# Mental Health Problems Scale for Adolescents- Parent Report: Development and Preliminary Technical Properties

Akbari Zardkhaneh, S. et al.

## **Extended Abstract**

## Aim

The prevalence of psychological problems among adolescents is on the rise, and their severity depends on a variety of factors, including age, gender, life history, and geographic location. Early detection and intervention can aid in mitigating long-term harm. The screening of the child and adolescent population is one of the most effective methods for addressing this issue. None of the existing screening tools, such as the children's behavior checklist (Achenbach and Rescorla, 2001) and Connors' rating scales (1998), are based on the pattern of common problems of the Iranian student community; coherent activities to adapt the tools for the study of Iranian adolescents' society have not been conducted; nor have normative and cut-off scores been developed based on the groups of Iranian adolescents. Hence, the objective of this research is to develop a scale based on the pattern of prevalent behavioral and emotional issues among adolescents in the country.

## Methodology

The current study is an applied and descriptive survey study in terms of its purpose. This study's statistical population consisted of the parents of secondary school pupils in six Iranian provinces: Alborz, Kermanshah, East Azarbaijan, Sistan and Baluchistan, Fars, and Razavi Khorasan. The sample group of parents consisted of 308 individuals, 52% of whom were parents of females and 48% of whom were parents of boys. The secondary school students' psychological health problems scale was developed through three stages: 1. Extracting the pattern of common psychological health problems among adolescents in the country, 2. Identifying and embedding the indicators of each component, 3. Implementation of the questionnaire in six provinces.

#### Findings

Using SPSS software, item analysis was performed. The rule enacted to eliminate the items in this section was that each of them violated six of the seven criteria listed below: a) the item average was outside the range of 0.5 to 2.5, and b) the standard deviation was below 0.5. c) Skewness greater than 3, d) Kurtosis greater than 5, d) Correlation coefficient of the item score with the total score of the scale less than 0.10, e) Cronbach's alpha coefficient after removing the item less than 0.90, and f) More than 50% of the subjects responded with a single option. Under these conditions, the internal consistency of the whole scale was 0.91. Using exploratory factor analysis, limiting the number of factors to six, and employing the method of principal axes and equamax rotation led to the extraction of factors most consistent with the scale's theoretical structure. In addition, parallel analysis was used to count the number of factors.

#### Conclusion

The purpose of the present study was to develop a parent report variant of the preliminary scale for psychological health screening of high school students. The examination of the items revealed that each item is related to the entire scale and that the homogeneity coefficients of the subscales are acceptable. In addition, the Cronbach alpha validity coefficient demonstrates the validity of all subscales. Almost all of the items in the instrument are in favorable condition in terms of their individual characteristics, as determined by an analysis of the psychometric properties of the items. Although this instrument conceptually has eight sub-scales, exploratory factor analysis revealed that the six-factor structure is the most appropriate structure for this scale. In educational, service, and therapeutic contexts, the preliminary version of the parents' report on the psychological health of secondary school students can be utilized. Currently, this tool can be used to measure eight impairments (failure to perform task, injurious behaviors, self-harm, harassment, anxiety, hyperactivity and attention deficit, depression, and self-regulation). However, in order to complete it, in addition to fixing problems in other subscales, it is necessary to develop the tool further and create a child abuse subscale.

**Keywords:** Parent Report, Psychological Trauma, Psychological Screening, Psychometric Properties, Scale Development.