

## Psychometric properties of Urdu version of adolescent peer relation instrument in Pakistan

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### Abstract

**Objective:** To translate the Adolescent Peer Relation Instrument into Urdu language, to make cultural adaptations, and to determine its psychometric properties.

**Method:** The two-phase study was done in Karachi; the translation was done from May 2016 to December 2016 and data collection was done from January 2017 to June 2017. The Adolescent Peer Relation Instrument was first translated into Urdu through a clearly outlined process before it was tested in 2017 on a sample of adolescents aged 12-16 years studying in the local private schools. The reliability of the scale was assessed through Cronbach's alpha, split-half reliability and test-retest reliability. The convergent validity was measured using Centre for Epidemiological Studies Depression Scale for Children, and the discriminant validity was measured using the Resilience Scale. Data was analysed using SPSS20.

**Results:** The translated version was tested on 150 subjects with a mean age of  $13.31 \pm 0.94$  years. There were 97(64.66%) boys and 53(35.33%) girls. Internal consistency Cronbach's alpha value for bullying and victimisation subscales was 0.867 ( $p < 0.01$ ) and 0.898 ( $p < 0.01$ ); test-retest reliability values for the two subscales were 0.517 ( $p < 0.01$ ) and 0.581 ( $p < 0.01$ ); and Guttman split-half coefficient was 0.836 ( $p > 0.05$ ) and 0.876 ( $p > 0.05$ ) respectively. Convergent validity of bullying and depression was  $r = 0.298$  ( $p < 0.01$ ) and for victimization and depression it was  $r = 0.395$  ( $p < 0.01$ ). Discriminant validity for bullying and resilience was  $r = -0.168$  ( $p < 0.01$ ) and for victimisation and resilience it was  $r = -0.133$  ( $p < 0.01$ ).

**Conclusion:** The Urdu version of the Adolescent Peer Relation Instrument was found to be a reliable and valid measure to use in Pakistan. There was a significant relationship between bullying and depression, and between victimisation and depression, and an inverse relationship between bullying and resilience, and between victimisation and resilience.

**Keywords:** Bullying, Victimization, Depression, Resilience. (JPMA 70: 1048; 2020)

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### Introduction

Bullying is commonly defined as an act of aggression committed for the sake of intimidation or dominance by a powerful person or a group on another weaker individual.<sup>1,2</sup> For any action to be considered as bullying it needs to have three basic characteristics. Firstly, the action leaves a negative impact on the victim. Secondly, it is a repetitive behaviour of the perpetrator. And, thirdly, the perpetrator has an advantage over the victim whether in terms of physical, psychological and/or financial aspect.<sup>3</sup> Bullying can take many forms such as verbal bullying, which includes name-calling and/or verbal abuse, physical bullying, such as hitting and/or destroying victim's property, and social bullying that includes peer rejection and exclusion from social groups. According to the National Centre for Education Statistics and Bureau of Justice Statistics,<sup>4</sup> about 21% adolescents aged 12-18 years have experienced some form of bullying. According to the Youth Risk Behaviour Surveillance<sup>5</sup> by the Centre

for Disease Control and Prevention (CDC), 19% students of grades 9-12 reported having been bullied on school premises in the 12 months preceding the survey.

Being victimised and lacking social support result in individuals having poor mental health.<sup>6</sup> Being victimised leads to social alienation and withdrawal. It is seen that individuals who become a part of the bullying continuum, whether as bullies, victims and/or bully/victims, are at risk of a wide variety of mental health issues.<sup>7</sup> These problems can be both internalised (i.e. depression) or externalised (i.e. behavioural issues).<sup>8</sup> Researches show that bullies and victims alike may later on develop depressive symptoms.<sup>9</sup> Furthermore, it has been found that bullies have more aggressive tendencies and impulsiveness. It is seen that bullies have poor social skills and suffer from feeling of insecurity. They are more at risk of developing relational and behavioural problems.<sup>10</sup>

Victims also show low level of self-esteem. They lack assertiveness and may develop health problems in the future. Children identified as bullies showed threefold more chances of having depressive symptoms.

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Furthermore, it was seen that the impact of childhood bullying is a long-lasting one.<sup>11</sup>

Bullying in adolescence creates a high risk for both the victim and the perpetrator for developing mental health issues such as depression which is a serious and chronic mental disorder. As per the American Psychiatric Association (APA),<sup>12</sup> its symptoms include hopelessness, withdrawal, lack of pleasure, energy drainage, feeling of worthlessness, change in sleep patterns, change in appetite and even thoughts about self-harm. Being a part of the bully continuum is highly linked to having depressive symptoms.<sup>13</sup> Furthermore, it was seen that these associations are similar to that of child abuse.<sup>14</sup>

Certain protective factors may impact this relationship and lead to better mental health. Protective factors such as problem-solving skills and supportive parental relationships help in moderating the relationship between bullying and depression.<sup>15</sup> Resilience is one such protective factor. Resilience is defined as "a personality characteristic that moderates the negative effect of stress and promotes adaptation". Resilience is a concept that depicts a person's emotional stamina and level of adjustment and adaptability to the stressful situations of life.<sup>16</sup> Individuals with higher level of resilience are seen to have better mental health.<sup>17</sup> Resilience acts as a protective factor towards bullying as well, and adolescents with higher level of bullying are much more adjusted towards dealing with bullying.<sup>18</sup>

Bullying is a global phenomenon and the negative impact it leaves on the victim and the perpetrator is definitely real. However, there seems to be a lack in literature in Pakistan for bullying and victimisation. One reason for this is the linguistic boundaries, as, due to linguistic differences and lack of understanding, there seems to be a gap in researches. Nowadays, due to interest in cross-cultural psychology and the increase in globalisation, test adaptation and translation has increased in order to create better understanding of human behaviour across cultures. The current study was planned to translate and adapt the Adolescent Peer Relation Instrument (APRI)<sup>[19]</sup> into Urdu language and to make cultural adjustments, and to evaluate its psychometric properties.

## Materials and Methods

The two-phase study was done in Karachi. In the first phase, translation and adaptation were done from May 2016 to December 2016. The author of the original scale<sup>19</sup> was approached through email and permission was taken from him. A panel of experts was then formed who were bilingual and able to understand the native language and the cultural aspect. Their native language was Urdu in

which the APRI was being translated. The panel led the forward and backward translation process of the adapted version and gave professional feedback. Of the 8 translators on the panel, four did the forward translation and the rest did the backward translation.

The four forward translators worked independently and their outcome was then given to the four backward translators who were not a part of the first team and were not aware of the original English version of APRI. After they back-translated the Urdu version into English, their version was compared with the original APRI.<sup>19</sup> It was ensured that the translated questionnaire rightly based itself on the actual construct and it did measure what it was supposed to measure. Any grammatical and linguistic errors were also identified and rectified.

In the second phase, the translated version was tested on a sample of subjects aged 12-16 years. This data was collected from January 2017 to June 2017. After permission from the respective schools and the consent from the subjects, data was gathered on a demographic information form. The APRI Urdu version was then distributed among the subjects along with the Centre for Epidemiological Studies Depression Scale (CES-DS) for children<sup>20</sup> and the Resilience Scale.<sup>16</sup> It was done in group settings. For test-retest reliability, the scales were re-administered on some of the same adolescents with a gap of two weeks.

While taking down the demographic details, the socioeconomic status (SES) was assessed using the guidelines provided by the Household Integrated Economic Survey (HIES) 2015-16 alongside the American Psychological Association guidelines.<sup>21,22</sup>

To establish the psychometric properties of APRI Urdu version, its internal consistency, test-retest reliability, construct validity and split-half reliability were computed separately for the two subscales of bullying and victimisation using SPSS 20.

## Results

The translated version was tested on 150 subjects with a mean age of  $13.31 \pm 0.94$  years. There were 97(64.66%) boys and 53(35.33%) girls. The test-retest group had 62(41.33% adolescents; 29(47%) males and 33(53%) females. Demographic data of the entire sample was noted (Table-1).

Internal consistency, test retest reliability and construct validity of APRI Urdu version was determined separately for the two subscales of bullying and victimization.

Split-Half reliability coefficient for APRI Urdu version is also

**Table-1:** Descriptive Statistics of Sample Characteristics based on age, gender, family system and socio-economic status.

Characteristic	Frequency (n)	Percentage (%)
<b>Age (N=150)</b>		
12 years	31	20.7
13 years	60	40.0
14 years	44	29.3
15 years	13	8.7
16 years	2	1.3
<b>Gender (N=150)</b>		
Male	97	64.7
Female	53	35.7
<b>Family System (N=150)</b>		
Nuclear	104	69.3
Joint	46	30.7
<b>Socio-economic Status (N=150)</b>		
Lower	6	4
Middle	103	68.7
High	41	27.3

**Table-2:** Analysis of Split-Half Reliability of Bullying and Victimization sub-scales of Adolescent Peer Relation Instrument (APRI) Urdu Version.

Cronbach's alpha	Split-Half Reliability	
Part 1	Value	0.786
	N of items	9a
Part 2	Value	0.763
	N of items	9b
Total N of items	18	
Correlation between forms	0.719	
Spearman-Brown Coefficient	Equal Length	0.836
	Unequal Length	0.836
Guttman Split-Half Coefficient for Bullying		0.836
Part 1	Value	0.829
	N of items	9a
Part 2	Value	0.808
	N of items	9b
Total N of items	18	
Correlation between forms	0.790	
Spearman-Brown Coefficient	Equal Length	0.883
	Unequal Length	0.883
Guttman Split-Half Coefficient for Victimization		0.876

Note: a items are; 1, 2, 3, 4, 5, 6, 7, 8, 9; b items are; 10, 11, 12, 13, 14, 15, 16, 17, 18.

established separately for both subscales (Tables-2, 3).

Both the subscales had a good Guttman Split-Half Coefficient value of 0.836 and 0.876.

The value of convergent validity for bullying and depression was  $r=0.298$  ( $p<0.01$ ) and for victimisation and depression it was  $r=0.395$  ( $p<0.01$ ), showing a significant correlation between APRI and CES-DC ( $p<0.05$ ). The value

**Table-3:** Reliability and Validity Analysis of Bullying and Victimization with Depression and Resilience.

Scale	Reliability Analysis		Construct Validity	
	Cronbach's alpha	Test Retest	CES-DC	Resilience Scale
APRI (Bullying)	0.867**	0.517**	0.298**	-.168**
APRI (Victimization)	0.898**	0.581**	0.395**	-.133**

\*\*Note: correlation significant at .01 level

APRI: Adolescent Peer Relation Instrument

CES-DC: Centre for Epidemiological Studies Depression Scale.

for bullying and resilience was  $r=-0.168$  ( $p<0.01$ ) and for victimisation and resilience it was  $r=-0.133$  ( $p<0.01$ ), showing a significant negative correlation between the two variables.

## Discussion

To establish the psychometric properties of APRI Urdu version, the current study analysed internal consistency, test-retest reliability, split-half reliability, convergent and discriminant validity.

Internal consistency Cronbach's alpha for APRI Urdu version was 0.934, showing high internal consistency. Any measure with Cronbach's alpha value of 0.7 is considered to be a reliable instrument. Test-retest reliability of a test depicts its ability to give the same reliable result even after a time lapse. The test-retest value for APRI Urdu version was 0.70, depicting that there was acceptable test-retest reliability of the scale. Split-half reliability for bullying was 0.836 and for victimisation it was 0.876. Both the values showed good split-half reliability of the instrument.

Likewise, convergent validity of APRI Urdu version showed significant positive relation between bullying and depression, and between victimisation and depression. Both victimisation and bullying are related to depression, and they are even linked to suicidal ideation and overall mental health.<sup>23</sup> Individuals who are part of the bullying continuum, whether as perpetrator or victims, are seen to be more at risk of having depressive symptoms and other mental health issues compared to those who are not involved in the bullying continuum.<sup>24</sup>

Discriminant validity showed a significant inverse relation between bullying and resilience, and between victimisation and resilience. Resilience is seen to be a healthy coping mechanism in the face of adversities and is positively related to psychological wellbeing.<sup>25</sup> Both being a perpetrator of bullying and a victim are seen to be a stress-inducing experience as there are many underlying dynamics in both roles. Therefore, it does not come as a surprise that resilience has an inverse

relationship with both these variables. This goes to show that individuals facing bullying and individuals who are bullying both can benefit by enhancing their resilience level. It is seen that the resilience diminishes the negative impact of bullying and victimisation.<sup>26</sup>

The result of the current study helps to fill the gap in literature on the subject in Pakistani society. Both bullying and victimization are negative life experiences which leave a lasting impact, and, therefore, it is essential that these constructs be further studied. There is a dire need for creating awareness regarding the seriousness of the implication that bullying and victimisation have. For that purpose, further detailed and larger studies are recommended to better understand the impact on mental health and wellbeing.

### Conclusion

The Urdu version of APRI was found to be a reliable and valid tool to assess bullying and victimisation. It can be used in future studies conducted in Pakistan in this domain.

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