

THE DEVELOPMENT OF A SELF-ESTEEM SCALE

The Development of a Self-Esteem Scale for University Students

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The present study aimed to develop a measure of self-esteem for the university students. For this purpose, the expression of self-esteem was explored from 25 university students (15 male; 10 female) using the semi-structured interview based on the Mruk's definition of self-esteem (1999). A list of 62 items was converted into a self report measure Self-Esteem Scale (SES). For establishing the psychometric properties of SES was presented along with a demographic Performa and translated version of Rosenberg Self-Esteem Scale (Rosenberg, 1965) to 445 university students (226 male; 219 female). Factor analysis of SES showed a 5 factor solution namely Low Self-Esteem, Resilience, Withdrawn, Sociability and Self-Confidence. SES was found to have acceptable psychometric properties. Results are discussed in terms of factor structure of SES, gender differences in level of self-esteem in the cultural context.

Key words: Self-esteem, university students, phenomenology, scale, validity, reliability, culture, gender

Self-esteem is considered to be one of the basic psychological constructs related to the self. It is generally regarded as an evaluation in which people approve or disapprove themselves and make judgments about their self-worth (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Self-esteem also refers to the individuals' judgments about the extent to which they own various characteristics or it is the way people perceive themselves (Oguz & Korukcu, 2010). It refers to one's self image in one's own eyes (Rosenberg, 1965). Self-esteem can be defined as an individual's opinion of himself or herself that one holds, acceptance or rejection of, or satisfaction or dissatisfaction with, oneself (Guillon, Crocq, & Bailey, 2007).

Self-esteem plays an important role in shaping the human behavior and influences their growth and development (e.g., Baumeister, Campbell, Krueger, & Vohs, 2003; Ma-kikangas & Kinnunen, 2003; Oguz & Korukcu, 2010). Self-esteem might work as a buffer against new situations and mental health problems (Gaertner, Sedikes, & Chang, 2008; Guillon et al., 2007; Martens et al., 2010), related to individual's well being (Kernis, 2005; Vess, Arndt, & Schlegel, 2011), high academic achievement (Baumeister et al., 2003; Mutlu, Balbag, & Cemrek, 2010). An individual with high self-esteem is said to be resilient, assertive with a positive view of life (Chedraui et al., 2010; Veselska et al., 2009; Sobhi-Gharamaleki & Rajabi 2010), tends to engage in a healthy life style and strive for the maximization of their potentials (Oguz-Duran & Tezer, 2009). On the other hand, low self-esteem is positively related to a sense of rejection (Marigold, Holmes, & Ross, 2010), mental health problems, suicidal ideation poor job performance, disturbed interpersonal relationship (Donnellan et al., 2005; Krizan & Suls, 2008; Lengua, Long, Smith, & Meltzoff, 2005; Richardson, Bergen, Martin, Roeger, & Allison, 2005),

substance abuse (Kokkevi, Richardson, Florescu, Kuzman, & Stergar, 2007) and domestic violence (Krizan & Suls, 2008).

The university years represent a developmentally challenging transition to adulthood where university students face many pressures intellectually and emotionally (Delaney, 2003; Duchscher, 2008). Researches have shown that the maintenance of a healthy self-esteem becomes increasingly difficult during the period of these transitions (e.g. Taylor & Montgomery, 2007). Such transitions and decisions include achieving financial independence, taking responsibility for self and others, building close relationships or starting a family and entering into the working life (Arnett, 2000; Lefkowitz, 2005; Salmela-Aro & Nurmi, 2007; Shanahan, 2000). Moreover, a young adult also struggling with his identity, self respect (Artazcoz, Borrell, & Benach, 2001; Emami, Ghazinour, Rezaeishiraz, & Richter, 2007; Kohlberg, 1984). The confusions at this stage make university students more vulnerable to mental health problems and low self-esteem (Adlaf, Glikzman, Demers, & Newton-Taylor, 2001).

Despite upsurge of in studying self-esteem, there are many conceptual issues associated with the construct of self-esteem that remain to be resolved. Different researchers have tried to define and explain the basic nature of this construct (Baldwin & Hoffmann, 2002; Cast & Burke, 2002). Since the mid of 19th century, it is under consideration but is often misunderstood. The term self-esteem was first coined by James (1890), who explained self-esteem as an affective phenomenon. Later on, different researchers proposed different explanations of this phenomenon in almost all theoretical perspectives. According to the psychodynamic perspective, self-esteem is a developmental phenomenon (Adler, 1927; White, 1963), in socio-cultural perspective self-esteem is an attitude that the individuals have about themselves (Rosenberg, 1965), in behavioral perspective self-esteem is a construct or an acquired trait (Coopersmith, 1967), in humanistic view self-esteem is individual's ability to live to honor and accept his view of

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himself (Branden, 1969; Jackson, 1984) and in cognitive-experiential perspective self-esteem is a consequence of an individual's understanding of the world and others (Epstein, 1985). Researchers are still struggling to understand whether self-esteem is a uni-dimensional or multi-dimensional (e.g. Miller & Moran, 2007; Tafarodi & Milne, 2002), is a state or a trait (e.g. Guindon 2010; Pervin, Cervone, & Oliver, 2005), implicit or explicit (MacKinnon, Newman-Taylor & Stopa 2011), and is static or dynamic (Baldwin & Hoffmann, 2002; Lyubomirsky, Tkach, & Robin, 2005).

Mruk (1995) has presented a phenomenological theory of self-esteem comprising the interaction between two basic components of self-esteem, Competence and Worthiness (Mruk, 1999; Wang & Ollendick, 2001). According to Mruk, Competence, the functional aspect of the self related to the skillfulness of an individual and Worthiness, an affective evaluation of the abilities by himself. He further explained that Competence is the behavioral component of self-esteem that is related to aspirations and success and it is relatively easy to observe. Whereas, Worthiness is an internal feeling of an individual based on values he gives to himself so it is more experiential and subjective experience. Mruk also emphasized that the development and maintenance of self-esteem is influenced by the parents, social values and cultural context in which an individual lives.

Mruk postulated that the construct of self-esteem is dynamic in nature as individual's Competence and Worthiness work in relation to each other that's why it keeps on changing throughout by experiences. Mruk (1999) also proposed a continuum matrix of self-esteem showing low to high levels of self-esteem i.e. High Self-Esteem: high competence, high worthiness; Defensive Self-Esteem Type I (Narcissistic Self-Esteem): low competence, high worthiness; Defensive Self-Esteem Type II (Pseudo Self-Esteem): high competence, low worthiness; and Low Self-Esteem: low competence, low worthiness.

The influence of social values and cultural variations in self-esteem provides us further dimensions of the construct. Self-esteem has been studied in the context of individualistic (i.e. mostly western) and collectivistic (i.e. mostly eastern) cultures (Brown, 2003; Heine, 2003; Heine & Hamamura, 2007). The Western culture tend to give more importance to the independence, uniqueness and individuality of the person whereas, the Eastern culture focuses more on collectivism, dependence and compliance (Chao, 1994). In both, there is a marked difference in understanding the concept of self. In individualistic culture self is represented in terms of personal achievement, goals and brilliance, where as in collectivistic culture, self is viewed in terms of gratifying others by adapting oneself to fit into specific situations (Chen & West, 2008; Lehman, Chiu, & Schaller, 2004). Due to all these differences in these two cultures, it is clear that the people from individualistic culture and collectivistic culture have difference in their conceptualization in terms of definition, description,

expression and function of self-esteem (Luk & Bond, 1992; Wang & Ollendick, 2001).

Difference in cultural evaluation of self-esteem also raises the question of using scales which are developed in different cultures. The main emphasize remains there that the semantic and precise meaning, relevance and significance vary considerably from culture to culture and context to context (Gergen, Massey, Gulerce, & Misra, 1996). This is also supported by different cross-cultural studies that the individuals from collectivistic culture score low on Self-esteem as they have low self awareness (e.g. Falk, Heine, Yuki, & Takemura, 2009; Schmitt & Allik, 2005).

Scales developed in the western cultures based on the individuality and uniqueness of an individual that might not give a comprehensive picture of that culture which promotes collectiveness and interdependence. Therefore, it is imperative to study the concept of self-esteem in cultural context through emic approach to highlight its multiple manifestations in the particular culture (Berry, 1989). The present research aims to explore the experience and expression of self-esteem of university students using Mruk's theory (1999). This study also aimed to develop a valid and reliable tool for measuring different dimensions of self-esteem in university students.

Method

Phase I: Generating Item Pool

Participants and Procedure

The aim of this phase was to explore the expression and manifestation of self-esteem of university students according to Mruk's (1995) two factor phenomenological theory of self-esteem. According to this theory the self-esteem was operationally defined as "*the capacity to feel good about oneself and having the confidence of possessing the required competence*". This definition was presented to 25 university students of BS Hons (15 males and 10 females). The respondents were asked to list the characteristics and attributes of an individual according to this operational definition of self-esteem. The participants were further asked open-ended questions for the precise description of the attributes. The participants indicated the presence of positive attributes as an indication of high self-esteem and absence as low self-esteem. In this way, an initial pool of 71 items showing the presence and absence of self-esteem was generated and collated. By excluding repetition, ambiguous and slang words, a list of 62 items was finalized. Which was transformed into a self-report 4 point rating scale and named as Self-esteem Scale (SES).

THE DEVELOPMENT OF A SELF-ESTEEM SCALE

Phase II: Translation of Rosenberg Self-Esteem Scale (RSES, Rosenberg, 1965)

Procedure

In order to establish the concurrent validity of SES, RSES was translated into Urdu (national language of Pakistan). For this purpose the researcher translated with the help of 2 linguistic experts and 3 trained Clinical Psychologists having at least 3 years clinical experience. Items having less than 80% agreement were modified according to the suggestions given by the experts.

Phase III: Pilot Study

Participants and Procedure

The aim of this phase was to assess the layout, user friendliness and understanding of the items of SES and RSES (Rosenberg, 1965) by the university students. For this purpose, 15 students (male: 7; female: 8) of BS (Hons.) were selected through simple random sampling. There were three items of SES which were not clear to the participants so these items were modified according to the suggestions given by the / participants to achieve better understanding of the concept

Phase IV: Standardization

Participants

Multistage sampling technique was used to select the sample of university students of BS (Hons.) from 3 public sector universities of Lahore. In the first stage stratified sampling technique was used to divide the sample into four main strata according to the class i.e. BS (Hons.) year I, II, III and IV. Then these strata were further divided into two sub-strata of male and female. The sample consisted of 446 participants (51% male and 49% female) university students. The mean age of the participants was 20.46 years (SD 1.49) with the age range of 18-24.

Instruments

Demographic Questionnaire: A self report questionnaire designed to collect some demographic information, regarding age, gender and the educational class of the participants was used.

Self-Esteem Scale: The Self-esteem Scale (SES) consists of 62 items. It is a four point scale (0-3) with the following scoring categories: 0 "not at all", 1 "sometimes", 2 "to some extent" and 3 "most of the times". Higher score on SES means higher level of self-esteem of the individual.

Rosenberg Self-Esteem Scale (Rosenberg, 1965): Translated version of Rosenberg Self-Esteem Scale (RSES) was used in the main study to determine the concurrent validity of SES. It is ten item Likert type scales in which the items are answered on a four-point scale ranging from strongly agree to strongly disagree. This scale consists of five positive and five negative statements. While calculating the collective score the polarity of the negative items is reversed. This scale gives the uni-dimensional measure of global self-esteem of an individual. The higher the score, the higher is the self-esteem of the individual. It has its good cross-cultural application. It also had acceptable level of reliability and validity.

Procedure

Of the five universities initially contacted, the three agreed to take part in the current research. Authorities were informed about the aim and objectives of the current study. All the authorities were assured about the confidentiality and privacy of the information obtained. The participants were approached in groups of 15 for collecting data. The researcher briefly introduced herself and the purpose of the study. Informed consent was taken from the participants after assuring about the confidentiality and privacy that the data would be used for research purposes only. All the participants were also assured that they have the right to quit from research. Those who agreed participants were provided with the booklet of demographic performa, SES and RSES. All participants were asked to rate each item to the extent in which each item applies to them. Average time taken in the administration was 10 minutes. After administration, all the participants were debriefed. For establishing the test retest reliability, 12% of the total sample was re-tested after one week interval

Results

Section I: Sample Description

This section describes the frequency and percentage of the demographic characteristics of the participants of the current study ($N= 446$).

Table 1

Demographic Characteristics of the Participants (N= 445)

Variables	Male n (%)	Female n (%)	Total n (%)
Gender	226 (51)	219 (49)	445 (100)
Age Groups (Years)			
19 or below	44 (19)	75 (34)	119 (27)
20 years	53 (23)	51 (23)	104 (23)
21 years	69 (31)	55 (25)	124 (28)
22 or above	60 (27)	38 (18)	98 (22)

Education			
BS 1 st Year	58 (26)	59 (27)	117 (26)
BS 2 nd Year	52(23)	52 (24)	104 (23)
BS 3 rd Year	56 (25)	55 (25)	111 (25)
BS 4 th Year	60 (27)	53 (24)	113 (25)

Table 1 shows that the sample of 445 comprises of almost an equal proportion of male and female participants (male 51%, female 49%). On the bases of *mean* and *SD*, age was divided into different categories. This showed that most of the students were 21 years old (28%). The above table also shows that there is almost an equal proportion of students from each year of BS, slightly more students from 1st year (26%) than 4th year (25%), 3rd year (24.93%) and 2nd year (23%).

Section II: Psychometric Properties of SES

Principle Component Factor Analysis with Varimax Rotation was performed on 62 items to explore the factors of SES. Varimax rotation is one of the methods of orthogonal rotation use with the assumption that it maximizes the interpretability, simplification and variance of factors. The factors obtained through Varimax rotation were independent of one another (Kahn, 2006). The Scree Plot was used to identify the initial factor structure of the scale in the form of graphical representation of eigenvalues (Cattell, 1966).

Kaiser-Guttman’s retention criterion of Eigen values greater than 1 revealed a five factor solution for SES (Kaiser, 1974). On the basis on this initial factor solution shown in scree plot other Principle Component Factor Analyses were carried out using six, five and four factor solutions with Varimax Rotation. Rotated Component Matrix showed that the five factor solution was giving the most-clear and simple structure with the fewest number of dubious and cross-loading items and yielded the most interpretable results.

This solution was closely analyzed in terms of content and theme. Items having factor loading .30 and above were selected in SES (Kline, 1994). In this way 3 items with factor loading less than .30 were excluded from the SES. A total of 11, 15, 10, 11 and 12 items loaded on the five factors respectively. The factor loadings of 62 items are given in the following table.

Figure 1
Scree plot Showing Extraction of Factors of Self-Esteem Scale (N= 445)

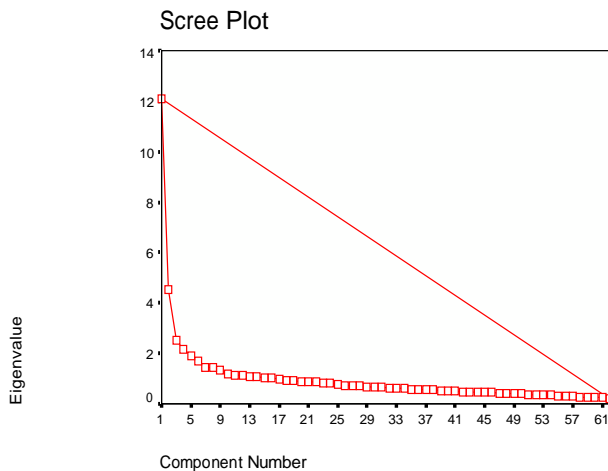


Table 2
The Factor Structure of 59 Items of Self-Esteem Scale (SES) with Varimax Rotation

S. No	Items	F1	F2	F3	F4	F5
1	42	.65	.05	.13	.01	.02
2	43	.50	.10	.20	.01	-.15
3	44	.52	.05	.26	.01	-.29
4	45	.38	-.23	.23	.06	-.28
5	46	.52	-.20	.14	.04	-.15
6	48	.73	-.10	.04	.07	.01
7	49	.53	.08	.20	-.22	-.29
8	52	.38	-.27	.25	.03	.16
9	56	.55	-.11	.19	.08	.04
10	58	.65	-.11	.22	-.13	.01
11	61	.59	.06	.07	.10	-.10
12	11	-.16	.36	.16	.27	.19
13	12	-.15	.49	.01	.20	.05
14	13	-.12	.45	.04	.20	.20
15	14	-.13	.44	.03	.29	.06
16	15	.01	.52	-.11	.09	.25
17	17	.02	.53	-.11	-.18	.28
18	18	.05	.53	.02	.01	.03
19	20	-.17	.62	.04	.18	.15
20	21	-.24	.42	.01	.25	.10
21	24	.07	.55	.08	.04	.27
22	25	.07	.57	.05	.08	.22
23	31	-.28	.36	-.16	-.25	.24
24	32	.04	.43	.04	.18	.08
25	39	.01	.48	.03	.20	.04
26	41	-.27	.31	.08	.29	.26
27	22	.21	-.11	.65	.08	.07
28	26	.12	-.12	.68	.04	-.12
29	40	.20	-.25	.35	.04	.09
30	50	.56	-.12	.51	-.13	-.06
31	51	.18	.15	.68	-.21	-.08
32	53	.29	-.21	.54	.08	.02
33	54	.28	-.15	.37	.05	.27
34	55	.20	.06	.52	-.16	.04
35	57	.07	.07	.68	-.16	.04
36	62	.24	-.17	.51	-.13	.03
37	4	.09	-.07	-.29	.49	.21
38	16	-.09	.18	-.01	.44	.26
39	23	-.06	.16	.16	.34	.09
40	28	.06	.15	-.10	.53	.12
41	30	-.12	.24	.05	.40	.08
42	33	-.20	.06	-.04	.51	.14
43	34	-.21	.20	.14	.44	.20
44	35	.09	.23	-.32	.43	.03
45	36	.01	.15	-.29	.50	-.08
46	37	-.01	.04	-.29	.61	.12
47	59	-.13	.01	-.07	.46	.15
48	1	.06	.21	.05	.13	.45
49	2	-.14	.16	-.11	.19	.54
50	3	-.07	-.16	-.01	.03	.63
51	5	-.13	.30	-.20	.10	.47
52	6	-.08	.21	-.22	.18	.47
53	7	-.24	.28	.04	.17	.46

THE DEVELOPMENT OF A SELF-ESTEEM SCALE

54	8	-.13	.27	-.09	.04	.49
55	9	-.20	.23	.01	.21	.40
56	19	-.24	.21	.01	.09	.37
57	27	-.10	.26	.07	.20	.42
58	38	.05	.24	-.05	.24	.40
59	47	-.18	.02	.02	.16	.46
Eign Values		5.36	5.23	4.62	4.02	3.96
% of variance		8.64	8.44	7.45	6.49	6.38
Total % of variance		8.64	17.07	24.52	31.01	37.39

Note. Factor loadings > .30 have been boldfaced. F1 = Low Self-Esteem; F2 = Resilience; F3 = Withdrawn; F4 = Sociability; F5 = Self-Confidence.

Table 2 shows the factor loadings of each item in all the factors. The item was retained in that factor in which its factor loading was above .30 (Kline, 1994). The factor loadings above .30 are bold faced. Table 3 also shows that all the factors retained have the Eigen value greater than 1. This is the most popular methods to determine the number of factors introduced by Kaiser (1974).

Description of Factors

Scree plot revealed five factor solutions of SES. A descriptive label was allocated to each factor on the basis of commonality of theme emerged in the respective factor.

F1: Low Self-esteem.

The first factor was a negative factor consisted of 11 items. Examples include "being fearful of criticism", "facing failure repetitively", "feeling of being inferior", "being lazy", "depending on others", "lack of confidence", "being emotional", "blindly following others", "being overwhelmed with failures", "finding difficulty in solving problems".

F2: Competence.

The second factor consisted of 15 items denoting the signs of individual's sense competence. Examples include "finding solutions of the problems", "being consistent", "having defined goals", "having optimistic approach", "being hardworking", "being responsible", "having control over emotions", "completing task in time", "being loyal to work", "being confident about own decisions".

F3: Anxious / Withdrawn.

This factor consisted of 10 items referring to the signs of being anxious or withdrawn. Examples include "being sad", "being lost in oneself", "being easily fed up", "being worried", "being quite", "losing interest in life", "thinking about oneself", "being lack of healthy relations", "preferring being alone" and "feeling anxious".

F4: Sociability.

This factor consisted of 11 items referring to the signs of sociability. Examples include "being mix-up with people easily", "having leadership qualities", "being perfectionist", "being energetic", "having high aims", "having decision power",

"having healthy relations with others", "being able to communicate own point of view", "being social".

F5: Self-Confidence.

This factor consisted of 12 items indicating the signs of having self-confidence. Examples include "having abilities", "being confident", "considering oneself good", "using skills effectively", "taking initiative", "being confident of doing work", "knowing one's abilities", "being sure of achieving goals", "knowing oneself", "having command over task".

Reliability and Validity of the Self-Esteem Scale (SES)

Self-Esteem Scale measures two opposite dimensions of self-esteem so its total internal consistency was not computed. In order to establish the internal consistency of the 59 items of SES, Alpha Coefficient was calculated through Cronbach Alpha. In order to establish relationship among five factors of SES and to establish the concurrent validity with Rosenberg Self-Esteem Scale (RSES) Pearson correlations was computed.

Table 3 shows that there is a significant correlation among all the factors of SES. Positive factors (Resilience, Sociability and Self-Confidence) have significant positive inter-factor correlation ($p < 0.001$). Whereas, a significant negative correlation with negative factors (Low self-esteem and Anxious/withdrawn). All the five factors of SES has significant correlation with RSES ($p < 0.001$). Table also shows that all the five factors of SES have high internal consistency

Split half reliability of SES

In order to determine the split half reliability of SES, the items in each factor were divided into two sets A and B randomly. Then later on all the A's were merged to make Form A and B's to make Form B. Form A consisted of 30 items and Form B consisted of 29 items. Reliability between two forms was found to be $r = 0.76$ ($p < 0.001$) indicating highly significant correlation. Cronbach alpha for Form A was found to be .80 and for Form B is .83.

Test Retest Reliability of SES

In order to establish the test retest reliability of SES, 12% (n=47) of the participants of the main study were retested on

SES after one week of interval. This showed one week test retest reliability of SES $r=0.97$ ($p<0.001$) indicating very highly significant test retest reliability.

Table 3

Summary of Inter correlation, Means, and Standard Deviations for Scores on Five Factors of Self-Esteem Scale (SES) and RSES and Alpha Coefficients of SES

Factors	Low Self-Esteem	Resilience	Withdrawn	Sociability	Self-Confidence	RSES	α
Low Self-Esteem	---	-.41***	.62***	-.27**	-.39***	-.46***	.85
Resilience	---	---	-.33***	.49***	.67***	.35***	.84
Withdrawn	---	---	---	-.36***	-.27**	-.44***	.84
Sociability	---	---	---	---	.51***	.28**	.76
Self-Confidence	---	---	---	---	---	.38***	.81
RSES	---	---	---	---	---	---	.73
M	15.88	32.59	14.77	20.98	25.42	20.83	
SD	6.66	6.55	6.52	4.36	5.04	4.35	

Note. $df=445$; ** $p<0.01$; *** $p<0.001$. RSES = Rosenberg Self-esteem Scale (Rosenberg, 1965) Source

Self-esteem and Age

In order to investigate the mean difference of four age groups on five factors of Self-Esteem Scale (SES) Analysis of

Variance was carried out. Furthermore, Post Hoc Test with LSD was computed in order to test category wise difference on each factor of SES.

Table 4

One Way Analysis of Variance for Five Factors of SES Across Four Age Groups

Factors	19 or below (n= 118)		20 years (n= 104)		21 years (n=124)		22 or above (n=98)		F	Sig
	M	SD	M	SD	M	SD	M	SD		
Low Self-esteem	15.42	6.03	16.35	7.52	16.33	6.18	15.36	7.02	.74	.526 (ns)
Resilience	32.45	6.65	32.06	7.18	32.28	6.04	33.69	6.33	1.26	.286 (ns)
Withdrawn	14.07	6.09	15.41	6.38	15.73	6.74	13.72	6.74	2.56	.054 (ns)
Sociability	20.42	4.53	20.69	4.30	20.65	4.12	22.39	4.25	4.57	.004**
Self-Confidence	24.96	5.42	25.20	4.88	24.87	5.04	26.93	4.47	3.89	.009**

Note. ** $p<0.01$. between groups $df=3$; within group $df=440$; groups total $df=443$

Table 4 shows that the individuals from different age groups score significantly different on only two factors of SES i.e. Sociability and Self-confidence ($p<0.01$). Post Hoc Analysis showed that the individuals falling in the category of 19 and below, 20 years and 21 years score significantly lower on

Sociability and Self-confidence as compared with those who fall in the category of 22 and above. This shows that as the age increases the self-esteem increases in these two dimensions of Sociability and Self-confidence.

THE DEVELOPMENT OF A SELF-ESTEEM SCALE

Table 5

t values showing differences between Male (n=225) and Female (n=218) participants on Five Factors of SES

Factors	Gender	M	SD	t	p<
Low Self-esteem	Males	15.46	6.44	-1.33	.183 (ns)
	Females	16.31	6.87		
Resilience	Males	32.44	6.30	-.48	.630 (ns)
	Females	32.74	6.81		
Withdrawn	Males	14.68	6.29	-.29	.773 (ns)
	Females	14.86	6.77		
Sociability	Males	21.42	4.21	2.20	.028*
	Females	20.52	4.46		
Self-Confidence	Males	25.49	4.71	.26	.792 (ns)
	Females	25.36	5.37		

Note. df =442. *p<0.05

Self-esteem and Gender

Table 5 shows that male and female have weak significant difference ($p<0.05$) on Sociability on the rest of the factors of SES like Low Self-esteem, Competence, Anxious / Withdrawn and Self-confidence there is no significant difference between male and female.

Self-Esteem and Year of Education

The results indicate that there is a weak significant difference of the scores on Competence by the participants from four different years of BS (Hons.). On the rest of the factors like Low Self-esteem, Anxious /Withdrawn, Sociability and Self-confidence there is no significant difference among the scores of individuals from four different years of BS (Hons.). Post Hoc Analysis showed that on Competence the students of 2nd year showed significantly lower as compared with those individuals from 1st year and 4th year. This shows that the students of 2nd year BS (Hons.) have significantly lower Competence based self-esteem than the students of 1st year and 4th year.

Discussion

The main aim of the current study was to develop an indigenous tool to measure the self-esteem of university students followed by the identification of the relationship of their self-esteem with their mental health problems. Self-esteem has a crucial relation with resilience and mental health of an individual (e.g. Veselska et al., 2009) . It can help to enhance or reduce the performance of an individual in any domain of life. It has the potential to determine and shape the human behaviors in a positive or negative manner (Makikangas & Kinnunen, 2003). Due to the vital importance of self-esteem, it has been under consideration since a long time to be understood and explained in a better way but still there is a list of controversial issues related with the explanation of this phenomenon.

Many researchers have contributed their efforts to defined and understand this complex psychological construct of human behavior. Mruk (1999) was one of them, who proposed the two

factor theory of self-esteem and proposed a phenomenological definition of self-esteem covering its two components named Competence and Worthiness which are embodied in the process and situations of real life and make it dynamic in nature. As, he has integrated a variety of definitions of self-esteem and hypothesized a more comprehensive phenomenological definition of self-esteem so, this was considered to be a better account to understand and describe self-esteem in terms of its operationality (Saleem & Mahmood, 2011). Due to these reasons the present study was based on Mruk's (1995) phenomenological definition of self esteem.

In recent literature, many researchers have focused on the importance of culture as a unique contributor to human behavior (e.g. Uchida et al., 2008). Most of the psychological concepts, theories and constructs and assessment procedures being used in our culture are derived from the Western cultures. All these assessment tools are developed and standardized in the Western culture with a little ecological validity for the use in the Eastern culture. As a result, these assessment tools have limited relevance and understanding in different cultures (Matsumoto, 2000). If we use these culturally biased assessment procedures with our target population, we may lose some of the essential and important information and may provide a false profile to misguide the preventative and intervention measures (Stewart et al., 1999). There is ample evidence to describe a great need for developing culturally sensitive and appropriate assessment procedures with high ecological validity to assess the self-esteem of university students. Berry (1989) emphasized that in order to understand any phenomenon in its cultural context emic approach is more effective to be used. It provides all the variations and dimensionality of a particular phenomenon in a specific culture.

Among the most important findings of this study, in contrast of the previous study by Saleem and Mahmood (2011) on children based on the same Mruk's two factor model of self-esteem, the first factor is a negative factor named Low Self-Esteem. For children the first factor was Academics showing the importance of academic performance in determining their self-image and self-esteem. So this can be assumed that in contrast to the school children, the university students are more

concerned about their identity, self-image and self-perception. The age group of 18 to 22 might be very sensitive to insult or of being negatively criticized. According to Mruk (1999) self-esteem is embodied in the surrounding and situations. Whereas, in our culture we just focus on negatively criticizing the individuals regardless of their feelings associated with those criticisms. This might be the cause of the emergence of the Low Self-Esteem as the first factor.

The second factor is Resilience which mainly deals with the competence of an individual to do better and deal effectively with difficulties. This shows that the individual's belief in himself that he is able to do things improves his overall perception about himself. This can be taken as the opposite of the first factor. The third and fourth factors are Withdrawn and Sociability respectively which are also considered as the polarities of each other. The last factor is Self-Confidence which is giving worth to one's own abilities. This factor structure indicates that in our culture the students are more sensitive to negative things first as compared with the positive things. Their self-image depends more on the negative criticism by others with reference to having and believing in one's own abilities. We believe more in isolation than in interacting with people.

University students are usually considered as the most fortunate population but we can't ignore the fact that they are the ones who pass through a constant stress of transition and survival during this period of their life (Mahmood & Saleem, 2011). These stressors may place university students at greater risk and for developing some problems (Duchsher, 2008; Hunt & Eisenberg, 2010). The factors like frequency, duration and intensity of the stressor determine the effect on an individual. Another factor that determines the effect of these stressors on an individual is their ability to deal with such problems. Self-esteem acts as a buffer against stressors. Those who have high self-esteem, they used better strategies to cope with their everyday life stressors and face less mental health issues (Guillon et al., 2007).

The first subsidiary hypothesis related to the increase in the age, self-esteem of an individual also increases is confirmed for two factors names Sociability and Self-Confidence. For the rest of the dimensions of self-esteem it remains static throughout the life span. This may be due to the reason that with the increase in age the maturity comes in the individual and they improve their public dealing and start giving more worth to their abilities. Whereas the sensitivity to the negative criticism, the ability to do perform tasks and reserved attitude according to the findings of this study have no impact of age on it.

Contrary to findings by Jackson and colleagues (Jackson et al., 2010), we found no gender differences in the self-esteem of the university students except in Sociability. This might be due to the reason that we have selected highly special population. Both male and female in Pakistan, who reach up to this level of education, are mostly provided with almost the same facilities to know, groom and flourish themselves. Females themselves

try their level best to deal with their everyday life problems effectively and develop confidence in their abilities like males. The female at this level also have the trust and support of their families and they are more resilient. Despite all these facilities, there is an expected role of females by our culture that they have to behave as confident but reserved and less interactive with others. They are allowed to go to the field with some restrictions in their socialization. This might be the reason that females score low only on Scalability and on the rest of the factors they score almost the same as males.

The study also suggests that years of education of the students has no significant impact on the self-esteem and mental health problems of an individual. The university students are least concerned with the academics. They are more concerned with their social relations and the self-image since the very beginning and it remain the same throughout their academic work that is why no significant difference over the academic year was found.

Conclusion

Current research has contributed significantly in improving our understanding about the attributions of self-esteem of university students in our culture. In this study, a valid and reliable assessment measure with high ecological validity has been developed. This measure provides us the five different dimensions of self-esteem attributions expressed by the university students in their specific-cultural context. All the individual factors provide an exclusive opportunity for in-depth understanding of the functional profile of a student that will ultimately help in planning of counseling strategies for particular university student. Furthermore, this study will also help teachers and parents for early identification of the students with self-esteem problems that might lead to other interpersonal and intrapersonal problems as well.

Though, self-esteem has significant predictive relation with mental health problems of the university students, therefore, in order to handle the mental health problems more effectively, self-esteem of an individual must be improved. For this purpose, all educational authorities must develop a guidance and training programme for the university students along with their academic development to boost the healthy self-esteem. These counseling and guidance programmes would focus on providing psychological help to improve Resilience, Sociability and Self-Control and to reduce Low Self-Esteem and Withdrawn. The scale developed in this study to assess the self-esteem of university students is also applicable in clinical work with individuals.

THE DEVELOPMENT OF A SELF-ESTEEM SCALE

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Nazia Zafar, Sadia Saleem & Zahid Mahmood

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THE DEVELOPMENT OF A SELF-ESTEEM SCALE

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