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California bullying victimization scale: validity and reliability evidence for the Turkish middle school children

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Abstract

This study aimed to examine the reliability and validity of the California Bullying Victimization Scale (CBVS) (Felix et al., 2011) in a sample of Turkish middle school students. A total of 313 students (47.9% male, 52.1% female) participated in this study. For the reliability the Cronbach's alpha coefficient and test-retest reliability coefficient; for the validity concurrent and predictive validity were calculated. Results indicated the internal consistency of .72 and .83 for victimization items; two-week test-retest reliability of .82. The total scores of CBVS were also positively correlated with a bullying measure and negatively correlated with life satisfaction and hope.

1. Introduction

Given that bullying in schools is a prevalent and concerning issue, there has been an apparent increase in bullying studies at the national and international levels (Cornell, Sheras, & Cole, 2006; Craig et al., 2009). However, a variety of conceptual and operational definitions of bullying, differences in the prevalence of bullying across and within countries (Cook, Williams, Guerra, & Kim, 2010), no or less effectiveness of the bullying programs (Cornell, Sheras, & Cole, 2006) have raised some questions about to what extend current measures accurately assess bullying. Thus, in the recent years, several discussions on conceptual and psychometric properties of existing self-report bullying measures have begun (Cornell, Sheras, & Cole, 2006; Furlong, Sharkey, Felix, Tanigawa, & Greif-Green, 2010; Griffin & Gross, 2004). The existing bullying instruments displayed some discrepancies in definition of bullying, the use of term "bullying", time periods used for bullying incidences, and frequency of bullying behaviors (Cornell, Sheras, & Cole, 2006; Pişkin, 2010) that cause problems in assessment.

The accurate assessment of bullying is vital due to several reasons. Initially, it provides an opportunity to examine the dimensions of the construct, seriousness of the bullying in schools, and utilization of precise intervention strategies based on that information. Testing the effectiveness of the bullying program also depends on the assessment. Lastly, it gives an opportunity to follow the progress of the bullying and make comparison across or within countries (Cornell, Sheras, & Cole, 2006).

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Bullying is considered as a subtype of peer victimization, which differentiates from other types of victimization with three elements (intention, repetition, and power imbalance) (Furlong et al., 2010; Felix, Sharkey, Green, Furlong, & Tanigawa, 2011). Furlong et al. (2010) argued that most of bullying instruments ignore to measure core components of bullying. Therefore, they consider that these self-report instruments evaluate peer victimization rather than bullying victimization. Recently, Atik (2011) evaluated self-report bullying instruments in Turkey regarding the conceptual elements of bullying (intention, repetition, and power imbalance) and their psychometric properties. According to this study, the accurate assessment of bullying has been overlooked and these instruments were not capable of measuring the core elements of bullying. Considering the current issues in assessment of bullying victimization, Felix et al. (2011) recently developed *The California Bullying Victimization Scale* (CBVS) that measures intention, repetition, and power imbalance elements of bullying victimization without using the term of "bully" in the scale. The current study aims to study the reliability and validity of CBVS in a sample of the middle school students. Concurrent validity of CBVS was examined through Olweus Bully/Victim Questionnaire (OBVQ) (1996). The rationale for selection of OBVQ was that it is a common and definition-based instrument. Predictive validity was assessed by exploring the relationship between CBVS, Children's Hope Scale (CHS) (Snyder et al., 1997), and Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) (Seligson, Huebner, & Valois, 2003). The instruments selected for predictive validity of CBVS were positive indicators of well-being. These instruments were included in this study to be consistent with the original study of CBVS (Felix et al., 2011).

2. Method

2.1. Participants

A total of 313 students participated in this study. Of the students, 150 (47.9%) were males and 163 (52.1%) were females. Participants were from 6th grade (63.8%), 7th grade (18.1%), and 8th grade (18.1%). The mean age of participants was 12.6 (*SD* = .98).

2.2. Measures

2.2.1. Demographic Information Form. The form included questions regarding gender, age, and grade level.

2.2.2. California Bullying Victimization Scale (CBVS). The CBVS was developed by Felix and colleagues (2011) to assess bullying victimization among elementary and middle school students. It is a self-report instrument assessing various forms of bullying victimization without using the term bullying and definition. In order to distinguish bullying from peer victimization, the scale was developed with the consideration of criteria for bullying that being intentional, power imbalance, and repeated incidents in a time period. The CBVS includes seven items related to bullying victimization behaviors, such as being teased or called names; had rumors or gossip spread behind someone's back; left out of a group or ignored; hit, pushed, or physically hurt; threatened; had your things stolen or damaged; and had sexual comments, jokes, or gestures made to them. It is asked to student to rate how often these things happened to them on a five-point scale (0 = *Never*, 1 = *Once in the past month*, 2 = *2 or 3 times in the past month*, 3 = *About once a week*, and 4 = *Several times a week*). In order to determine power imbalance, measure also asks students to rate how popular, smart, and physically strong the main person bullying them than they are. Moreover, some other questions are asked to students to evaluate location and time of bullying during the school day, and who they talk with about bullying. Felix et al. (2011) analyzed the test-retest reliability of the scale, over a two-week period with different methods such as correlations between the total scores of CBVS across two time points (r = .80 for 5-6th Grades, r = .83 for 7-8th Grades), Cohen's Kappa coefficients for each item (ranging from .46 to .64) and percentage agreement and Cohen's Kappa coefficient for the classification of students as non-bullied and bullied across two time points (percent agreement = 89.6, kappa = .71). The total CBVS scores were found to be correlated significantly, positively with other bullying measurement and negatively with the measures of life satisfaction, school connectedness, and hope.

2.2.3. Olweus Bully/Victim Questionnaire (OBVQ). The OBVQ was developed by Olweus (1996) and translated in to Turkish by Dölek (2002) for use with Turkish adolescents. The OBVQ includes 40 items about bullying and

victimization experiences. The first 16 questions measures frequency and types of bullying and victimization. These items are responded on a five-point continuum (1 = *Never* to 5 = *Several times a week*). The rest of items assess the location where the bullying takes place, who does the bullying, how often children report bullying to teachers or their family, and if the teacher intervenes and what he or she does to stop the bullying. The internal consistency for the total scores of victimization and bullying items was tested on different samples and found .80's or higher values (Olweus, 1996). The internal consistency of the Turkish version of OBVQ was .71 for the victimization items and .75 for the bullying items (Dölek, 2002).

2.2.4. Children's Hope Scale (CHS). The CHS, measures hopeful thinking of children. It is developed by Snyder et al. (1997) and adapted into Turkish by Atik and Kemer (2009). CHS is composed of two dimensions as pathways and agency. It is a six-item scale responded on a six-option continuum (1 = *None of the time* to 6 = *All of the time*). The internal consistency for the total scores of CHS was tested on different samples and the Cronbach alpha coefficients changed between .72 and .86. The median alpha was .77. Test-retest reliability with a one-month interval was .71. Snyder et al. (1997) also examined convergent, discriminant, predictive and incremental validity of the CHS. The Turkish version of CHS validated the original factor structure of CHS and showed a good evidence of internal consistency (α = .74) as well as test-retest reliability with a one-month interval (r = .57) (Atik & Kemer, 2009). Atik and Kemer (2009) also investigated convergent and incremental validity of the Turkish version of CHS. In the present study, the internal consistency for the total score of CHS was .75.

2.2.5. Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). The BMSLSS was developed by Seligson, Huebner, and Valois (2003) and adapted into Turkish by Siyez and Kaya (2008). This is a five-item scale that measures overall life satisfaction of middle school students as well as their satisfaction for five specific domains such as family life, friendship, school experience, self, and living environment. Items are responded on a seven-point scale ranging between 1 = *Terrible* and 7 = *Delighted*. The internal consistency for the total score of BMSLSS was .75. The validity studies showed that it met the expected results for self-report instrument (Seligson, Huebner, & Valois, 2003). The Turkish version of BMSLSS was examined on 4-8 grade students and showed a good internal consistency (α = .89) for the total score of the scale (Siyez & Kaya, 2008). In this study, the Cronbach alpha coefficient for the total score of BMSLSS was .72.

2.3. Procedure

This study was approved by the Middle East Technical University, Human Subjects Ethics Committee and Turkish Ministry of National Education. The principal researcher visited the middle school in Ankara and explained the administrators the purpose of the study and asked their support. After getting their support, the researcher visited classrooms and instructed students about the purpose of the study and how to fill out each instrument. The volunteer students filled out the surveys during one class period (40 minutes). In two classrooms, the participants were asked to write their school number on the demographic information form. Two weeks later, the researcher re-administered the instruments to study participants.

3. Results

3.1. Rates of Bullying Victimization

Table 1 presents the percentages of victimization in each items and victimization category by gender and grade level. The frequency criteria were set at 2-3 times per month or more. While categorizing the students, a system suggested by Felix et al. (2011) was used. Non-victims were students reporting no victimization experiences. Peer victims were students experiencing at least one victimization behavior of any frequency, but no power differentiation. Bully victims were students reporting at least one victimization behavior at least 2-3 times per month, at least one form of power imbalance. As seen in the table, being teased and being victimized through sexual comments, jokes, or gestures were the most frequent form of victimization. Chi-square tests were also used to examine the significant differences between males and females. Females in grade 7 reported that they were hit significantly more than males. When the victimization category was investigated, the percentages of peer victims were higher than bullied victims.

3.2. Internal Consistency

The internal consistency was calculated for seven core victimization items. The Cronbach alpha coefficients were .72 for the first sample ($n = 313$) and .83 for the second sample ($n = 76$).

3.3. Test-Retest Stability

Initially, seven victimization items were summed and a total score was obtained for each time period (time 1 vs. time 2). Pearson correlation between the total scores at time 1 and time 2 was .82 ($n = 66, p <. 001$). In addition, the consistency in classification of students as non-bullied and bullied was investigated across the time periods (percentage agreement = .85; $\kappa = .46$; χ^2: 14.22, $p < .001$).

Table 1. Descriptive statistics of victimization in each items and victimization category by grade levels and gender

	Grade Levels					
	6 ($n = 200$)		**7** ($n = 57$)		**8** ($n = 56$)	
	Male (%)	**Female (%)**	**Male (%)**	**Female (%)**	**Male (%)**	**Female (%)**
Items						
Teased	15.6	17.2	17.5	24.6	16.3	10.2
Rumors	11.0	10.4	10.5	5.3	13.5	5.8
Ignored	8.4	6.7	5.4	12.5	6.0	14.0
Hit	13	11.4	1.8	10.9[*]	11.8	13.7
Threatened	8.9	6.1	10.9	3.6	2.0	2.0
Sexual comments	17.2	19.4	17.9	14.3	17.3	19.2
Property	13.3	16.7	7.3	9.1	18.0	12.0
Victimization Category						
Not a victim	7.0	6.5	9.1	9.1	9.3	5.6
Peer victim	24.3	29.7	25.5	23.6	16.7	27.8
Bullied victim	15.1	17.3	16.4	16.4	16.7	24.1

Note. [*]$p < .05$ (χ^2)

3.4. Concurrent Validity

The concurrent validity of CBVS was assessed with Olweus Bully/Victim Questionnaire (CBVS) (Olweus, 1996) which includes a definition approach. Initially, a significant positive association ($n = 92, r = .73, p < .001$) between the total scores of CBVS and OBVQ was found. However, there were also significant differences between the classification of students (non-bullied vs. bullied) by two measures (percentage agreement = .63; $\kappa = .22$; χ^2: 6.7, $p < .05$)

3.5. Predictive Validity

While the total victimization scores were significantly and negatively correlated with life satisfaction total scores ($r = -.29, p < .05$), it was negatively but not significantly correlated with hope total scores ($r = -.13, p > .05$). In addition, the results of the analysis of variance conducted to examine the differences in life satisfaction and hope according to the victimization classification (non-victims, peer victims, and bullied victims) indicated significant group differences. Non-victims had higher life satisfaction [$F(2, 95) = 5.54, p < .01$] and hope scores [$F(2, 95) = 8.28, p < .001$] than peer victims and bullied victims. There was no significant differences between peer victims and bullied victims in life satisfaction and hope scores.

4. Discussion

The CBVS was prepared to address the inadequate points in evaluation of bullying. It addresses core elements of bullying (intention, repetition, and power imbalance) and also provides psychometrical evidences. In this study, CBVS was translated into Turkish, examined for reliability and validity evidence for use with middle school students in assessing bullying. The results indicated that the Turkish version of CBVS demonstrated good internal consistency, test retest reliability and concurrent and predictive validity.

In the present study, higher rates of bully and peer victims than non-victims were found in each grade level. This finding might be due to the nature of the CBVS that doesn't include the term bullying in its' items. As it was

supported by Kert, Codding, Tryon, and Shiyko (2010), measures not including any definition of bullying or the term bullying yield higher rates of bullying.

The result of concurrent validity addressed that two instruments (CBVS vs. OBVQ) displayed differences in classification of students into victimization categories. The OBQV includes the traditional assessment approach explains bullying to the participants. As reported by Felix and colleagues (2011), different approaches in measurement of bullying yields different classification systems which affect the results. The predictive validity results that showed negative relationship between bullying victimization, life satisfaction, and hope supported by the previous studies (e.g. Felix et al., 2011; Kerr, Valois, Huebner, & Drane, 2011; You, Furlong, Felix, Sharkey, Tanigawa, & Green, 2008).

This study had several limitations. Initially, the results based on students' self-report. It would be beneficial to examine the agreement between other informants (teachers, peers, etc.). Lastly, the data was collected from one middle school through a convenient sampling. Therefore, the generalizability of the findings was limited to the participants who show similar characteristics.

Acknowledgments

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