

# VALIDATION OF THE URDU VERSION OF OLWEUS BULLY/VICTIM QUESTIONNAIRE (OBVQ)

<sup>1</sup>RABIA KHAWAR, <sup>2</sup>FARH MALIK, <sup>3</sup>SYEDA SHAHIDA BATOOL

<sup>1,3</sup>GC University, Lahore. Pakistan

<sup>2</sup> University of Punjab Lahore. Pakistan

## OBJECTIVE

The study intended to validate the Urdu version of Revised Olweus Bully Victim Questionnaire (OBVQ) in our local settings.

## DESIGN

Exploratory study

## PLACE AND DURATION OF STUDY

The study was conducted in different public and private schools of Lahore during 2012 to 2014.

## PARTICIPANTS AND METHODS

Participants were 817 students from grades four to six of 12 public and private schools of Lahore. Additionally, 106 teachers participated in bullying nomination of students. Purposive convenient sampling technique was used.

## RESULTS

Confirmatory factor analysis resulted in a good model fit with acceptable values on indices and parameter estimates supporting the construct validity of the instrument. The reliability coefficients for bullying and victimization were comparable to international studies. Significant relationship between the OBVQ 8 types of victimization and bullying and two corresponding global items demonstrated concurrent validity. Children were involved in bullying roles with larger proportion in bully-victim group. OBVQ-Urdu version demonstrated concordance with the teacher nominations of bullying.

## CONCLUSION

The Urdu version of OBVQ has good psychometric properties and is appropriate for measuring the involvement of Pakistani school students in a variety of bullying behaviors.

## KEYWORDS

Bullying, Bullying Questionnaire, Adolescents

## INTRODUCTION

During the last two decades, bullying has been emerged as serious problem affecting many students in schools throughout the world<sup>1,2</sup>. Researchers have distinguished bullying from ordinary fight or quarrelling between two parties of equal strength by emphasizing the notion of power imbalance. It's a combination of certain direct and indirect negative actions performed by one or more students repeatedly over time with an intention to harm weaker students. Victims' inability to defend him or her is another important feature of Olweus definition<sup>3,4</sup>. Bullying can take several forms such as physical (e.g. hitting, punching, kicking, and beating up, pushing, spitting, property damage, and/or theft), verbal (e.g. teasing, mocking, name-calling, nasty comment and humiliation, threats and noxious remarks, extortion, and/or racist, sexist or homophobic insults), social (e.g. gossip, rumor spreading, embarrassment, alienation or exclusion from the group) or cyber (e.g. using the cell phone or internet i.e. email, text messaging, social media)<sup>5</sup>. All types of bullying causes some sort of psychological damage. Researchers have asserted that bullying may result in academic failure, health issues, loss of social relations and a variety of cognitive, affective and behavioral problems<sup>6,7</sup>. Perpetrators of bullying are exposed to disrupted academic and social life at school that may result in delinquency and conduct problems in later life<sup>8</sup>.

Depending on the nature and design of the study, the participants' age and the region, the proportion of school children repeatedly victimized ranges from 7.1 to 70.2%<sup>9</sup>.

The most commonly used measure to assess bully/victim status conflicts is the Revised Olweus Bully/Victim Questionnaire<sup>10</sup>. Though used widely by researchers and educators in different countries, information about the psychometric properties of OBVQ is not well documented<sup>11</sup>. The measure provides two main dimensions (being bullied and bullying others) for classifying students as bullies, victims, bully/victims or uninvolved. Studies have provided evidence for the construct validity of these two dimensions<sup>12,13</sup>. One of the most comprehensive analysis using Rasch model supported the conceptual design of both dimensions with acceptable psychometric elements for each scale<sup>14</sup>. Some recent researches have also shown adequate reliability and validity for the instrument when translated into another language (e.g. Greek)<sup>15,16</sup>.

This the first attempt to validate the construct validity of Revised Olweus Bully Victim Questionnaire-Urdu version by using confirmatory factor analysis for the two dimensions, examining the classification of children as bullies, victims, or bully/victims and to determine its convergent validity with teacher nominations of children's role in bullying.

## METHOD

### Participants

The sample consisted of 817 students studying in 4th, 5th and 6th grades of both public and private sector schools of Lahore. Girls (n = 440) and boys (n = 377) with age range between 9 to 12 years (M = 10.86, SD = 1.08) were selected from 12 schools that agreed

to participate in the study. A total of 106 teachers participated in the nomination procedure (Mage = 29.79, SD age = 4.8). All the teachers had been teaching the same class for at least last four months.

### Measures

#### Revised Olweus Bully-Victim Questionnaire-Urdu Version

Revised Olweus Bully Victim Questionnaire distinguishes among students for their involvement bullying roles with the help of two global questions i.e. item No. 4 (being bullied) and 24 (bullying others) along with 8 types, each answered on a 5 point scale with "I haven't been bullied/bullied other students at school in the past couple of months," coded as 1 and "several times a week" coded as 5. The questionnaire had shown good internal consistency (Cronbach's  $\alpha = .80$  to  $.90$ ) and can be easily administered in a group setting<sup>17</sup>. The present study utilized an Urdu version of the OBVQ developed using standardized translation procedures. Initial empirical investigation of the Urdu version had resulted in acceptable psychometric properties with being bullied and bullying others dimensions yielding Chronbach Alpha of  $.79$  and  $.82$  respectively. The current study further evaluated the reliability and validity of the two sets of items measuring bullying and victimization with a larger sample.

#### Teacher Nominations of Students' Bullying Roles

A brief measure was developed using definition of bullying from Revised Olweus Bully Victim Questionnaire. Teachers were instructed to read the definition of bullying carefully followed by the description of all the bullying roles: bully, victim, bully/victim and uninvolved. They were then presented with the list of randomly selected students from their classes and were asked to assign them to one of the four bullying roles based on their past three months observation of student's behavior and complaints reported by peers.

## RESULTS

### Confirmatory Factor Analysis

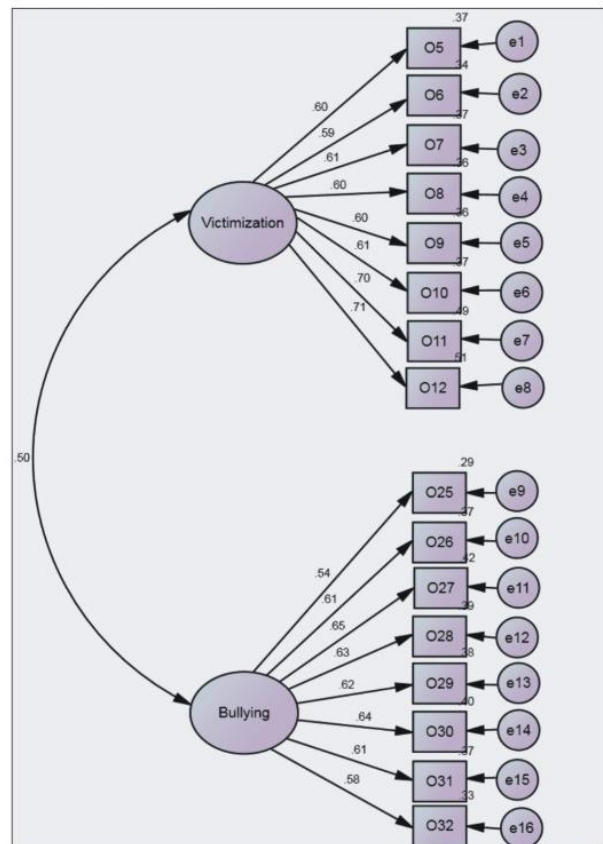
To determine the construct validity of the set of items assessing being bullied and bullying others status and types in Revised OBVQ-Urdu, we performed a confirmatory factor analysis (CFA) using Analysis of Moment Structures (AMOS), Version 20.0. A poor fit was suggested by the chi square value being significant,  $\chi^2(103) = 334.57, p < .05$ . Yet the CMIN/df value (CMIN/DF = 3.24) was found approximately acceptable. Rest of the indices that have been considered for assessing the degree of fit between the hypothesized two factor model and the sample resulted in a good model fit.

Tucker Lewis Index and the Comparative Fit Index were found to be acceptable having values  $.93$  and  $.94$  respectively (TLI & CFI:  $>.90$  acceptable,  $>.95$  excellent<sup>18</sup>. Root Mean Square Error of Approximation yielded a score of  $.05$  that had been considered excellent<sup>19</sup>.

Factor loadings for victimization scale range from  $.59$  to  $.71$ , and items on bullying scale also showed high loadings ranging between  $.54$  and  $.65$ .

**Figure 1**

Confirmatory Factor Analysis for OBVQ-Urdu Version



### RELIABILITY ANALYSIS

Internal consistency reliability of OBVQ-Urdu version, based on Cronbach's Alpha, was also uniformly high across gender and grade level.

**Table 1**

Reliability Coefficients for OBVQ-Urdu by Gender and Grade

	Victimization	Bullying	Total
Boys	.83	.82	.85
Girls	.84	.83	.87
4 <sup>th</sup>	.83	.83	.85
5 <sup>th</sup>	.86	.81	.85
6 <sup>th</sup>	.82	.82	.86
Total	.84	.82	.86



Furthermore, strong relationships between the 8 types of victimization and bullying, and OBVQ global items for being bullied ( $r = .40$  to  $r = .65$ ) and bullying others ( $r = .35$  to  $r = .70$ ) demonstrated adequate concurrent validity respectively with alpha significance at  $p < .001$ .

### Bully-victim Status Types

#### Being bullied

With regard to victims of bullying, about one third of the students (28%) reported not being bullied by others in the past couple of months, 25% reported being bullied "once or twice," 25.5% reported being bullied "two or three times a month," 9.9% reported being bullied "about once a week," and 11.6% reported being bullied once a week "several times a week." A large number of students (71.9%) reported being bullied; using milder criterion of "only once or twice", and the standard Olweus cut-off classified nearly 47% students as victims of perpetration.

#### Bullying Others

On the OBVQ, the majority of students (45.9%) reported not bullying others in the past couple of months, about 30% reported bullying others "once or twice," 17% reported bullying others "two or three times a month," and 9.1% reported bullying others "about once a week", while 4.2 % bullied others "several times a week." Following the "at least once" criterion. More than half students in the sample (54.1%) were found involved in bullying others, and the Olweus standard criterion identified only 34.23% students reporting bullying others.

Finally, we identified children that were uniquely bullies ( $n = 141$ ), uniquely victims ( $n = 158$ ), and bully-victims ( $n = 235$ ). The rest were grouped together as uninvolved ( $n = 283$ ). To serve this purpose, we considered (1) the cases of the children that were involved in bullying others for "two to three times a month or more" on global item of bullying and at least one of the 8 subsequent forms of bullying, but had not been victims of bullying (2) the cases of the children that were bullied two to three times a month as measured by global item of victimization along with at least one of the 8 ways, but had not been involved in bullying others, and (3) the cases of the children that had been bullying others and been bullied two to three times a month or more on both global items and at least one of the 8 corresponding items for bullying and victimization. The results of these calculations show that only 35% of the students remain uninvolved, 17.3% of the students were uniquely bullies, 19.3% of the children were uniquely victims, and 28.8% were bully-victims. In total, 65.4% of the Pakistani school students have been found to be involved in bullying and victimization.

### Relationship Between Obvq Results and Teacher Nominations

Data from the teacher estimates of students' involvement in bullying served as a check on the accuracy of the self-report. The estimated number of class bullies (and victims) was compared to the total number of students who reported being bullies (and victims).

**Table 2**

Bullying Role Classification Following OBVQ and Teacher Nomination

Teacher Nominations	OBVQ Bullying Status				Total
	Bully	Victim			
Bully	132	11	26	18	187
Victim	1	136	7	11	155
Bully-Victim	5	6	198	13	222
Uninvolved	3	5	4	241	253
Total	141	158	235	283	817

Total of 87 % of the original grouped cases as a result of self-report (OBVQ-Urdu) has been correctly classified as evidenced by teacher nominations. Cohen's  $\kappa$  was conducted to determine the level of agreement between teacher nominations and self-reported bullying classification for 817 students. Kappa showed high correspondence between the two classification,  $\kappa = .82, p < .001$ .

The majority of the students (95.3%) labeled as uninvolved as a result of OBVQ received the same status in teacher nominations. High level of agreement (89.1%) was found between teacher nominations of students as bully-victim and self-reports. Most of the self-reported victims were accurately classified (87.7%) by teachers into the same role. Although, substantial number of students nominated as bullies by teachers acknowledged their role in self-report (70.6%), some of them were identified as bully-victims (13.9%), and victims (5.9%). A few (9.6%) reported them as uninvolved.

Subsequently, we performed multinomial logistic regression that can be used to observe the effects of independent variables on a nominal dependent variable, such as the teacher nominated groups of bullies, victims, bully/victims, and uninvolved children in our case. Two global items of OBVQ assessing bullying and victimization were added as covariates.

**Table 3**

Multinomial Logistic Regression Predicting Accuracy of Self-reported Bullying and Victimization

TN	OBVQ	B	SE	Wald	OR	95% CI	
						L	U
Bully	victimization	.31	.18	2.98	1.37	.96	1.95
	bullying	2.33	.19	155.63*	10.28	7.13	14.82
Victim	victimization	2.38	.19	154.4*	10.75	7.39	15.63
	bullying	-.14	.21	.43	.87	.58	1.32
Bully -Victim	victimization	1.89	.19	102.61*	6.61	4.59	9.53
	bullying	2.18	.19	125.09*	8.81	6.02	12.89

\* $p < .001$

Children who scored high on global bullying item (24) of OBVQ were more likely to be designated as bullies by teachers. Similarly self-reported victimization on global item (4) of OBVQ significantly predicted teacher nominations for victims. Teacher nominated bully/victim group scored higher on both of the items respectively. The results maintain the correspondence between teacher



nominations and self-reported victimization and bullying.

## DISCUSSION

Most of the validation studies of the Olweus Bully Victim Questionnaire have supported the two factor structure for prevalence estimation of bullying and victimization<sup>14,16</sup>. Present study therefore attempted to validate the previous findings after translating and adapting the OBVQ for Pakistani culture. The confirmatory factor analysis model for the current sample yielded acceptable to excellent values on all the fit indices except for chi square that was found significant. It is not uncommon to obtain a significant chi square value for model with larger sample size that results in overstating the lack of fit,<sup>20,21</sup> so the overall adequacy of the model should be interpreted with caution by taking other fit indices into account after dismissal of chi square<sup>22, 23, 24</sup>. We interpret our model as a good fit because of acceptable values of CMIN/df, CFI, TLI, RMSEA, and supporting parameter estimates that present high loading on both the factors.

The gender and grade-wise reliability estimates of both bullying and victimization scales were high. Reliability of the scales was also high for the total sample. These results are comparable to the existing reliability coefficients reported in different studies<sup>14,16,17</sup>. Initial concurrent validity evidence has been provided following the procedure described researchers that are high correlation for single global item and its subsequent forms<sup>25</sup>.

Overall, slightly higher prevalence of bullying and victimization has been found in Pakistan having 17 % bullies, 19 % victims and 28 % students identified as bully-victim. Only 35 % remained uninvolved, while almost one fourth of the total sample experienced either being bullied or bullied others once or twice. This group though included as uninvolved for the current study could be at a great risk of more frequent involvement in bullying behavior if no prevention measures had been taken. Recent international research findings have reported disparity in bullying prevalence rates across countries with prevalence estimates varying from 5% to 45% approximately<sup>26</sup>. We also examined concordance of the OBVQ with the teacher nominations to determine if the two methods identified the same students in different bullying roles. The results demonstrated that the teachers detected almost 87% of respondents accurately into bullying roles who reported on the OBVQ; however, they also identified almost 30% of respondents as having been bullied, who actually did not report bullying on the BVQ. Percent agreement across two methods for classification of victim, bully victim and uninvolved group was high. There is more support for self-reported victimization than bullying. Hence the social desirability can be the reason for low reported bullying by students as noticed by researchers<sup>27</sup>.

Logistic regression was also conducted using two OBVQ global items to predict teacher nominations. Results showed that respondents endorsing the OBVQ item for being bullied were over 10.8 times more likely to be designated as victims by teachers than those who did not endorse this. The same was true for bullies with an odd ratio of 10.2. Students who responded above the cut off level on both global items were more likely to be nominated as bully-victim by their teachers. Existing studies have found only low to moderate support to convergence between self-report and teacher nomination of bullying<sup>28</sup>, whereas the current study has indicated moderate to high

correspondence between the two methods.

The study provides strong evidence to the psychometric properties of the Olweus Bully Victim Questionnaire Urdu version. The questionnaire can be used in identifying Pakistani children and adolescents' involvement in different bullying roles. The information obtained from OBVQ data provides guidelines to the researchers and school psychologists for implementing suitable intervention strategies in educational institutions.

## LIMITATIONS AND SUGGESTIONS

We administered OBVQ in a confidential manner instead of recommended anonymous format, as we had to evaluate teacher nomination also. However studies have reported no significant differences between confidential vs. Anonymous self-report measure.<sup>11,28</sup> Moreover the questionnaire was administered to randomly selected students rather than whole class. School authorities do not allow for that and researchers are usually not welcomed considering disturbance in school routine. To resolve these issues researchers need support from government agencies such as federal or local education department or ministry who should be considerate for making nationwide anti-bullying policy to prevent overall violence and intolerance in society that has become a crucial issue in Pakistan right now, leading youth towards delinquency and more severe forms of aggression such as terrorism.

## CONCLUSIONS

A few years back, OBVQ was reported having lack of psychometric evidence, but recent investigations have demonstrated adequate reliability and validity of the instrument across cultures. Acceptable overall fit of the model and good internal consistency suggest that the Urdu version of OBVQ is a sound and valuable measure. To our knowledge, this study is not only the first that documents psychometric properties of OBVQ-Urdu version, but also affords insight to the school bullying phenomenon based on empirical findings from a large sample in Pakistan.

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