and other is intrapersonal intelligence) and interpersonal intelligence is the ability to understand and work cooperatively with other people

Shazia Habib, Sadia Saleem, and Zahid Mahmood, Department of Clinical Psychology, Government College University, Lahore, Pakistan.

Shazia Habib is now in Government College University, Faisalabad, Pakistan.

Correspondence concerning this article should be addressed to Sadia Saleem, Department of Clinical Psychology, University of Management and Technology C-II, Johar Town, Lahore 54770, Pakistan. E-mail: dr.sadiasaleem@yahoo.com; sadia.saleem@umt.edu.pk

and includes the capacity to distinguish and respond appropriately to the moods, temperaments, motivations, and desires of other people (Cherniss, Extein, Goleman, & Weissberg, 2006; Goleman, 1995). The controversy of basic structure of intelligence as unitary or multidimensional, further gave rise to the other two types of intelligences namely, emotional and social intelligence. In fact, Thorndike (1920) had already introduced the concept of Social Intelligence. Later, Thorndike and colleagues fall short to demonstrate the concept of social self-esteem psychometrically (Thorndike, 1936; Thorndike & Stein, 1937).

One of the difficulties in studying the concept of social intelligence is the absence of an operational definition of the concept (e.g., Gini, 2006). As originally coined by Thorndike (1920), the term referred to the person's ability to understand and mange other people and to engage in adaptive social interactions. The construct of social intelligence has undergone a process of refinement over the years. From a personality trait (e.g., Moss & Hunt, 1927; Thorndike, 1920; Vernon, 1933) to social judgment (O'Sullivan, Guilford, & DeMille, 1965), interpretation of social cues and regulation (Cantor & Kihlstrom, 1987), problem solving skills, and knowledge of social rules (Barnes & Sternberg, 1989), and more recently Interpersonal competencies that facilitate effective human behavior (Bar-On, 2005).

Bjorkqvist and Osterman (2000) have identified perceptual, cognitive and behavioral components of the construct of social intelligence. Socially intelligent people are said to carry attitudes that not only encourage the person to grow, create, communicate, and befriend others (Buzan, 2002). Cultural perspective posits that social skills endorse interpersonal behaviors that accurately communicate one's emotions and needs to facilitate the achievement of various interpersonal goals. Absence of these skills is often found in people with mental illness (Liberman, DeRisi, & Mueser, 1989).

Several attempts have been made to measure social intelligence and literature (Bar-On 1997; Moss, Hunt, Omwake, & Woodward, 1955; O'Sullivan & Guilford, 1966; Riggio, 1986) found the concept faced two main problems. First, the underlying construct of social intelligence was rather abstract and was not easily transformed into performance or behaviors. Social intelligence did not demonstrate individual differences. Social intelligence was construed as a part or a subset of intelligence (Cattell, 1971; Wong, Day, Maxwell, & Meara 1995) investigating through self report measures (Marlowe, 1986), behavioral assessment (Fredickson, Carlson, & Ward, 1984; Guilford, 1981; O'Sullivan et al., 1965), and performance measures (Stricker & Rock, 1990).

The construct of social intelligence is closely bound to cultural norms and these diverse definitions of SI make it difficult to compare different scales (Gini, 2006; Gini & Iotti, 2004; Silvera, Martinussen, & Dahl, 2001). Chadha and Ganeshan (1986) Bar-On (Eq-i) Interpersonal Scales and Tromso Social Intelligence Scale (TSIS) developed with eight subscales namely patience, cooperativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humor, and memory.

Social intelligence influences inter cultural communication considerably (e.g., Wawra, 2009). Social intelligence is also considered as a function of a particular culture in which an individual lives (Dong, Koper, & Collaco, 2008). In other words, the behaviors and characteristics one culture considers socially intelligent may not be necessarily considered socially intelligent by another. Behaviour construed as socially intelligent may have different manifestation and aims in different cultures. For example, Willman, Feldt, and Amelang (1997) conclude that for the Chinese the hallmark socially intelligence is to create harmony and maintain equilibrium by conforming to others' expectations, whereas the Germans saw obtaining one's goals and influencing others as social intelligence. Social intelligence like other social phenomena is bound in the norms and values of a culture (Chao 1994; Wang & Ollendick, 2001).

However, there are some important dimensions of social intelligence, still remain not fully explored. Cantor and Kihlstrom (1987) explained that social intelligence helps us in the "pursuit of goals associated with life tasks" (p. 74). Social intelligence may have an important biological function that through gathering favorable social support the individual can ensure safety, security and survival (Snow, 2010). Behavior construed as socially intelligent may have different manifestation and aims in different cultures. For example, Willman et al. (1997) conclude that for the Chinese the hallmark socially intelligence is to create harmony and maintain equilibrium by conforming to others expectations, whereas, the Germans saw obtaining one's goals and influencing others as social intelligence.

By and large, people living in collectivistic cultures like Pakistan, India and China stressed upon and putting into practice loyalty to social norms, values and interpersonal relationships. In collectivistic cultures trust and loyalty are demanded. Moreover, people also show greater willingness to fulfill their responsibilities and duties to others than those in individualistic cultures (Chan, 2000). By and large people living in collectivistic cultures, show greater respect to others than in individualistic cultures, particularly those placed on the higher social positions and elders (Stewart et al., 1999).

This debate further puts into focus the concept of *emic* and *etic* approaches (Berry, 1989). The *emic* approach focus on cross cultural studies which intended to study the phenomenon of interest within a single specific cultural context. On the other hand the focus is on the comparative cross-cultural research, the *etic* approach. Such differences in cultural values and linguistic expressions also question the use of scales and assessment procedures which are not culturally valid. Other important viewpoint is regarding the ecologically valid framework of the study with regard to its interpretation and of uniformity in measures across cultures (Berry, Poortinga, Segall, & Dasen, 1992).

The above mentioned discussion further gives rise to an idea that the core of social intelligence is determined by the culture and norms, values, social setup, social roles, and responsibilities as well as child rearing practices. Therefore, the present research is an attempt to explore the phenomenology of social intelligence in Pakistani culture in university students. This study also aimed to develop an indigenous, ecologically valid, and reliable tool for assessing social intelligence with regard to gender and age. It would particularly important to explore the components of social intelligence in these cultural contexts and then the construct may be studied across cultures.

#### Method

## **Item Generation**

Participants and procedure. This phase of the study aimed to explore the phenomena of social intelligence from university population. First of all, social intelligence was operationally defined in terms Wechsler, (1958) description of intelligence and Thorndike's definition of social intelligence (1920) as social intelligence is the ability that helps the individual understand social interactions and deal with them purposefully and effectively. 35 university students (17 male and 18 female) with the age range of 18-25 years from two public sector universities were selected through purposive sampling method. The sample was selected according to educational levels i.e. BS (Hon) and M.Sc. The participants were given the operational definition of the social intelligence. They were asked to list the characteristics and attributes of a person with social intelligence according to the above definition. Initially, a list of 118 attributes was elicited. The research team closely examined the list, all those items were excluded which were ambiguous, repetitive, and slang. After linguistic modification and exclusion of repetition, a list of 98 attributes was finalized.

## **Empirical Validation**

**Participants and procedure.** The 98 items of the final list were further evaluated for their relevance and empirical validation. For this purpose 13 experienced clinical psychologists (7 females and 6 males) were selected with five years of minimum teaching and research experience in university setting. The collated list was further transformed into a 5 point rating scale (0-4) where 0 means" *Not at all*" and 4 means "*Very much*". All the participants were asked to rate each item to the extent in which it reflects the construct of social intelligence according to the given operational definition. All those items that were not endorsed by the one third experts were excluded from the list. In this way, out of 98 a list of 79 items was retained and used for further psychometric phase. The list was transformed into a self report measure with 4 point rating scale and given the name of Social Intelligence Scale (SIS).

# **Psychometric Properties**

The purpose of this phase was to determine the factorial structure, internal consistency, reliability and validity of Social Intelligence Scale (SIS).

# **Participants**

Purposive sampling technique was used to select the participants for this psychometric phase. The sample was selected according to the gender and educational level i.e., BS (Hon) and M.Sc comprising 431 (48% male and 52% female) students of BS (Hons) and M.Sc/MBA from two government universities with the age range of 18-25 years (M = 21.56; SD = 1.62).

#### **Measures**

In the psychometric phase, following measures were used along with a demographic questionnaire. The demographic information included age, gender and academic class of the participants.

*Social Intelligence Scale (SIS).* Social Intelligence Scale (SIS) comprising 79 items with a 4 point rating scale (0-3). The participants

were asked to rate each item of SIS to the extent in which each characteristic was seen present in the respondent. The scoring options of SIS are  $0 = "not \ at \ all"$ , 1 = "slightly",  $2 = "to \ some \ extent"$ , and  $3 = "very \ much"$ .

Bar-On Emotional Quotient Inventory (Bar-On EQ-i). In order to establish the construct validity of SIS, Interpersonal Scale of Bar-On Emotional Intelligence Scale (Bar-on EQ-i, 1997) was used. The Interpersonal Scale of EQ-i consists of three domains namely Interpersonal Relationships, Social Responsibility, and Empathy. As noted earlier, there is no indigenous scale available to measure social intelligence, therefore Interpersonal Scale was used as it was close to the conceptual framework of dealing with other people effectively that is an essential part of social intelligence. This scale comprised 24 items, the internal consistency coefficient for the EQ-i ranging from .69 to .86 with Test-retest reliability .85 after one month and .75 after four months. The standard procedure was used to translate the Interpersonal Scale into Urdu Language. Two bilingual experts and two experienced clinical psychologists were asked to translate each item of Interpersonal Scale for linguistic and conceptual equivalence with original items.

# **Procedure**

First of all, university authorities were sent the brief aims and objectives of the research. They were assured that all the information would be kept confidential and would only be used for research purposes. After permission was granted, the heads of different departments were asked to provide randomly the participants from two different educational levels. All participants were given the right of participation in the research. All subjects were also assured the anonymity and confidentiality of their research data. The final protocol comprising demographic questionnaire, SIS and (Bar-On EQi, 1997) was given to the participants.

They were instructed in Urdu and the testing was conducted in a group setting. It took 20- 25 minutes to complete the protocol. Informed consent was taken from the 15% (n = 63) of the sample to participate in the test-retest phase. These participants were re-tested after a week's duration by keeping all the conditions standardized (same instructions and setting). Most of the research participants fill up the form within 15-20 minutes. After completion of the testing phase the participants were debriefed.

#### **Results**

Table 1

Percentages of Demographic Characteristics of the Participants

Demographics	Male	Female
	%	%
Gender	48	52
Age in years		
18-21	43	57
21-25	54	46

The Table 1 shows that there were predominately more female participants (52%) than male participants.

## **Factor structure of Social Intelligence Scale (SIS)**

Principal Component Analysis with Varimax Rotation and Scree Plot was used to explore the factor structure of SIS. Eign values greater than 1 and Scree plot was used to determine the number of factors (Kim & Mueller, 1978). Kaiser-Guttman's retention criterion of Eigen values (Kaiser, 1974) greater than 1 revealed an 8 factor solution for SIS. The 8 factor solution resulted in cross loadings. On the basis of this initial factor solution, subsequent Principal Component Factor Analyses were performed using seven, six and five factor solutions with Varimax Rotation. The five factor structure resulted in fewer cross loading. Therefore, five factor solution was retained for the further analysis.

Table 2
Factor Loadings, Eigen Values, and Variance explained by five Factors of Social Intelligence Scale (SIS)

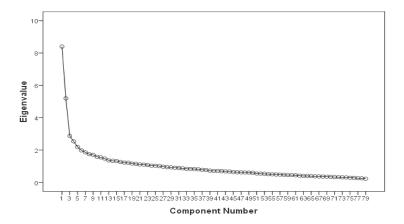
Serial No.	Item No.	F1	F2	F3	F4	F5
1	12	.59	.10	22	.19	10
2	17	.44	21	13	.11	.29
3	30	.39	.25	29	.11	.15
4	33	.39	.10	.21	14	.26
5	38	.36	.19	26	.19	.13
6	43	.31	.11	.19	.10	.15
7	44	.34	.22	.29	.15	.17
8	48	.67	13	15	.29	21

Continued...

Serial No.	Item No.	F1	F2	F3	F4	F5
9	52	.33	25	.17	10	16
10	54	.55	.21	11	.12	.29
11	55	.32	17	.22	.17	21
12	56	.41	19	29	21	26
13	58	.55	22	.21	12	.10
14	68	.54	21	11	29	12
15	74	.57	.14	19	16	.22
16	77	.56	.15	23	17	.14
17	9	.21	.46	.18	.10	.12
18	13	17	.37	23	21	.23
19	15	.19	.34	.25	.11	.29
20	16	.17	.46	.12	.25	.21
21	27	.28	.38	.15	.23	.26
22	37	.19	.45	.18	.14	.12
23	40	.25	.49	.28	.24	.21
24	42	.17	.44	.21	.16	.18
25	45	.26	.32	.22	.27	.13
26	50	.13	.40	.23	.19	.22
27	53	.11	.32	.18	.20	.21
28	57	.22	.33	.19	.16	.17
29	59	.29	.61	.13	.10	.19
30	62	.15	.53	.11	.17	.21
31	63	.19	.52	.17	.19	.23
32	65	.22	.36	.21	.11	.22
33	72 70	.28	.31	.20	.24	.29
34 35	79 2	.21	.35	.26	.24 .23	.21 .22
	2 5	.17 .28	.21 .11	.32 .30		.22
36 37	3 10	.28 .19	.23	.30 .45	.28 .19	.23
38	10	.19	.15	.45 .45	.19	.25 .25
39	20	.26	.13	.52	.21	.11
40	21	.12	.19	.32 .49	.10	.18
41	22	.19	.22	.47	.29	.14
42	23	.24	.23	.34	.23	.16
43	25	.22	.29	.44	.21	.23
44	26	.29	.28	.47	.28	.22
45	1	.10	.10	.21	.57	.14
46	3	.21	.18	.29	.51	.19
47	7	.16	.22	.23	.44	.21
48	8	.24	.24	.21	.49	.23
49	14	.22	.18	16	.36	.29
50	18	.16	.24	.25	.34	.26
51	19	.13	.22	.24	.56	.27
52	34	.23	.19	.23	.48	.18
53	35	.26	.28	.21	.44	.13
54	41	.22	.23	.15	.43	.17

Continued...

Serial No.	Item No.	F1	F2	F3	F4	F5
55	51	.27	.20	.18	.52	.13
56	66	.11	.10	.19	.35	.21
57	6	.21	.11	.16	.21	.34
58	28	.23	.19	.13	.11	.32
59	29	.25	.21	.17	.13	.39
60	32	.19	.22	.20	.16	.32
61	36	.16	.19	.21	.18	.39
62	46	.28	.12	.10	.13	.52
63	47	.24	.23	.11	.10	.68
64	60	.15	.11	.23	.11	.35
65	61	.25	.10	.29	.13	.49
66	69	.18	.19	.28	.19	.41
67	71	.13	.17	.23	.18	.69
68	73	.10	.16	.24	.21	.39
Eigen values		4.83	4.66	3.93	3.75	3.46
% of Variance		6.11	5.89	4.98	4.74	4.38
Cumulative %		6.11	12.00	18.98	21.73	26.11



*Figure 1.* Scree plot Showing Extraction of Factors of Social Intelligence Scale on 431 participants.

A descriptive label was assigned to each factor of SIS on the basis of commonality of themes of the items in each factor. The five factors of SIS namely are Social Manipulation, Social Facilitation, Social Empathy, Extroversion, and Social Adaptability.

**Factor 1. Social Manipulation.** The first factor comprised 16 items deals with the attributes of social manipulation indicating the negative component of social intelligence. The sample item include

"using others for one's own purposes", "dominating others", "self praise", "careless about others' emotions and feeling", "do not feel insulted easily", "self centered", "cleverness", "diplomat" and "leg pulling".

**Factor 2. Social Skills.** The second factor consisting 18 items describe the positive component of social intelligence. The sample items include "able to convince others", "active participation in social activities", "socially popular", "problem solving skills", "confident", "able to express effectively", "active and alert", "attractive personality", "realistic", "innovative", "ability to make decision" and "leadership skills".

**Factor 3. Social Empathy.** The third factor comprised 10 items depicting the attributes of social empathy. The sample items include "helpful towards others", "handling interpersonal relationship effectively", "trusting others", "guiding others", "help others in difficult situations" and "understand others' situations".

**Factor 4. Extroversion.** The fourth factor comprised 12 items. The sample items include "friendly attitude", "initiate interaction with others", "caring others", "humorous" and "talkative".

**Factor 5. Social Adaptability.** The last factor consist 12 items. The sample items are "adapting according to situation", "accepting others", "courteous and polite", "positive and optimistic", "consistent", "moderate attitude", "accepting ones mistakes", "tolerant" and "insightful".

## **Psychometric Properties of SIS**

To further establish psychometric properties, reliability, and validity estimates and correlations were computed.

**Test-retest reliability.** In order to establish the test- retest reliability of Social Intelligence Scale (SIS), 13% (n = 60) sample was retested after the duration of one week. The correlation coefficient was found 0.88 (p < 0.001) which revealed that the Social Intelligence Scale (SIS) has high test- retest reliability.

**Split-half reliability.** The 68 items of Social Intelligence Scale (SIS) were divided into two equivalent halves (Form A and Form B) by using odd and even number procedure. The correlation coefficient

between Form A and From B was 0.78 (p < 0.001), which was found to be highly significant. The Cronbach Alpha was found to be 0.83 and 0.86 for Form A and B respectively.

**Internal Consistency.** The Social Intelligence Scale (SIS) was found to have high internal consistency. The details are given in the following table.

Table 3
Summary of Intercorrelations, Means, and Standard Deviations for Scores and Cronbach Alpha on subscales of Social Intelligence Scale (SIS)

Factors	1	2	3	4	5	М	SD	α
1. SM	_	.11*	31***	.28**	.03	13.90	5.95	.77
2. SS		_	.44***	.29**	.49***	32.99	6.64	.83
3. SE 4. E			-	.31**	.41*** .23**	22.33 32.51	3.52 4.45	.71 .76
5. SA						22.02	3.97	.81

*Note.* SM = Social Manipulation; SS = Social Skills; SE = Social Empathy; E = Extroversion; SA = Social Adaptability.

Table 3 indicates that Social Manipulation has significant negative correlation with Social Empathy and significant positive relation with Social Facilitation and Extroversion. Social Facilitation, Extroversion and Social Adaptability found to have significant positive correlation. Also the scale found to have high internal consistency.

**Construct validity.** Construct validity of SIS and Bar-On EQ-i revealed that the factor of Social Manipulation has negative relationship with Interpersonal Relationship, Social Responsibility and Empathy r = -.24, -.33, and -.29 (p < 0.01) respectively. The second factor of SIS, Social Facilitation has a low positive relationship with all the three Interpersonal scales of Bar-On EQ-i with r = .27, .29, and .31 (p < 0.001) respectively. The third factor of SIS, Social Empathy has a positive relationship with three sub-scales of Interpersonal Relationships, Social Responsibility and Empathy r = .21, .37, and .41 (p < 0.01) respectively. The fourth and fifth factor of SIS Extroversion

p < 0.05. p < 0.01. p < 0.001.

and Social Adaptability was found to have no significant relation with Bar-On EQ-i Scale.

Table 4

Gender differences of Males and Females Participants on five Factors of Social Intelligence Scale (SIS)

				95% CI		Cohen's
Factors	Gender	M(SD)	t(429)	LL	UL	d
SM	Males <sup>a</sup>	15.15(5.91)	4.35**	1.34	3.55	0.61
	Females <sup>b</sup>	12.71(5.76)	4.33	1.54		
SS	Males <sup>a</sup>	33.81(6.45)	3.50**	0.34	2.84	0.42
	Females <sup>b</sup>	30.22(6.74)	3.30	0.54		
SE	Males <sup>a</sup>	22.16(3.39)	1.01	1.0	0.32	0.15
DL	Females <sup>b</sup>	22.50(3.64)	1.01	1.0		0.13
Е	Males <sup>a</sup>	23.75(3.91)	1.05	0.39	1.29	0.12
	Females <sup>b</sup>	23.29(4.91)	1.03	0.33		
SA	Males <sup>a</sup>	22.11(4.15)				
	Females <sup>b</sup>	21.95(3.82)	0.42	0.59	0.91	0.19

*Note.*  $^{a}$  n = 209;  $^{b}$  n = 222; SM = Social Manipulation; SS = Social Skills; SE = Social Empathy; E = Extroversion; SA = Social Adaptability.

Table 4 indicates that the significant difference was found between male and female on Social Manipulation and Social Skills. Male were significantly scored higher than females on Social Manipulation and Social Skills factors (p < 0.001). Whereas, no significant difference was found between male and female university students on Social Empathy, Extroversion and Social Adaptability factors of Social Intelligence Scale (SIS) between male and female participants. As far as the age is concerned, social intelligence remained unrelated to age (p > 0.05).

## **Discussion**

Following in the footsteps of cognitive intelligence (Binet 1911; Wechsler, 1958) and Emotional Intelligence (Gardner, 1983; Goleman, 1995). Now Social Intelligence (SI) has emerged on the central stage of psychological research. This rise in its popularity is

<sup>\*\*</sup>*p* < .001.

mainly due to importance attached to social development, social skills, social success, interpersonal relations, mental health and positive psychology (Dong et al., 2008). In spite of several attempts made to identify and define the underlying structure of SI (e.g., Brown & Anthony, 1990; Ford & Tisak, 1983), it was observed (e.g., Gini 2006; Grieve & Mahar, 2012) that the lack of consensus on the construct of SI was bogged down in the efforts to fit in SI and SO with intelligence and IQ. Cultural differences are as important as individual differences in determining our response to our environment, our learning, growth and development have contributed to a diverse conceptualization of SI. Furthermore, the increasing emphasis on functional concepts like self efficacy, self management, and self-regulation have gained prominence over the static structural approach to IQ and as a same time they have contributed to the diverse conceptualization of SI (Salovey & Mayer, 1990). The Functional view of SI is now the hallmark of civilized and intelligent societies and its closeness to the concepts of normality and mental health is acknowledged. This point has been quite eloquently and convincingly demonstrated in therapies like Cognitive Behaviour Therapy (Beck, 1976) and Rational Emotive Behaviour Therapy (Ellis, 1973).

The present study was undertaken to examine the underlying features of SI in a traditional collectivistic culture like Pakistan. Using the *Emic* approach (Berry, 1989), the phenomenology of SI was explored in the light of a given definition. The university students' descriptions were collected collated and once verified by experts formed the basis of the Social Intelligence Scale (SIS). SIS was administered on 431 university students along with another SI Scale constructed elsewhere (Eq-i Bar-On, 1997). Psychometrically the SIS was found to have acceptable levels of reliability, content validity and internal consistency.

Principal component factor analysis revealed a five factor solution as the most preferred and reflective of the essential components of what we understood as SI. These factors were: Social Manipulation, Social Facilitation, Social Empathy, Extroversion and Social Adaptability. The Social Manipulation is marked by social maneuvering the purpose of which is to get what one wants from others. In other words, using people to one's own ends, this is accomplished by subtle and surreptitious techniques of getting under others' skin through charm and skill and take advantage of them by earning their trust. The Social Facilitation factor however, is more straightforward, above board, sincere and honest participation in interaction with others without having any secret or selfish agenda. Social Empathy is reflected in a capacity to share the feelings,

happiness and pain experienced by others. Such individual are natural counsellors, therapists and social helpers. Social Extroversion is that well known trait that predisposes one to enjoy just being with people. Finally, the Social Adaptability is perhaps closer to social maturity and likely to maintain a degree of social adjustment even in changing social circumstances.

There was a small though significant relationship among some of the five factors. Social Manipulation and Social Facilitation factors stood as opposite ends of a continuum of socially acceptable or unacceptable values. The former identified by selfishness, individualistic, crafty, appearing honest and sincere in order to use people to serve a purpose. The latter is recognized by more benign, harmless, attractive personality, positive attitude and wisdom. If the former is a politician the latter is a popular film star. The more socially manipulative one is the less socially empathic or adaptable he or she is likely to be. In a collectivistic culture with oral tradition, the righteousness, honesty and sincerity are more valued attributes than mere personal success and individual achievements (Saleem & Mahmood, 2011; Wang, & Ollendick, 2001; Willmann et al., 1997). In a collectivistic culture, there is more interpersonal dependence; therefore, positive social qualities and helpful interactions with others are more admired attributes. Social sensitivity to others' needs. thoughtfulness, considerate approach, interest in others' welfare, fair and balanced judgment are all admired. A socially intelligent is a wise person who guides, facilitates and strengthens social bonds, cultural values and perpetuates social cohesion for the good of others. At the same time a socially manipulative person may be socially intelligent and skilled but may use other people for his gains disregarding others' rights. Paying no heed to the concepts of fairness, justice, the selfish desires are the ultimate goal.

Extroversion as a trait has a foot in every camp. With small but significant correlation with Social Manipulation, Social Skills, Social Empathy and Social Adaptability indicates the role Extroversion plays in all form of social interactions. It is a social trait that is present in all forms of interpersonal interactions- a psychobiological predisposition irrespective of social values as such. Unlike the other components of the SI scale, Extroversion is not value-laden social attribute, but it could help in any other aspect of SI, like the oil in the machine.

The findings of the study suggest that Social Intelligence is the capacity of an individual to create, facilitate and maintain a set of cohesive and cooperative interpersonal relationships in which he or she, can manipulate, influence, manage and control others though communication, accurate empathy, and social adaptability. The scope

of SI goes much beyond and far wider than any of its predecessors. The logical-mathematical intelligence was more related to mechanical and academic sides of life, emotional intelligence was concerned more with the intrapersonal functioning. SI relates to not just the individual but in interpersonal functioning. Also, SI serves some of the very important functions that are essential for the integrity of the individual as well as the group membership. In a culture, where shared values, customs and habits are common denominators of social behavior, such values provide templates of activities in interpersonal situations that promote social cohesion, harmony, predictability and safety.

The function of SI is the capacity to use one's social abilities, skills, attitudes that cultivate positive social behaviour to ensure acceptance, affinity, support and social survival. SI not only gives us safety it also helps us resolve interpersonal problems like conflict, opposition and strife that may sap our energies and confidence or our social standing. SI like cognitive intelligence can be used positively or negatively. It could cultivate and promote social adjustment or make one a social misfit. It could give skills to empathize with others, strengthening the bond with them or it could be used to serve self interests through conflict, force, manipulation and exploitation.

As far as the gender difference is concerned, male participants showed more Social Manipulation and Social Facilitation as compared to their female counterparts. This may be because male in a traditional collectivistic societies are supposed to be the leader and responsible of the clan's values so they might have to show more social skills and handles different situations more effectively. On the other hand, female is more responsible for her home and family where she has fewer opportunities to interact with people outside her immediate environment (Stewart et al., 1999).

## **Limitations and Suggestions**

This research gives us a limited understanding the concept of SI. While some of the component are identified, but these may be specific to the selected population and the result cannot be generalized beyond a small segment of population of university goers in Pakistan. May be the man in the street exposed to different value system more communal, more religious and more conservative than the urbanized member of a nuclear family system would view SI differently. Cultural, sub cultural, linguistic and social difference may change the presentation of what we know as social intelligence. The structural approach of discovering the underlying factor as borrowed from

cognitive intelligence would give us as a static a view of SQ as we have in IQ. The important question should be what SI does for us. How can we use it to help us as individuals and as societies and as citizens of the world? We need to understand SI in different walks of life, in different psychosocial problems: like corrupt politicians or a psychopathic personality with a high SI or someone paralyzed by social anxiety. However, a new vista is open for studying the role SI in Positive Psychology.

## Conclusion

The current study provided a ground work for investigation of the construct of social intelligence as reported by university students in Pakistan. It further helped in better understanding of the phenomenon of social intelligence from cultural-specific viewpoint. The results of this study supported the notion that social intelligence is a muti-dimensional construct rather than uni-dimensional, along with that having both positive and negative connotations in our culture. In the of the findings of the above research SI could be defined as 'a capacity of the individual to create, facilitate, and maintain a set of cohesive and cooperative interpersonal relationships which he or she can manipulate, influence, manage, and control others through effective communication, accurate empathy and social adaptability.

#### References

- Barnes, M. L., & Sternberg, R. J. (1989). Social intelligence and decoding of nonverbal cues. *Intelligence*, 13, 263-287.
- Bar-On, R. (1997). *The Bar-On Emotional Quotient Inventory (EQ-i): Technical Manual.* Toronto: Multi-Health Systems.
- Bar-On, R. (2005). The impact of emotional intelligence on subjective wellbeing. *Perspectives in Education*, 23, 41-61.
- Beck, A. T. (1976). *Cognitive therapy of emotional disorders*. New York: International Universities Press.
- Berry, J. (1989). Imposed etics-emics-derived etucs: The operationalization of a compelling idea. *International Journal of Psychology*, 24, 721-735.
- Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (1992). *Cross-cultural psychology: Research and applications*. Cambridge, London: Cambridge University Press.
- Binet, A. (1911). Nouvella recherches sur la mesure du niveau intellectuel chez les enfants d'ecole. *L'Annee Psychologique*, *17*,145-201.

- Bjorkqvist, K., & Osterman, K. (2000). Social intelligence-empathy aggression? *Aggression and Violent Behavior*, 5(2), 191-200.
- Brown, L. T., & Anthony, R. G. (1990). Continuing the search for social intelligence. *Personality and Individual Differences*, 11, 463-470.
- Buzan, T. (2002). The power of social intelligence. Noida: Gopsons Paper Ltd.
- Cantor, N., & Kihlstrom, J. F. (1987). Personality and social intelligence. Englewood Cliffs, New Jersey: Prentice Hall.
- Cattell, R. B. (1971). *Abilities: Their structure, growth, and action.* Boston: Houghton Mifflin.
- Chadha, N. K., & Ganeshan, U. (1986). Manual for social intelligence. Agra: National Psychological Corporation.
- Chan, Y. M. (2000). Self-esteem: A Cross-cultural comparison of British-Chinese, White British and Hong Kong Chinese children. *Educational Psychology*, 20(1), 59-74.
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style, understanding Chinese parenting through the cultural notion of training. *Child Development*, 65, 1111-1119.
- Cherniss, C., Extein, M., Goleman, D., & Weissberg, R. P. (2006). Emotional intelligence: What does the research really indicate? *Educational Psychologist*, *41*, 239-245.
- Dong, Q., Koper, R. J., & Collaco, C. M. (2008). Social intelligence, self-esteem, and intercultural communication sensitivity. *Intercultural Communication Studies*, 17(2), 162-172.
- Ellis, A. (1973). *Humanistic psychotherapy: The rational-emotive approach*. New York: Julian Press.
- Ford, M. E., & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology*, 75,196-206.
- Fredrickson, N., Carlson, S., & Ward, W. C. (1984). The place of social intelligence in a taxonomy of cognitive abilities. *Intelligence*, 8, 315-337.
- Gardner, H. (1983). Frames of mind: The theory of multiple intelligence. New York: Basic.
- Gini, G. (2006). Brief report: Adaptation of the Italian version of the Tromso social intelligence scale to the adolescent population. *Journal of Adolescence*, 29, 307-312.
- Gini, G., & Iotti, G. (2004). La Tromso social intelligence scale. Traduzione e adattamento alla popalazione italiana. Italy: University of Padova.
- Goleman, D. (1995). Emotional intelligence. New York: Bantam Books.
- Guilford, J. P. (1981). Higher-order structure-of-intellect abilities. Multivariate Behavioral Research, 16, 411-435.

- Grieve, R., & Mahar, D. (2012). Can social intelligence be measured? Psychometric properties of the Tromsø social intelligence scale-english version. *The Irish Journal of Psychology*, 34(1), 1-12.
- Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39, 31-36
- Kim, J., & Mueller, C. W. (1978). Factor analysis statistical methods and practical issues. London: Sage University Paper.
- Liberman, R. P., DeRisi, W. J., & Mueser, K. T. (1989). *Social skill training for psychiatric patients*. New York: Pergamon Press.
- Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of Educational Psychology*, 78(1), 52-58.
- Moss, F. A., & Hunt, T. (1927). Are you socially intelligent? Scientific American, 137, 108-110.
- Moss, F. A., Hunt, T., Omwake, K. T., & Woodward, L. G. (1955). *Manual for the George Washington university series social intelligence test.* Washington, DC: Center for Psychological Service.
- O'Sullivan, M., & Guilford, J. P. (1966). Six factors test of social intelligence: Manual of instructions and interpretations. Beverly Hills, CA: Sheridan Psychological Services.
- O'Sullivan, M., Guilford, J. P., & DeMille, R. (1965). The measurement of social intelligence. *Psychological Laboratory Reports* (Vol. 34). Los Angeles: University of Southern California.
- Riggio, R. E. (1986). Assessment of basic social skills. *Journal of Personality and Social Psychology*, 51, 649-660.
- Saleem, S., & Mahmood, Z. (2011). The development of self-esteem scale for children in Pakistan. Pakistan Journal of Psychological Research, 26(1), 1-21.
- Salovey P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.
- Silvera, D. H., Martinussen, M., & Dahl, T. I. (2001). The Tromso social intelligence scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology*, 42, 313-319.
- Snow, N. (2010). Virtue as social intelligence: An empirically grounded theory. New York: Routledge.
- Stewart, S. M., Bond, M. H., Zaman, R. M., McBride-Chang, C., Rao, N., Ho, M. L., & Fielding, R. (1999). Functional parenting in Pakistan. *International Journal of Behavioral Development*, 23(3), 747-770.
- Stricker, L. J., & Rock, D. A. (1990). Interpersonal competence, social intelligence, and general ability. *Personality and Individual Differences*, 11, 833-839.
- Thorndike, E. L. (1920). Intelligence and its use. *Harper's Magazine*, 140, 227-235.

- Thorndike, E. L. (1936). Factor analysis of social and abstract intelligence. *Journal of Educational Psychology*, 27, 231-233.
- Thorndike, E. L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, *34*, 275-285.
- Vernon, P. E. (1933). Some characteristics of the good judge of personality. *Journal of Social Psychology*, *4*, 42-57.
- Wang, Y., & Ollendick. T. H. (2001). A cross-cultural and developmental analysis of self-esteem in Chinese and Western children. *Clinical Child and Family Psychology Review*, 4(3), 253-271.
- Wawra, D. (2009). Social intelligence: The key to intercultural communication. *European Journal of English Studies*, *13*(2), 163 -177.
- Wechsler, D. (1958). *The measurement and appraisal of adult intelligence*. (4<sup>th</sup> ed.). Baltimore, USA: Williams & Wilkins.
- Willmann, E., Feldt, K., & Amelang, M. (1997). Prototypical behavior patterns of social intelligence: An intercultural comparison between Chinese and German subjects. *International Journal of Psychology*, 32(5), 329-346.
- Wong, C. T., Day, J. D., Maxwell, S. E., & Meara, N. M. (1995). A multitrait-multimethod study of academic and social intelligence in college students. *Journal of Educational Psychology*, 87(1), 117-133.

Received June 16, 2011 Revision received February 18, 2013