

Development and Validation of Welcoming School Scale (WSS) for Examining General School's Capacity to Welcome Students with Disabilities in Pakistan

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Abstract

Multidimensional self-report Welcoming School Scale (WSS) was developed and validated to examine general school's capacity to intake students with disabilities. A pool including 46 items was created. In order to analyze factor structure, 23 items were chosen from the pool in viewing experts' opinion. A sample of 430 teachers with various educational backgrounds was randomly selected. Twenty three items of Welcoming School Scale (WSS) were submitted to principal components analysis by using varimax rotation. A solution of four factors was obtained on the basis of eigenvalues and associated scree plot. The contents of the items were examined in detail with $> .30$ factor loadings on four factors in rotated solution by following the criteria of Kline (1986). The rotated factor solution was found to be more meaningful for the theoretical explanation of the factors, which produced the four subscales of Welcoming School Scale. For these four aspects eigenvalues were 3.13, 2.70, 1.96 and 1.82, respectively. The final Welcoming School Scale (WSS with 19 items) was found to be internally consistent as shown by value of alpha coefficient .71. The study also focused to explore the difference on mode of welcoming school with respect to various demographic variables. This study also measured differences between different age groups of teachers on WSS. The difference was examined with the help of t- test and ANOVA respectively and significant differences were found for three age groups. Results from t-test analyses produced considerable difference between males and females teachers on WSS, $t(378) = 5.36, p < .000$. Male teachers showed significant and higher score on WSS as compared to female teachers. It has been concluded that future researchers may use WSS to analyze the welcoming and in-taking capacity of general school for students with disabilities along with their counterparts without disabilities.

Key words: Welcoming school scale, validation, principal component analysis, capacity for diversity

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Introduction

A school which accept and address diverse needs of all students may be considered as good school. Goransson & Nilholm (2009) explained that inclusive schools means general schools that are good in terms of acceptability. The development of schools is a complex process, embedded in a local context. In each country's context, inclusion may differ from integration. For example, in British context integration differs from inclusion where students with disabilities are not full times students as their counterparts are, in ordinary schools. On the other hand in Italian context inclusion and integration are understood in the similar sense that all students irrespective of their disabilities are the part of ordinary class in ordinary school. For Armstrong (2008) inclusion situates the barriers to participation within the school or college while integration focuses on the perceived deficits in the child as creating barriers to participation. Disability, as our society views, becomes the cause of segregation. Perceptions within deficit paradigm exclude students with disabilities from ordinary schools and become a barrier in inclusion. Although, some of these ordinary schools, for a little, allow students with disabilities to come, but this is integration, not inclusion. For enhancing the general schools capacity it is imperative to minimize barriers which hinders acceptance of diversity. Clough (1998) explained that history of inclusive schools starts from the history of special education. Armstrong (1998) elaborated that history of inclusion and exclusion begins simultaneously. United Nations Convention on the Rights of People with Disabilities (UNCRPD), article 24 provides support inclusive education.

Through visiting the existing literature following dimensions have been traced as far as school capacity to welcome students with diversity is concerned: willingness, acceptance or rebuff, barriers and orientation or training. A school is welcoming when teachers are willing to teach in inclusive class, accept students with disabilities, teachers and schools minimize barriers in the way of inclusive classrooms and finally school regularly provide orientation and training to teachers. The current research was endeavor of construction of an indigenous self-report WSS and to determine its psychometric properties by establishing reliability and validity checks (face, content and construct).

The study was designed to develop a psychometrically sound multidimensional WSS. The following objectives were formulated to guide the research:

1. To develop items for indigenous self-report WSS
2. To obtain validity and reliability of the newly developed scale WSS
3. To access gender and age differences in mode of welcoming school

The study seeks to answer following research questions:

1. Is there difference in mean score of mode of welcoming school between male and female teachers?
2. Is there difference in mean score of mode of welcoming school between different age groups?

Methodology

We reviewed extensive literature available in French and English. We used the data for validation of the instrument named ‘Welcoming School (WSS)’ for knowing the capacity of general school to welcome students with disabilities. Pilot study was conducted to make sure the psychometric purification of statements, similar items, removing not related and unclear items or to ensure items’ understandability, to limit the length of questionnaire and to gain insight to the suitability of scale items. The scale pilot tested on 30 students of a Public High School of District Sargodha. The process resulted in the pilot-tested pool of 39 items. This WSS was validated through content and face validity, construct check of validity using factor analysis, reliability and internal consistency using Cronbach’s alpha coefficient. Data were analyzed through mean, standard deviation, factor analysis, correlation coefficient, t-test and ANOVA to use the SPSS (Statistical Package for Social Sciences Version 22). For the assessment of Welcoming Schools Scale (WSS) reliability, an indicator of internal consistency of the scale i.e. alpha coefficient was computed. The internal consistency of the WSS was indicated by the high correlation coefficient values. Inter-scale correlation and alpha coefficient was analyzed to determine reliability of Welcoming Schools Scale (WSS) on 430 participants. Cronbach’s alpha of the 23-item total WSS was obtained to be .71. Cronbach's alphas of .77, .53, .53, and .73 were obtained for the first four subscales that are willingness, acceptance/ rejection, understanding, and barriers scales, respectively.

Testing the Assumptions for Factor Analysis

Following assumptions were tested empirically to assess suitability of the data for factor analysis.

I. Sample Size

The data were collected from both men and women teachers teaching in general schools. The teachers included were having different age ranges from 25 years to 59 years. The Kaiser-Meyer-Olkin (KMO) (Kaiser, 1970) and Bartlett tests were used (Zwick&Velicer, 1986) to assess the appropriateness of the sampling and the feasible sphericity of the collected data. By using KMO and Bartlett tests size of sample was also tested empirically. Additionally, through “Bartlett's test of sphericity” (Bartlett, 1950) distribution condition of responses of the participants was examined. Bartlett’s test of sphericity showed significant results ($p < .001$), indicating that to allow an assessment of the possible factor structure the data were sufficiently distributed. Bartlett's Test of Sphericity showed that factorability is assumed and data are suitable for additional analysis.

Next, to assess if the ratio of WSS items to the number of participants was adequate the “Kaiser-Meyer-Olkin measure of sampling adequacy” was measured (Kaiser, 1974). The

Kaiser-Meyer-Olkin produced a value of .71, showing that the ratio of WSS items to the number of participants was adequate to run a principal component factor analysis. This value is fairly larger than .60 i.e., the minimum value necessary for running the factor analysis that lies between class of “good” for adequacy of sample (Kaiser, 1974).

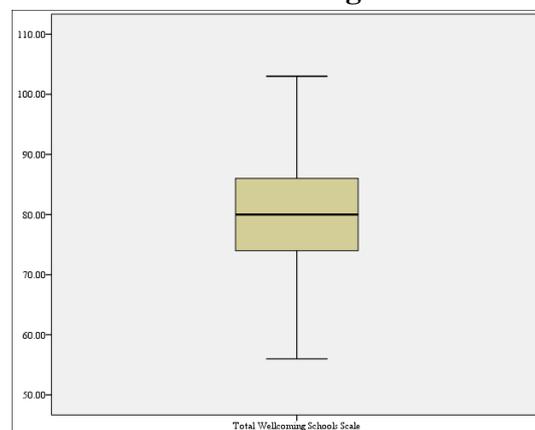
Table 1
Kaiser-Meyer-Olkin Measure of Sampling Adequacy and
Bartlett Test of Sphericity for self-report WWS (N = 380)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.708
Bartlett's Test of Sphericity	Approx. Chi-Square	2148.678
	df	253
	Sig.	.000

II. Outlier Cases

For outlier cases analysis of factors is very susceptible (Coakes & Steed, 2003). No extreme outlier was showed by box plot in data; because of this condition no case was removed. (See Figure 1).

Figure 1: Box Plot to See Outliers among Cases



III. Missing Values

There is no need to replace missing value with any value because the data are large enough (Dancey & Reidy, 2004).

IV. Communalities

All variables are selected for further analysis to proceed with the rotation of factor analysis because all the communalities are considerably higher (Fabrigar et al, 1999; Field, 2005).

Table 2
Communalities

Item No.	Initial	Extraction
1	1.000	.629
2	1.000	.682
3	1.000	.652
4	1.000	.642
5	1.000	.676
6	1.000	.702
7	1.000	.492
8	1.000	.658
9	1.000	.475
10	1.000	.563
11	1.000	.718
12	1.000	.424
13	1.000	.451
14	1.000	.503
15	1.000	.696
16	1.000	.628
17	1.000	.632
18	1.000	.591
19	1.000	.725
20	1.000	.699
21	1.000	.487
22	1.000	.643
23	1.000	.643

Extraction Method: Principal
Component Analysis.

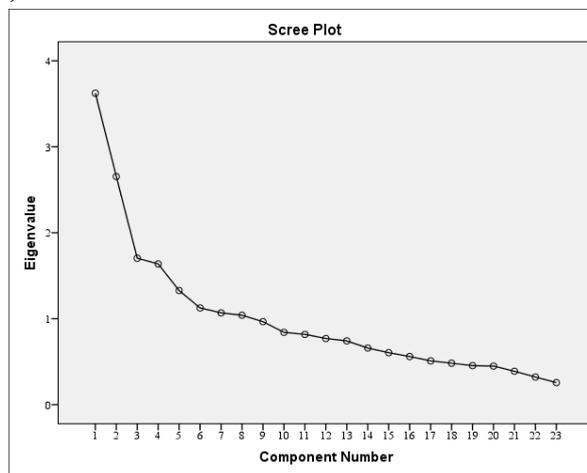
Factorial Validity/ Dimensionality

As the factor analysis extraction technique “Principal Component Analysis” with “Varimax rotation” was conducted on 23 items to evaluate mode of welcoming school. Interpretability and orthogonality of the factors is maximized by the Varimax rotation. The responses of 430 participants to the 23 items were submitted to “principal component analysis” using “varimax rotation” for assessment of factorial validity, to include retained items into the final scale and to establish the underlying factor structure

of the Welcoming Schools Scale as suggested by Field (2005). The solution of factors converged after 5 iterations revealed by initial analysis. To follow the retention standard of Kaiser (1960) a principal component analysis produced 8 factor solutions with higher than 1.0 eigenvalues, but this process has been shown over extraction in result. Subsequent principal component analyses were carried out to use four, three, two and one factor solutions using varimax rotation on the basis of these initial results.

On the basis of both the judgment of the theory and the scree discontinuity test, the four emerged factors were favored from the factor analysis. A four-factor solution was analyzed thoroughly because valid assessment is so vital. There were four components (interpretable, well defined, accurate and clear) out of eight that were chosen theoretically and eigen values > 1.0 . The content of items whose factor loadings on these four factors are $> .30$ has been regarded as appropriate for detail examination. This criterion has been selected in agreement with Kline's (1986) opinion that requires item inclusion in the measure. For a scree test the eigenvalue plot was applied (Cattell, 1987, Nunnally, 1978). Extraction of factors shows the Scree plot in the Figure 2. As it showed that the most apparent break after the first factor is between fourth and fifth component that provided help to the number of factors' selection. The scree plot graphically displays the eigenvalues for each factor that is presented in Figure 2.

Figure 2: Scree plot displaying Factor Matrix for 23 items of WSS (N= 430)



The scree plot in Figure 2 recommended that first component is predominant and the other three are also showing eigenvalues > 1.0 . The factor analysis of the data found a four factor solution; the scree plot showed the extraction of four factors for this group. Table 3 revealed percentages of variance explained by four factors and eighteen values.

First component had an eigenvalues 3.13. The second, third and fourth components in the solutions had eigenvalues of 2.70, 1.96 and 1.82 respectively. First component explained 13.65 % of the variance, while components 2, 3 and 4 accounted for 11.74%, 8.52% and 7.91% of the variance respectively. Overall, the first four retained components explained 41.82 % of the whole item variance. Above mentioned four factors were extracted. The variance accounted for four components is showed in table 3.

Table 3

Percentages of Variances, Eigenvalue, and Cumulative Percentages of Variance Explained by First Four Factors of the 23 Items of the Welcoming Schools Scale (WSS) in the Factor Solution Obtained Through Varitnax Rotation (N=430)

Total Explained Variance

Component	Rotation Sums of Squared Loadings		Cumulative %
	Total	% of Variance	
1	3.138	13.645	13.645
2	2.700	11.740	25.385
3	1.960	8.523	33.907
4	1.820	7.912	41.819

Extraction Method: Principal Component Analysis.

By using “varimax rotation” a “principal component analysis” carried out on the WSS (23 items) produced a four factor solution. In terms of underlying theme and item content these components were closely analyzed. The four factors were interpretable clearly according to welcoming schools models as reflected in literature on inclusive education. For identification of the dimensions and labeling of the factors, the text of items with factor loading $> .30$ has been analyzed in detail (Kline, 1999). The result showed that those items having factor loading $> .30$ are showing a pattern consistent in their text on each of these factors and could be explained in terms of different aspects of welcoming schools. The four different factors are defined by the four sub dimensions of WSS. Six items loaded $> .30$ on factor 1 included typically conceptualized as the “willingness”. Second factor comprised 4 items having $> .30$ factor loading. It was named as “acceptance/ rejection”. The third factor comprised 4 items loaded $> .30$. It was named as “understanding”. The fourth factor included 5 items with loadings $> .30$. This factor was called as “barriers”.

It is noted that some items may be loaded $> .30$ on more than one components. A close assessment of the content guided to the choice to include items to a factor which are

conceptually more connected. The “varimax rotation” of the matrix of factors found theoretically more reasonable and meaningful factor solution.

Table 4
Welcoming Schools Scale (23 Items) with Respective Factor
Loadings on Four Factors

	Rotated Component Matrix ^a			
	Component			
	1	2	3	4
Q14		.456		
Q15		.775		
Q16		.740		
Q17		.756		
Q18			.499	
Q19			.530	
Q20			.591	
Q21		.399	.549	
Q22		.441	.373	
Q23		.377	.457	
Q24			.427	
Q25				.381
Q26				.470
Q27				.499
Q28				.762
Q29				.657
Q30				
Q31	.635			
Q32	.789			
Q33	.786			
Q34	.494			
Q35	.723			
Q36	.645			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

It is noteworthy that to form the Welcoming Schools Scale only those 19 items have been selected having factor loadings > .30 on the four factors. These 19 items connected to four aspects may constitute the four subscales of the Welcoming Schools Scale, including 6 items in first subscale (assessing the willingness), 4 items in the second subscale, (assessing the acceptance/ rejection), 4 items in third subscale, (assessing the

level of understanding), and 5 items in the fourth subscale, (assessing barriers). Range of the score on the willingness is from 6 to 36 while the acceptance/ rejection score can range from 4 to 20. On understanding the score can range from 4 to 20 and for barriers it can range from 5 to 25. The higher score shows the larger degree of the school welcoming. These 19 items having loadings high clustered on first four factors were selected for final scale and were arranged in WSS from number of sequence from 1 to 19. After factor analysis with varimax rotation, 23 items of the Welcoming Schools Scale (WSS) (N=430), factor validity of questionnaire determined on theoretical and empirical basis. Final measure comprised 19 items and properly described four components.

Reliability Analysis

For the assessment of Welcoming Schools Scale (WSS) reliability, an indicator of internal consistency of the scale i.e. alpha coefficient (Cronbach & Thorndike 1971) was computed. Tables 4 display the findings of reliability indices. The internal consistency of the WSS was indicated by the high correlation coefficient values. Table 4 showed the internal consistency of the WSS. Inter-scale correlation and alpha coefficient was analyzed to determine reliability of Welcoming Schools Scale (WSS) on 430 participants. Cronbach's alpha of the 23-item total WSS was obtained to be .71 showed the degree of homogeneity among the items is consistent with the degree of theoretically expected homogeneity for the Welcoming School Scale (WSS). For four Subscales of WSS the internal consistency estimates have also been found. Cronbach's alphas of .77, .53, .53, and .73 were obtained for the first four subscales that are willingness, acceptance/ rejection, understanding, and barriers scales, respectively. For the individual scales (Acceptance/ Rejection and Understanding) the alphas were lower as contrasted to the total scale ($\alpha = .71$), but sufficient for the scales with fewer items. Additionally, the means and SD for every subscale score were also computed. The findings showed in the table below.

Table 5
Means, Standard Deviations, and Alpha Reliability of the 19-Item Welcoming Schools Scale (WSS) (N=430)

Name of subscales	No. of Items	Mean	Std. Deviation	Alpha Coefficient
Willingness	06	18.13	6.688	.77
Acceptance/ Rejection	04	8.95	3.117	.53
Understanding	04	8.47	2.923	.53
Barriers	05	7.94	3.289	.73
Total Welcoming Schools Scale (WSS)	19	43.48	12.076	.71

Inter-correlations among the Subscales and the Welcoming Schools Scale (WSS)

The correlation pattern is in the presumed direction. It is concluded from the inter-correlations matrix that all the subscales were significantly and positively related with the total scores of the WSS (ranging from $r = .468$ to $.642$, $p < .01$) recommend that all the subscales contribute to the total scale. Considerable correlations are showed by all the subscales with each other with some exceptions. The degree of inter-correlations among subscales explained relatively moderate correlations as compared to the high correlation with the total WSS, which supported that the four sub scales represent different aspects conceptually. The inter-correlations of four factors are showed in Table 6.

Table 6
Intercorrelations among the Welcoming School Scale (WSS) and its Subscales (N=430)

Measures	TWSS	accept	unders	barrier	willing
TWSS	—	.472**	.642**	.490**	.468**
Acceptance			.293**	-.019**	.026**
Understanding				.069	.230**
Barrier					.173**

** . Correlation is significant at the 0.01 level (2-tailed).

Note: Displaying Correlations among Subscales of WSS (N = 430), Where TWSS (Total Willingness Scale) Table 6 indicates that the highest correlation is found between Understanding and TWSS ($r = .642$, $p < .01$) and lowest correlation is found between Acceptance and Barriers ($r = -.019$, $p < .01$).

Gender Differences on the Welcoming Schools Scale (WSS) (N= 430)

Before construction of norms for the Pakistani sample, for gender and age differences t-test and for grade differences ANOVA was analyzed to find out significant variations of gender and age in WSS scores. The data were examined to find the gender differences regarding mode of welcoming school. Moreover to assess gender differences, t-test was computed for each of the dimension. Following hypotheses were created:

1. The male will have higher welcoming as compared to female.
2. The male will have higher willingness as compared to female.

3. The male will have higher acceptance/ rejection as compared to female.
4. The male will have higher understanding as compared to female.
5. The male will have higher barriers as compared to female.

The results produced significant variation between male and female on the welcoming school scale (WSS). Consequently, male tend to be more willingness as compared to the female. To produce norms for male and female, M and SD for the WSSS subscales were found. For male and female Means, standard deviations and t-test values for the WSS and its subscales are showed in Table 7.

Table 7
Mean, SD, and t-values of Scores of Male and Female on Total WSS and its Components

Name of Scale/ Subscales	Gender	No. of Cases	M	SD	t-value	df
Total Welcoming School Scale	Female	294	79.40	8.805	-.362**	422
	Male	130	79.74	8.943		
Willingness	Female	318	23.46	3.924	-.276	456
	Male	140	23.57	4.221		
Acceptance/ Rejection	Female	335	9.48	3.350	-.693	483
	Male	150	9.71	3.424		
Understanding	Female	327	13.85	2.734	2.090	474
	Male	149	13.27	3.033		
Barriers	Female	327	17.56	3.261	-3.519*	470
	Male	145	18.70	3.221		

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

The results presented in table 7 explained that the first hypothesis namely, the male will have higher willingness score than the female, is accepted. The mean score acquired by the male (M= 79.74, SD= 8.943) is higher than the mean scores acquired by the female (M= 79.40, SD= 8.805) and t-test value revealed that the difference between these two groups is significant ($t = -.362$, $P < .01$, $df = 422$). Thus the male participants scored significantly higher than female participants, on the WSS. The second hypothesis that the male will have higher willingness than the female, is not approved because t-test analysis showed that the difference between the willingness mean scores is insignificant ($t = -.276$, $p > .05$, $df = 456$). Third hypothesis that the males will have higher acceptance/ rejection than the female was not approved although the mean score of male on acceptance/ rejection scale was somewhat higher than the mean score obtained by females. However, this difference between the mean scores was obtained to be insignificant as indicated by the results ($t = -.693$, $P < .05$, $df = 483$). The fourth hypothesis

that the males will have higher understanding than females, is also not accepted as the results of t-test showed non-significant difference of the scores of two groups ($t= 2.090$, $P<.05$, $df =474$). The fifth hypothesis that the males will have higher barriers than females, was also accepted as the mean score of males on barriers scale was higher ($M=18.70$, $SD=3.221$) as compared to the mean score acquired by girls ($M=17.56$, $SD=3.261$). The results of t-test revealed significant difference of scores between two groups ($t= -3.519$, $p<.05$, $df=470$).

Note. Results in Table 7 demonstrated significant difference of scores between males and females on total Welcoming School Scale and its subscale of barriers whereas non-significant difference found on the subscales of willingness, acceptance/ rejection, and understanding.

Difference in three Age Groups on the Welcoming Schools Scale (WSS) (N= 375)

The results of the table below showed significant differences in the scores of the sample on the scale of Welcoming School Scale (WSS) on the basis of different age groups, $F(2, 372) = 1068.147$, $p< .05$. It means that any specific age group indicated high or low welcoming school. The results revealed that (55-72 years age group) obtained greatest mean score ($M=58.72$) and (17-35 years age group) obtained lower mean score ($M=26.19$). Thus it is suitable to proceed to a post hoc (a posteriori) test.

Table 8
Mean and SD for Three Age Groups on Scores of Total WSS (N=375)

Age group	N	Mean	Std.	
			Deviation	Std. Error
7-35	196	26.19	3.975	.284
36-54	154	43.64	4.761	.384
55-72	25	58.72	4.713	.943
Total	375	35.53	11.299	.583

Table 9
ANOVA to Observe the Significant Differences of Mean Scores of three Age Groups on BVS (N=380)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4064.426	2	20332.213	1068.147	.000
Within Groups	7081.030	372	19.035		

Total	47745.456	374
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Note. Results in Table 9 describe significant difference among three age groups on total welcoming school scale.

Table 10
“Post Hoc Test” to Analyze the Significant Relative Mean
Score Differences of Three Age Groups on WSS (N=375)

	(I) Age of Respondents	(J) Age of Respondents	Mean Difference (I-J)	Std. Error	Sig.
Tukey	17-35	36-54	-17.449*	.470	.000
HSD		55-72	-32.526*	.927	.000
	36-54	17-35	17.449*	.470	.000
		55-72	-15.077*	.941	.000
	55-72	17-35	32.526*	.927	.000
		36-54	15.077*	.941	.000

*p<.05

Note. Table 10 explained significant differences of three age groups in mean scores.

Age group 17-35 and 36-54 years has significantly lower mean score than 55-72 age groups. Age group 55-72 years has significant difference years in mean score with 17-35 years and 36-54. The findings of the present analysis suggest that the older people are more likely to have mode of welcoming school as compared to the younger ones.

Table 11
Percentile Scores for the Welcoming Schools Scale (WSS)
(N=430)

Percentiles	Scores on the WSS
10	68
20	72
30	75
40	77
50	80
60	82
70	85
80	87
90	91

Table 11 presents the percentile scores calculated from scores of the whole sample including both male and female (N=430). The present study did not intend to develop norms of the Welcoming School Scale but these percentile scores can be used tentatively

as substitute for norms. The percentile scores calculated for the whole sample showed that the individual who obtains a score of 80 on the Welcoming School Scale may be experiencing the mode of welcoming greater than the 50% of the sample which was taken in the present study.

Discussion

The part I of the research was designed to develop an indigenous self-report Welcoming Schools Scale (WSS) in cultural context of Pakistan. A valid and reliable indigenous welcoming schools scale was extremely essential to examine school capacity to welcome all students including students with disabilities. The work completed in the first part was intended to explain the construct to determine the dimensionality of the welcoming schools scale. Inductive methodology was used to empirically generate the item pool for the present scale. Initially the items were drawn for the scale to consult the review of the related studies as well as literature on assessment of welcoming school. Consensual evaluation of experts in the field was obtained as one of the primary methods to establish the content validity of pool of items in order that it can actually be measured (Hambleton, 1984; Lawshe, 1975; Martuza, 1974). Thus, after generating the list of 41 statements of the item pool for the self-report Welcoming Schools Scale (WSS) in its initial form. It was presented in the form of a list to four experts. On the basis of content validity, 23 items were selected to form the Welcoming Schools Scale. The pool of items consist of theoretically identified four components were factor analyzed after determining the content validity. In this research, principal components analysis used to factor analyzed the responses of 430 participants to the 23 items Welcoming Schools Scale (WSS). The factor analysis initially produced 8 components with eigenvalues above 1. The result of Cattell's scree plot and judgment of the theory recommended that a solution consist of four factor would be suitable. After that solution for four factors was subjected to varimax rotation. The eigenvalues obtained in the solution for the first four factors of 3.13, 2.70, 1.96 and 1.82 respectively. First four factors explained 13.65 %, 11.74%, 8.52% and 7.91% of the variance respectively. Overall, the first four retain factors explained 41.82 % of the scale variance.

Items selected on the basis of having factors loading > 0.30 on the four factors for the final scale. Following this standard, four items were removed. All of the left behind 19 items were highly loaded on the four factors. The factor structure of the measure was expected to include the four basic domains. In Part I the results of the study showed that Welcoming Schools Scale is multidimensional with four factors, which have been labeled as "willingness", "acceptance/ rejection", "understanding", and "barriers". Similarly, from the results of factor analysis with varimax rotation in the current study revealed the four underlying dimensions of welcoming school, which support expectations to obtain a multifactor structure.

The next essential step in scale development was assessment of internal consistency of 19-item WSS scores. The homogeneity of the Welcoming Schools Scale was exposed by the reliability estimates. The WSS produced alpha internal reliability coefficient of .71, which provide basis to consider that the WSS is a reliable scale. Moreover, Cronbach's alpha coefficient was also computed for scores on each subscale, For willingness, acceptance/ rejection, understanding, and barriers subscales, alpha coefficients were .77, .64, .64, and .73, respectively. For the individual scales of acceptance/ rejection and understanding the alphas were lower as contrasted to the total scale, but sufficient for the scales with fewer items. This means that each sub scale explained the variance particular to its own dimension, might be accepted as theoretically different from each other. The constructed Welcoming Schools Scale is found to be reliable and consistent internally.

The factors of Welcoming Schools Scale (WSS) expected to be inter correlate and they were, but not so highly (see Table 5). All subscales were significantly and positively related with total scores on the WSS (ranging from $r = .472$ to $.642$, $p < .01$) with mean correlation of .52. Between the total Welcoming Schools Scale and Understanding Scale the degree of correlation was greatest ($r = .642$, $p < .01$). On the basis of the inter correlations of Welcoming Schools Scale and its subscales, it may be observed that the Welcoming Schools Scale measures a general construct and the four subscales measure its four aspects. The present research verified the strength of the results of the factor analysis i.e. the construct of welcoming school is a multifactor construct. In a sample of 430, the factor solution suggested four similarly workable components. The data were examined to find the gender differences regarding welcoming school. The results of t-test showed significant difference between scores of males and females. It was found that males tend to be more welcoming as compared to the females. Males also obtained significant higher score on the subscale of willingness than females, whereas insignificant result was found on components of willingness, acceptance/ rejection, and understanding. Concerning the involvement of welcoming in age, there are contradictory evidences. The findings of the present analysis suggest that the older people are more likely to have mode of welcoming school as compared to the younger ones. In the present study norms for the Welcoming School Scale (WSS) were also established. Data were examined to observe the distribution of scores of the research participants. On the basis of findings of the present study the collective male and female norms for WSS were also developed (see Table 11), which may be used for comparison of the individual scores with the group.

Conclusion

An indigenous Self-report Welcoming School Scale (WSS) with four subscales consisting of nineteen items for Pakistani participants age ranged (17-72 years) has been successfully developed. The WSS is found as a highly valid and reliable tool to assess

mode of welcoming school for secondary school students. The higher scores on WSS is the indication of high level of mode of welcoming school. This scale may be used as diagnostic tool to measure individual differences in mode of welcoming school for purpose of counseling. This newer instrument keeps the main features of mode of welcoming school along with its indigenous factors and encounters existing psychometric standards.

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