

Translation, Validation and Factor Structure of the Handling Bullying Questionnaire in Pakistan

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The current study was aimed to adapt, translate and validate The Handling Bullying Questionnaire (THBQ; Bauman, Rigby & Hoppa, 2008) into Urdu language. Present study was conducted in two phases, at the first phase THBQ was translated into Urdu language through standard procedures. Linguistic equivalence between Urdu and English version scale of THBQ was found ($r = 0.75^{**}$) in pilot study. In the second phase of the study psychometric properties were established through Exploratory Factor Analysis and Confirmatory Factor Analysis. A sample of 400 participants was selected for administration of scale. Exploratory Factor Analysis retrieved 6 factors solutions in 22 items. Confirmatory Factor Analysis (CFA) confirmed five factor model with 16 items. Thus, findings indicted the Urdu version of THBQ may be valid and reliable. The questionnaire can be used in future research for the assessment of handling bullying behaviors among school children by teachers and counselors.

Keywords. Translation, bullying, teachers, standardization, Pakistan

Bullying in school is a serious matter of alarm that considered as a type of aggression characterized by habitual repeated behavior, meant to show dominance or power imbalance and cause harm to the

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victim (Olweus, 1991, Craig, Pepler, & Blais, 2007, Beran & Lupart, 2009, Liu & Graves, 2011). Bullying is linked to the different forms of aggression that can lead to the high profile occurrences of increased violence later in the life of any individual (Ttofi, Farrington & Losel, 2012). Thus, handling bullying issues at very early stages by school teachers and the counselors can not only create a safe and healthy school environment but would have a positive influence on the community at large.

Bullying in school has become a serious concern that can damage the value of a school, therefore, teacher's reactions to occurrences of bullying can have a major impact on reducing bullying at school level. Preparing school teachers to address bullying incidents is very important as teachers must intervene when bullying take place. However, school teachers often are unaware how to respond when bullying cases occur at school (Yoon & Bauman, 2014). In 2012, Hektner and Swenson argued that teachers' reactions and actions to address bullying, affect the range to which bystanders are ready to intervene. Rigby (2011) explained that mostly teachers are uneducated of their choices when challenging occurrences of bullying behaviors.

Holt and Keyes (2004) reported that a large proportion of studies have found that teachers reporting of bullying prevalence rates were less than students do. Bauman and Del Rio (2005) conducted a research study with 83 teachers and concluded that the majority of teachers did not even have a concept clarity and understanding of bullying. Bauman and Del Rio (2006) also exposed that mostly teachers measured interpersonal bullying to be less severe than other types of bullying. Hymel, McClure, Miller, Shumka and Trach (2015) reported that teachers have an "invisible hand" in determining student behavior so, they are important to know how they can address bullying and impact on school environment and student.

Literature review indicated that many tools, ratings scales and questionnaires were introduced to assess bullying behaviors of school children. Bullying through behavioral observation and mental status examination is the most important part of informal assessment for a clinical psychologist. Crothers and Levinson (2004) stated that peer assessment measures, self-perception scales and socio metric procedures are most inspiring to whole class intervention.

The Bullying Behavior Scale was developed to assess direct bullying occurrences by Austin and Joseph (1996). Teacher reporting's, children self-report questionnaires are a preferred assessment method for research studies and school administration exploring the bullying behaviors in schools (Leff, Freedman,

Macevoy, & Power, 2011). Most extensively used student scales and questionnaires are the “Olweus Bully/Victim Questionnaire” (Solberg & Olweus, 2003), “Illinois Bully Scale” (Espelage & Holt, 2001) and “School Relationships Questionnaire” by Wolke, Woods, Bloomfield and Karstadt, 2000.

Limited researches are conducted with reference to bullying behavior among school children in Pakistan. Those researches adapted and translated various scales into (Urdu) language to measure the bullying and victimization among school children. Khawar, Malik and Batool (2015) conducted exploratory study to translate and validate the (Urdu version) of Revised Olweus Bully Victim Questionnaire according to Pakistani culture. Shujja and Atta (2011) translated Illinois Bullying Scale (IBS) for Pakistani children age between (8-18 years).

In Pakistan prevalence of bullying behaviors significantly reported and for this purpose few scales and questionnaires are translated for bullies and victims. But there is no scale or questionnaire for the teachers or counselor that can help them to assess and address bullying cases and way of handling bullying among school children.

The Handling Bullying Questionnaire (Bauman, Rigby & Hoppa 2008) is one of the questionnaires that helps teachers to assess how to address bullying occurrence at school. The items in the scale are related to how a teacher will respond when any bullying situation occur in the school like he or she will talk to counselor, report to the principal, arrange meeting with parents or will handle the situation by themselves by using anti bullying techniques. In the current study, addressing bullying behavior among school children is main objective, where teachers are also the target population who need to learn and train in handling bullying behaviors among school children. Therefore, The Handling Bullying Questionnaire is adapted and translated into Urdu language.

The existing literature review on bullying highlights its significance in school settings. Teachers always play very important part in the identification, assessment and management of bullying. For measuring addressing bullying behaviors in school children by teachers The Handling Bullying Questionnaire (Bauman, Rigby & Hoppa, 2008) has been extensively used and it is considered to be the most reliable and valid measure for teachers and school administration.

Given the importance of handling bullying by teachers, it has not been yet explored in Pakistan, perhaps, due to lack of valid and

reliable tool. This questionnaire (THBQ) was decided to be translated into (Urdu) language and validated as a part of PhD research, as it was the only measure available for teachers, helps to assess that how they will handle bullying behaviors at school level.

The aims of current study are:

1. Adaptation and translation of The Handling Bullying Questionnaire in Urdu language.
2. Establishing the psychometric properties for The Handling Bullying Questionnaire.

Method

The Handling Bullying Questionnaire (THBQ)

Firstly, permission to use The Handling Bullying Questionnaire was obtained from Bauman, Rigby and Hoppa. This study was conducted to translate and adapt the scale according to Pakistani culture so that utility of the questionnaire for the non-English speaking participants will be increased. This study was conducted in two phases. In the phase I, adaptation, translation and cross language validation was done. In the phase II, the psychometric properties of the questionnaire were established.

The Handling Bullying Questionnaire by (Bauman, Rigby & Hoppa, 2008) include 22 items related to teacher's assessment that how they will address the bullying situation and teacher (subject) has to respond by reading the case of bullying presented in the scenario given in instructions that how they will react. "I definitely would not", "I probably would", "I am unsure", "I probably would not" and "I definitely would" are the five response rating for the subject. Cronbach's alpha for the five factors are, "Working with the victim" (.75), "Working with the bully" (.69), "Ignoring the incident" (.70), "Enlisting other adults" (.63) and "Disciplining the bully" (.45).

Phase I: Translation and Adaptation of the Handling Bullying Questionnaire

The aim of this phase was to translate and adapt original English questionnaire according equivalent in the language and culture. The key intension of this process was to enable the instrument standard and practically administered in both languages equally, English as source language and Urdu as the targeted language. The translation and cross language validation of THBQ was accomplished in six steps.

Step 1: Forward translation

The Handling Bullying Questionnaire (Bauman, Rigby & Hoppa, 2008) was translated with the help of experts panel. Six experts one PhD (Assistant Professor), three PhD scholars (1. Assistant Professor and 2. Lecturers) and one M.Phil (Associate Lecturer) in psychology with command over English and Urdu languages from Department of Psychology, University of Gujrat and Center for Clinical Psychology, University of the Punjab was consulted. Experts were selected by using purposive sampling. The bilingual experts educated to translate each item of the questionnaire according to the suitable Urdu language comprehension, without excluding the items.

Step 2: Expert panel

In a meeting with five experts each translated item was analyzed and the most appropriate translation which reflects true meaning of each item selected by the mutual consent. During the process of translation and adaptation some required changes were made in the original scale according to Pakistani culture as suggested by the bilingual experts. These changes were necessary because (English version) questionnaire was developed according to the Western culture. The expert panel suggested various alternatives for difficult words and expressions.

Step 3: Back-translation

The Urdu translated version of THBQ was given to five independent bilingual translators. The procedure was as same followed in the forward translation. Four lecturers having M. Phil degrees in psychology with five years of experience in university were involved in this process.

Step 4: Expert panel

The backward Urdu translation and English (HBQ) version scale items scrutinized by the same panel experts who helped in forward translation. Lastly, selected translated items were organized in same order like they were in original scale.

Content Validity Ratio (CVR)

The method of measuring the content validity was developed by Lawshe (1975) that is essentially a method for gauging agreement

among raters or expert panelist regarding how essential a particular item is. According to Lawshe (1975) each rater or expert respond to the following question for each item as “is the skill or knowledge measure by the item, (essential), (useful but not essential) and (not necessary)”. Positive CVR ranges between .00 and .99 and formula is given below (as cited in Cohen, 2009).

$$CVR = \frac{n_e - N/2}{N/2}$$

Table 1

Content Validity Ratio of Items of HBQ (Urdu Version)

Item No.	CVR (range)
1,2,3,7,8,10,11,12,15,16,18,19,21	0.66
4,5,16,19,13,14,17,20,22	0.33

Table 1 indicated the content validity ratio value of 22 items of the Urdu translated version of THBQ. The CVR indicted the “essential”, “useful but not essential” and “not necessary” value of items identified by the 6 panelists. All of the items in translated questionnaire of THBQ have positive and “essential” CVR ranges as 13 items with range of (0.66) and 9 items with (0.33) value.

Step 5: Try Out

Twenty-two items were translated and finalized for the try out. The aim of this step was to find out the correlation between English and Urdu version of THBQ. Teachers ($n = 55$) were selected from the Govt. Schools of Gujrat city. THBQ English version firstly administered and after two days with the same procedure and instructions Urdu version administered.

Cross Validation

Cross validation also known as rotation estimation, is a statistical method of evaluating and comparing learning procedures by dividing data into two sections, one used to learn the model and second used to validate the model (Shujja, Malik & Khan, 2017). The cross validation of the THBQ (Urdu and English version) was measured through the inter item and total correlation of the both questionnaires in (Table 2).

Table 2

Correlation and Linguistic Equivalence (item by item) and total of Urdu and English Version of The Handling Bullying Questionnaire

Item No.	<i>r</i>
1	.65**
2	.61**
3	.78**
4	.75**
5	.67**
6	.77**
7	.80**
8	.53**
9	.33**
10	.63**
11	.57**
12	.54**
13	.68**
14	.67**
15	.66**
16	.34**
17	.65**
18	.42**
19	.44**
20	.86**
21	.55**
22	.40**
English and Urdu version	0.75**

n = 55. ***p* < .01.

Table 2 showed item to item and total correlation of Urdu and English scale. Results showed significant item to item correlation between Urdu and English version THBQ ($r = 0.75^{**}$). Initial analysis comprises of computing language similarity of THBQ and correlation between Urdu items with original English items.

Phase II Psychometric Properties of the Handling Bullying Questionnaire

Sample I

In order to empirically estimate the translated THBQ, a sample of 200 school teachers was conveniently drawn from different schools of Gujrat city. Sample comprised 94(47%) male and 106(53%) female with age range 25-60 and with education up to graduation 77(38.5%) and 123(61.5%) above graduation. Sample was further classified on the basis of teaching experience that is 6 to 12 years teaching experience 87(43.5%), Above than 3 to 6 years 75(37.5%), above 12 and more 16(8%) and 3 or below than three years of teaching 22(11%) in schools.

Sample II

Sample of ($N = 200$) was conveniently drawn for (CFA) from schools of Gujrat city. Sample included 88(44%) male and 112(56%) female, age range 25 to 60 years and graduated sample 67(33.5%) and 133(66.5%) post graduated. Sample was further classified on the basis of teaching experience that is 6 to 12 years teaching experience 103(51.5%), Above than 3 to 6 years 57(28.5%), above 12 and more 17(8.5%) and 3 or below than three years of teaching 23(11.5%) in schools.

Procedure

For the field study permission was taken from principals and teachers of Govt. schools and information regarding questionnaire administration and time was provided. Teachers were instructed to rate each item in the questionnaire which is closely related to their interest how they will handle the bullying situation. In the Phase II psychometric properties of The Handling Bullying Questionnaire (Urdu Version) were established. This section presented factor analysis (EFA, CFA) for The Handling Bullying Questionnaire (Urdu Version).

Results

Exploratory Factor Analysis (EFA)

The Exploratory Factor Analysis (EFA) method was used to inspect relationship among variables in order to define the construct. The Principle Component Analysis (PCA) form was used in which all

variances of the variable (total variance) were analyzed. To assure an adequate sample size, two principles were considered, Kaiser-Meyer Olkin (KMO) sampling adequacy and factor loadings.

Table 3

Factors Loading of the Handling Bullying Questionnaire (Factors Loading >.05), Eigen Values, Percentages of Variance and Cronbach Alpha for 6 Factors of (THBQ)

	Ignoring the incident	Working with bully	Enlisting other adults	Working with victim	Discipling the bully	Assertiveness
Item #	1	2	3	4	5	6
2	.65	.04	.02	.06	.25	.01
8	.64	.07	.20	-.14	.60	.06
10	.52	.27	.17	.21	.12	.04
18	.58	.02	.14	.46	.14	.06
22	.76	.10	.05	.19	.06	.02
7	-.09	.62	.45	.04	.09	.07
11	.20	.57	.02	.26	.04	.15
12	.01	.76	.04	.23	.47	.20
21	.02	.30	.05	.04	.13	.06
3	.19	.10	.75	.03	.02	-.15
4	.09	.12	.66	.12	.17	.21
5	.17	.12	.48	.15	.22	.39
16	.03	.22	.29	.53	.12	.02
17	.16	.05	.03	.70	.15	.03
19	.27	.30	.05	.56	.12	.07
13	.39	.13	.16	.13	.65	.02
14	.24	.19	.09	-.08	.67	.11
15	.06	.12	.27	.19	.37	.01
20	.27	.00	.06	.29	.59	.18
1	.09	.12	.04	.01	.07	.79
6	.00	.16	.24	.28	.15	.37
9	.05	.49	.17	.21	.12	.58
Eigen Values	4.33	2.84	1.62	1.35	1.22	1.00
% of Variance	19.69	32.60	39.98	46.13	51.71	60.90
Alpha Coefficient	.72	.60	.56	.53	.62	.50

Factors Loading >.30 particular items are in the bold face

Factors analysis was used on 22 items Urdu version (HBQ) with Varimax rotations. Table 3 also highlight factors loading greater than .30 were comprised in the six factors. Results also indicated that the percentage of variance on factor 6, 5, 4 is significantly higher than factors 1, 2, 3. Cronbach alpha reliability analysis was 2.75 for total 22 items, which shows that this questionnaire has high internal consistency.

Confirmatory Factor Analysis (CFA)

The CFA was run on 200 participants (school teachers) to confirm the measurement model of THBQ, and the factor structure and dimensionality of the scale. Factor reserved after EFA were put to CFA in the 2nd phase of the study by using AMOS 20.0.

According to Hu and Bentler (1999) suggested the following guidelines for acceptable model fit root mean square error approximation (RMSEA) values are close to .06 or below, comparative fit index (CFI) and Tucker-Lewis index (TLI) values are close to .95 or greater (as cited in Hoyle, 2012).

The structure of the scale arose in EFA was inspected in CFA and this factor structure did not illustrate a good fit to the data as (CFI = .78) value was below the acceptable limit of .900. But other indices ($df = 142$, $p < .001$, RMSEA = 0.73, GFI = 0.87) were in normal limit.

To resolve the issue of CFI value for model fit the modification indices were taken into concerned. Covariance and regression weights were considered and it was noticed that there were certain items that were restating in both tables of modification. These repeated items were creating problems hence those items (21, 10, 19) were erased to rise the value of CFI. We remove factor 6 (assertiveness) items included (1, 6, 9) from the final model for improving the model and parsimony of the model and regression weights (14-18 and 7-3) discovered a good model fit.

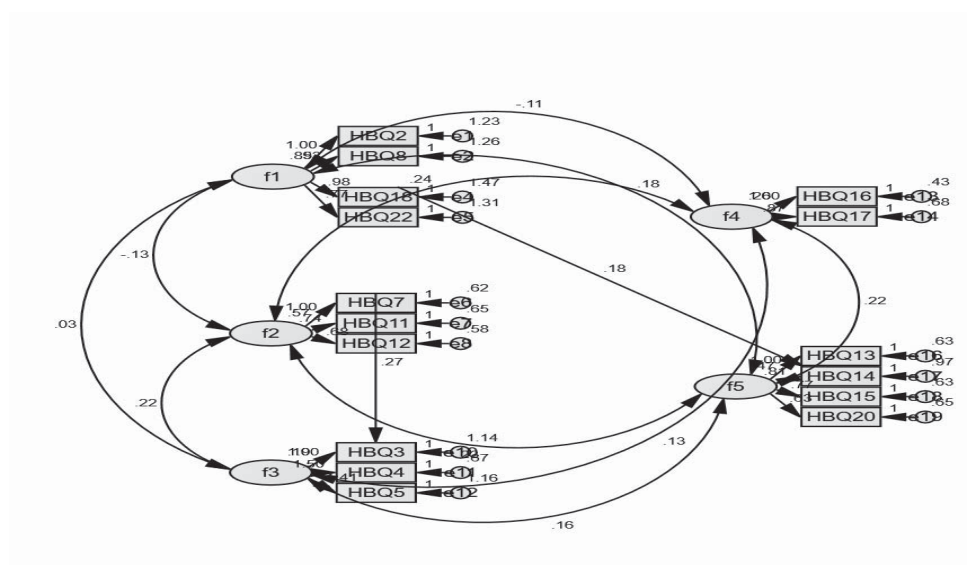


Figure 1. shows the CFA of The Handling Bullying Questionnaire along with five factors.

Table 4

Model Fit Summary of Confirmatory Factory Analysis (n = 200)

Indexes	Chi-square	df	p	CFA	RMSEA	GFI
Model	136.517	92	.002	0.91	0.04	0.92

The CFI value on the second run was 0.91 in the accepted limit. The remaining scale include 16 items with 5 factors after deleting 6 items.

Discussion

The objective of the study was to adapt translate and validate The Handling Bullying Questionnaire (Bauman, Rigby & Hoppa, 2008). The present study was also design to investigate the psychometric properties of Urdu version of THBQ in the socio culture context of Pakistan. Item analysis contained no negative values and inter item correlation ($r = 0.75$) was significant. The item analysis indicated that the test items are simple, compatible and valid with the test objectives.

The translated HBQ was well matched with Bauman, Rigby and Hoppa, (2008) original version scale included five factors and the translated scale also finally confirm same five factors but included 16 items (see Table 3 and 4). On the basis of extensive translation procedures of scale, 22 items were translated. Results highlighted the strong linguistics equivalence between English version and Urdu version of HBQ and acceptable psychometric properties make sure that The Handling Bullying Questionnaire is a suitable measure for screening bullying among school children in Pakistani schools.

Analysis of the data in EFA explored a six factor model (one addition factor than original questionnaire) for (THBQ) containing 22 items. Factor 1(5 items) measures “Ignoring the Incident”, Factor 2 (4 items) measures “working with Bully”, Factor 3 (3 items) titled with “Enlisting other Adults”, Factor 4 (3 items) “Working with the Victim”, Factor 5 (4 items) measures “Discipling the Bully” and last Factor 6 indicated (3 items) of “assertiveness”. Cronbach alpha reliability analysis ($**p < 0.001$) for total 22 items, Eigen values and % of variance reported to be significant (Table 3). One factor named “Assertiveness” was included as in the adapted scale.

The adapted HBQ was composed of six factor with 22 items of the original scale. Most of the socio-culture characteristics, cultural norms, habits, teaching methodologies and school environment are different in both Western and Asian culture. That was why the six factor probably made differences due to the cultural variation discrepancy.

Initially the results of the CFA did not elucidate a good fit to the data as CFI below than acceptable 0.90 value whereas other values were in normal limits. For the good model fit we have to delete 3 items, sixth factor items and execute two regression weights as in (figure 1). Now the CFA results confirmed 5 factors same as in original (THBQ) along with 16 items Urdu version of The Handling Bullying Questionnaire. Therefore, the translated and adapted Urdu version of THBQ may be considered as a valid and reliable instrument for the assessment of bullying among school children in Pakistan.

Despite advantages the current study suffers from a number of limitations. The study confined mainly in Gujrat school teachers, not covering all Punjab cities which is obstacle for overall generalization. Although the sample size (400) is sufficient for EFA and CFA, but on contrary, population is very much low. The third short coming is that only school children assessment was considered in the present study and not the college and university students were not assessed. Despite these limitations, the present findings can be serve as a further research on the handling bullying behaviors of school children in Pakistan.

Conclusion

This research provides teachers with a valid and reliable questionnaire for handling bullying behaviors of school children. The study also highlighted that the prevention of bullying, the attitude of each classroom teacher towards handling bullying plays an important part. There was a lack of teachers ' instruments to evaluate and address bullying among school children. "The Handling Bullying Questionnaire" (Urdu version) translated and validated is a valid and reliable instrument that will assist school teachers solve the problem of bullying at school level.

Limitations and Recommendations

There is scarcity of bullying evaluation tools available in Pakistan for teachers and children both. Literature review stated that there are only few translated and validated scales available in Urdu language for assessing children's bullying behavior, but the region is empty for teachers to assist evaluate bullying behaviors. Indigenous scales for bullying assessment need to be developed for teachers.

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