Translation and Validation of Illinois Bullying Scale for Pakistani Children and Adolescents

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The study translated Illinois Bullying Scale (IBS) for Pakistani children and adolescents of 8-18 years. Three bilingual experts translated the scale by keeping in view the true psychological sense. Sample comprised of 536 students (268 boys and 266 girls) with mean age 13.5 years (SD = 3.1). Statistical analyses revealed that Urdu translation of IBS was highly reliable ($\alpha = .88$) and three subscales (Victimization, Bully and Fight) significantly correlated with each other. Confirmatory Factor Analysis (CFA) supported the original exploratory factor analysis after excluding one item which did not fulfill the factor loading criterion. IBS was negatively correlated (r = .39, p < .01) with Antisocial Behavior Scale (Shujja & Malik, in press) but non-significantly correlated with Raven Standard Progressive Matrices (Raven, 1956). The scale is a contribution towards measuring bullying and victimization in Pakistani children and adolescents.

Keywords: bullying, victimization, fight, scale development

Bullying has emerged as a primary concern for psychologists, educational researchers, teachers and parents around the globe. Primary and secondary schools have become a fertile arena for the bullies but an avoidable and unpleasant place for the victims of bullying. Bullying is defined as a repeated aggression thereby one or more persons intend to harm or disturb another person physically, verbally or psychologically (Boulton & Underwood, 1992; Nasel et al., 2001; Olweus, 1978, 1993; Wolke, Woods, Stanford, & Schulz, 2001). Bullying occurs in different forms, i.e., verbal (e.g., name calling), physical (e.g., hitting, kicking, pushing) or psychological (e.g., social isolation, spreading rumors or gossiping) (Olweus, 1993). Researchers have categorized individuals affected by bullying in three groups (bullies, victims and bully/victim). Children who bully contain specific characteristics like impulsivity, dominance, deficient empathy and children who learn these patterns in early age set the course for later age violence (Baumeister, Campbell, Krueger, & Voh, 2003; Batsche & Knoff, 1994; Olweus, 1991). Bullies exhibit poor psychosocial functioning, poor school adjustment and prove to be frustration agents for the teachers. Bullying does not make them anxious because they prerationalize the act of bulling by arguing that they threaten or attack the victims because they don't like them (Veenstra et al., 2005). Bullies are more vulnerable to become involved in delinquency, crime and drug abuse than non-bullies (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Loeber & Dishion, 1983; Nasel et al., 2001; Olweus, 1993).

Although researchers have claimed the serious physical and psychological consequences of bullying yet victims of bullying are at more severe risk than bullies even. Researchers demonstrate that victims of bullying frequently report psychological malfunctioning, psychosomatic complaints, low self-esteem and academic achievement, feeling of sadness, sleeping difficulties, unhappiness, anxiety, depression, suicidal ideation and absence from school (Forero, McLellan, Rissel, & Bauman, 2001; Hawker & Boulton,

2000; McDougall, Vaillancourt, &, Hymel, 2009). A research demonstrates that victims exhibit more physical symptoms than bullies and they remain in active search for lame excuses of physical illness in order to avoid school (Wolke, Woods, Bloomfield, & Karstadt, 2001). Researchers have also identified another category, i.e., bully/victim. Several researchers claim that bullies and victims are not mutually exclusive. There are victims who turn out to become bullies and bullies report to be victims as well. Several studies have been conducted to explore different characteristics of bully/victim, e.g., greater aggression and depression, low academic competence, low self-esteem and low self control. Bully/victims perform more poorly than bully or victim alone (Hanish & Guerra, 2004; Nasel et al., 2001; Schwartz, 2000). Bully/victims have been considered as a high-risk group and are more likely to develop psychotic symptoms as they grow older (Kumpullainen & Rasanen, 2000).

The existing literature clearly reflects the aversive effects of bullying on physical and psychological development of children and adolescents. Foreign researchers are devotedly working to design and implement anti-bullying intervention programs but in Pakistan, dearth of research on bullying has deterred us in controlling bullying and victimization. A prevailing misconception about bullying among Pakistani teachers and parents is that showing aggressive behavior is the part of child's physical development and the negative consequences of bullying behavior have been continuously ignored. Mostly, bully cases are not reported or seriously considered. Furthermore, no valid and reliable scale is available to measure bullying, victimization or aggressive behavior in Pakistani children. Illinois Bully Scale (IBS) is a valid and a reliable 18 item scale with three subscales, i.e., Bullying, Victimization and Aggression. This scale has been developed in English for the age range 8-18 years. This scale was not applicable on 8-18 years old Pakistani children because of their deficient understanding of English and comprehension level. By keeping in view the importance of bullying and victimization and need of standardized bullying scale, an attempt was made to translate IBS into Urdu in order to make it easily understandable for Pakistani children.

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*p < .01.

Method

Sample I

The sample obtained for empirical evaluation comprised 536 students (268 boys and 266 girls) with age range 8-18 years (M = 13.5, SD = 3.1) taken from different private and government schools of Lahore and Sargodha through convenient sampling technique.

Sample II

In order to find out the convergent and discriminant validity, sample was conveniently drawn from different schools of Sargodha. It comprised 39 students of age range 13-18 years (M = 15.33, SD = 1.3).

Procedure

A standardized translation procedure was followed in order to make Illinois Bullying Scale valid and reliable for designated Pakistani population. For this purpose, following steps were taken:

Step I: Translation of Illinois Bullying Scale (IBS) into Urdu

Illinois Bullying Scale was translated through committee approach in which three bilingual experts were requested for the translation and these translations were examined and matched by the researchers in order to select the most suitable or best fit translation. All the three experts contributed to generate best possible translation.

Step II: Try Out

During the try out phase, 22 children of 8-18 years including 11 boys and 11 girls (one from each age year) were asked to give response on the translated scale. The respondents were instructed to indicate if they had difficulty in understanding any words or statements. Majority of students did not report any ambiguity except for few words that were replaced with more easily understandable synonyms.

Step III: Empirical Evaluation

The obtained data from the sample was subjected to statistical analyses. Correlation, reliability analysis and factor analysis were run to estimate the suitability of Illinois Bullying Scale (IBS) for the Pakistani children and adolescents.

Table 1 demonstrates that all the subscales of Illinois Bullying Scale (IBS) are significantly correlated with each other and with the total scale. The highest correlation was found between Bully subscale and total IBS (r = .92, p < .01), while correlation among subscales and total scale ranged from .44-.92.

Confirmatory Factor Analysis (CFA) was conducted to confirm the factor structure of original Illinois Bullying Scale (Espelage & Holt, 2001) on 533 Pakistani children and adolescents using AMOS (version 18.0). All the factors were treated in one model and error variance was allowed. The model obtained trough CFA showed good fit to the data with χ (df =126) = 290.89, CHI = .94 and root mean square error of approximation (RMSEA = .05). The initial criterion for the items to be included in factor was .30. CFA significantly confirms the factor structures generated in EFA except for item 17 which did not fulfill the inclusion criterion. Item no 17

Table 1

Correlation among Subscales and Total Illinois Bullying Scale
(Urdu Translation) on Pakistani Sample (N=536)

Scales	2	3	4
1. Victim	.44*	.46*	.69*
2. Bully		.74*	.92*
3. Fight			.88*
4. Illinois Bullying scale			

Table 2
Confirmatory Factor Analysis (CFA) for Illinois Bullying Scale by using AMOS (N = 533)

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Items		EFA	CFA
	Factor 1: Bully (Items=09)		
01	I upset other students for the fun of it	.70	.56
02	In a group, I teased other students	.72	.60
08	I helped harass other students		.67
09	I teased other students	.75	.67
14	I was mean to someone when I was angry	.56	.61
15	I spread rumors about other students	.56	.60
16	I started (instigated) arguments or conflicts	.52	.62
17	I encouraged people to fight	.62	.27*
18	I excluded other students from my clique of friends	.64	.45
	Factor 2: Fight (items=05)		
03	I fought students I could easily beat	.50	.70
10	I got in a physical fight	.82	.76
11	I threatened to hurt or hit another student	.60	.71
12	I got into a physical fight because I was angry	.82	.69
13	I hit back when someone hit me first	.55	.64
	Factor 3: Victim (items=04)		
04	Other students picked on me	.90	.50
05	Other students made fun of me	.92	.48
06	Other students called me names	.85	.60
07	I got hit or pushed by other students	.55	.71

Note. *Bold reflects low factor loading

Table 3
Reliability Coefficient of Translated Illinois Bully Scale (IBS) for Pakistani Sample (N=536)

Scales	No of Items	Original IBS (α)	Translated IBS (α)
Victim subscale	04	.88	.73
Bully Subscale	09	.87	.82
Fight Subscale	05	.83	.81
Total IBS	18	-	.89

Note. Total Cronbach's alpha was not computed in original IBS

Table 4
Correlation Analysis Showing Relationship of Illinois Bullying
Scale, Antisocial Behavior Scale and Raven Standard Progressive
Matrices (N = 39)

Scales	2	3
1. Illinois Bullying Scale	39*	.16
2. Antisocial Behavior Scale		08
3. Raven Standard Progressive Matrices		

*p < .01.

was deleted from the original item pool (See Table 2).

Table 3 indicates the translated version of IBS to be highly reliable for Pakistani children and adolescents ($\alpha = .88$) and the alpha reliability of subscales is also satisfactory (.73-.81) that is comparable to the original IBS.

Correlation among the Illinois Bullying Scale, Antisocial Behavior Scale (Shujja & Malik, in press) and Raven Standard Progressive Matrices (Raven, 1956) was computed to provide convergent and discriminant validity evidence for the Illinois Bullying Scale. Table 4 indicates that Illinois Bullying Scale is significantly correlated with Antisocial Behavior Scale (Shujja & Malik, in press) (r = -.39, p < .01), showing that less bullies are high on pro-social dimension of Antisocial Behavior Scale and vice versa. Whereas, there is a non-significant correlation among Raven Standard Progressive Matrices (Raven, 1956), Antisocial Behavior Scale (Shujja & Malik, in press) and Illinois Bullying Scale (Espelage & Holt, 2001). These results provide evidence for convergent and discriminant validity.

Discussion

The study attempted to translate Illinois Bullying Scale for Pakistani children and adolescents of 8-18 years. This scale comprised 3 subscales namely Victimization, Bully scale and Fight scale. Reliability analysis revealed that all these scales (Urdu translation) were satisfactorily reliable and were compatible with the original scale (Espelage & Holt, 2001). Reliability analysis suggested that items of the original scale measuring bullying and victimization also reflect victim and bully behaviors of Pakistani children and adolescents. Confirmatory Factor Analysis (CFA) demonstrated exactly the same factor structure as generated through EFA except for item no 17 which was below .30 factor loading and was excluded from the scale. The reason may be that encouraging others to fight did not fit in the bullying scale because other items loaded on bullying scale are relevant to direct bullying and encouraging others to fight does not directly reflect whether one is actually engaged in bullying or not. Further evidence was collected to ensure validity of translated Illinois Bullying Scale. The scores of translated Illinois Bullying Scale were correlated with Antisocial Behavior Scale (Shujja & Malik, in press) in order to ensure its convergent validity. Results demonstrated that those who scored low on bullying were high on pro-social behaviors and vice versa. These results are in line with existing literature claiming the adverse impact of bullying (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Loeber & Dishion, 1983; Nasel et al., 2001; Olweus, 1993). It seems logical that those who are involved in less bullying tend to behave in pro-social manner. Findings of discriminant validity revealed non-significant correlation between Illinois Bullying Scale and Raven Standard Progressive Matrices (Raven, 1956). Raven Standard Progressive Matrices measures the cognitive ability while Illinois Bullying Scale is a personality measure (Espelage & Holt, 2001). The non-significant correlation between these measures provides strong evidence for discriminant validity of Illinois Bullying Scale.

It was an initial and essential step towards the availability of a suitable measure of bullying. This study has larger implication in educational settings and environmental settings. It can contribute in understanding of bullying phenomenon in Pakistani children and adolescents. Teachers, school counselors, parents and educationists can be at ease in identifying bullying and victimization behaviors and in devising intervention plans for the Pakistani children and adolescents.

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