



Construction And Validation of Scale to Measure the Behavioural Problems of Adolescent Students

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Citation: Mrs. V. Rose, et al (2023), Construction And Validation of Scale to Measure the Behavioural Problems of Adolescent Students, *Educational Administration: Theory and Practice*, 29(4) 4001-4006
Doi: 10.53555/kuey.v29i4.8797

ARTICLE INFO

ABSTRACT

The study has been conducted to examine the Behavioral Problems of Adolescent students in Government and Private Adolescent students. The Sample selected for investigation consists of 150 Adolescent students from various Government and Private higher secondary Schools in Tirupattur District. The main objective of the present study is to develop a research tool to measure the Behavioral Problems of Adolescent students. The investigator has used normative survey method for the study. The researcher had attempted to construct and standardize the Adolescence Behavioral Problem scale (ABPS) to measure the Behavioral Problems of Adolescent students.

Key Words: Behavioral Problems, Adolescent students, Secondary Schools

Introduction

Adolescence is a stage of development that is marked by a great deal of change physically, emotionally and psychologically. As a result, it is common for teenagers to experience behavioral problems during this period.

Behavioral problems in students often stem from external influences that frequently go unnoticed or are not comprehended by others. Emotional and psychological factors within apparently typical children are not always discernible but are frequently mischaracterized as depression, hostility, withdrawal, or daydreaming as coping mechanisms for stress. Some students may have experienced physical, emotional, or sexual abuse. Many of these students find themselves in regular classrooms, struggling to navigate their issues independently without adequate understanding. To address the issues related to Behavioral Problems, several approaches seek to harness peer support in facilitating behavioral transformations.

Objective:

The main objective is to develop a research tool to measure the Behavioral problems of Adolescent students.

The objective of studying behavior problems among government and private school adolescents is to comprehensively understand, assess, and address these issues, ultimately contributing to the well-being, academic success, and positive development of adolescents in diverse educational settings.

Description of the Tool: Adolescence Behavioral Problem Scale

Behavioral problem scale has been developed and validated by the investigator. Many journals on Behavioral problems, test construction procedures were used for the construction of the tool. The Behavioral problems scale was constructed after having discussions with psychologists and experts in the field of education. The test has been prepared on five point rating scale.

The scoring procedure for the tool for the option 'Not at all' is given a score of 5, 'Rarely' is given a score of 4, 'Occasionally' is given a score of 3, 'Often' is given a score of 2, and 'Very Often' is given score 1. The minimum score for the tool is 50 and maximum score of the tool is 250.

Item Analysis

The draft tool prepared by the investigator was administered on a sample of 150 higher secondary school

students were asked to mark their opinion among the given alternatives. Each statement has five alternative responses; namely Not at all, Rarely, Occasionally, Often and Very Often. Scoring was done for all the statements. The minimum score would be 50 and the maximum score would be 250. It is most efficient to do the checking as a single operation after all booklets have been scored. Item analysis was adopted for the final selection of statements.

Table Structure and Columns

The table presents an analysis of 50 items with the following columns:

- *Item No*: Unique identifier for each item in the scale
- *Upper Group Mean (M1)*: Average score for the top-performing group
- *Lower Group Mean (M2)*: Average score for the bottom-performing group
- *Mean Difference (M1-M2)*: Difference between upper and lower group means
- *Discriminating Power*: A measure of how well each item differentiates between high and low performers
- *Selected/Rejected*: Whether the item is recommended to be kept or removed from the scale.

Item Selection Criteria

The researchers appear to have used several criteria to evaluate each item:

1. *Mean Difference*: A larger difference between upper and lower group means indicates the item better distinguishes between individuals with different levels of the measured behavior.
2. *Discriminating Power*: This represents how effectively an item can separate high-scoring from low-scoring individuals. Higher values suggest better item quality.

Key Observations

- *Total Items*: 50 items were analyzed
- *Selected Items*: 35 items were selected (retained for the scale)
- *Rejected Items*: 15 items were rejected

Examples of Item Analysis

Few examples to illustrate the analysis:

1. *Item 20*: - Highest discriminating power (77)
 - Large mean difference (3.07)
 - Selected for the scale
2. *Item 41*: - Very high discriminating power (79)
 - Large mean difference (3.14)
 - Selected for the scale
3. *Item 3*: - Low discriminating power (24)
 - Small mean difference (0.96)
 - Rejected from the scale

Interpretation Insights

The researchers used a rigorous process to refine the Adolescent Behavioral Problem Scale by evaluating each item's ability to measure the intended construct.

Items with higher discriminating power and larger mean differences were more likely to be selected, as they provide more meaningful information about the behavior being assessed.

The final scale, with 35 selected items, should provide a more reliable and valid measure of adolescent behavioral Problems.

Thus, the final scale contains 35 items; the list of items with the Discriminating Power is presented in Table-1. Split-half method was also used to find out the consistency of the test.

TABLE 1: ADOLESCENT BEHAVIORAL PROBLEM SCALE

Detailed Table showing the Item Analysis of the draft Adolescent Behavioral Problem Scale					
Item No	Upper Group Mean (M1)	Lower Group Mean (M2)	Mean Difference (M1-M2)	Discriminating Power	Selected/Rejected
1	3.08	1.32	1.76	44	Selected
2	3.20	1.52	1.68	42	Selected
3	2.96	2.00	0.96	24	Rejected
4	3.68	1.20	2.48	62	Selected
5	3.28	2.32	0.96	24	Rejected
6	3.00	1.08	1.92	48	Selected
7	2.92	2.16	0.76	19	Rejected
8	2.88	1.16	1.72	43	Selected
9	2.96	1.12	1.84	46	Selected
10	3.20	1.04	2.16	54	Selected
11	4.50	2.25	2.25	56	Selected
12	6.20	4.50	1.70	43	Selected
13	3.00	2.24	0.76	19	Rejected
14	2.96	1.26	1.70	43	Selected
15	4.50	2.58	1.92	48	Selected
16	2.65	1.59	1.06	27	Rejected
17	4.50	3.56	0.94	24	Rejected
18	3.60	1.54	2.06	52	Selected
19	3.50	1.20	2.3	58	Selected
20	4.32	1.25	3.07	77	Selected
21	3.38	2.15	1.23	31	Rejected
22	3.12	1.28	1.84	46	Selected
23	2.88	0.95	1.93	48	Selected
24	3.25	1.12	2.13	53	Selected
25	2.98	2.12	0.86	22	Rejected
26	2.59	0.98	1.61	40	Rejected
27	3.45	1.35	2.1	53	Selected
28	4.52	2.56	1.96	49	Selected
29	4.59	1.47	3.12	78	Selected
30	3.56	1.54	2.02	50.5	Selected
31	4.25	2.21	2.04	51	Selected
32	2.25	0.85	1.4	35	Rejected
33	3.47	1.45	2.02	51	Selected
34	2.54	1.23	1.31	33	Rejected
35	2.98	1.12	1.86	47	Selected
36	3.11	1.12	1.99	50	Selected
37	2.11	1.21	0.9	23	Rejected
38	2.89	1.15	1.74	44	Selected
39	3.56	1.52	2.04	51	Selected
40	4.51	2.21	2.3	58	Selected
41	4.50	1.36	3.14	79	Selected
42	2.98	1.31	1.67	42	Selected
43	3.57	1.02	2.55	64	Selected
44	1.98	0.95	1.03	26	Rejected
45	2.75	1.26	1.49	37	Rejected

Detailed Table showing the Item Analysis of the draft Adolescent Behavioral Problem Scale					
Item No	Upper Group Mean (M1)	Lower Group Mean (M2)	Mean Difference (M1-M2)	Discriminating Power	Selected/Rejected
46	4.15	2.26	1.89	47	Selected
47	3.00	2.24	0.76	19	Rejected
48	3.65	1.58	2.07	52	Selected
49	3.69	1.47	2.22	56	Selected
50	3.78	1.56	2.22	56	Selected

Reliability

The reliability of test can be defined as the correlation between two or more sets of scores on equivalent tests from the same group of individuals. A test score is called reliable when we have reasons for believing the score to be stable and trust worthy. Stability and trust worthiness depend upon the degree to which the score is an index of “true-ability” free from chance error. Test-retest (repetition) method was used to arrive at the reliability of the tool. Repetition of a test is the simplest method of determining the agreement between the two set of scores; the test is given and repeated on the same group; and the correlation computed between the first and second set of scores. Given sufficient time between the two tests the administration results show the stability of the test scores. The value of correlation co-efficient shows that there is high positive degree of correlation between the two tests and are given in Table-2.

Table 2: Reliability Co-Efficient of Behavioral problems

S.No.	Method of Reliability	Values
1.	Test-retest (Repetition)	0.80
2	Split-Half	0.83

Validity

The appropriateness, meaningfulness and usefulness of the specific inferences made from test scores. In research, if findings are to be appropriate, meaningful and useful, they need to be valid. The first essential quality of valid test is that it should be highly reliable. Besides, the content or face validity, the investigator intended to arrive intrinsic validity. Guilford (1950) defined the intrinsic validity as “the degree to which a test measures what it measures.” Therefore, the intrinsic validity of Adolescent Behavioral Problem Scale (ABPS) is 0.86.

DESCRIPTION OF THE FINAL TOOL

The final tool with 35 statements was prepared in English version with 5-point rating scale. The scoring procedure for the tool for the option ‘Not at all’ is given a score of 5, ‘Rarely’ is given a score of 4, ‘Occasionally’ is given a score of 3, ‘Often’ is given a score of 2, and ‘Very Often’ is given score 1. The minimum score for the tool is 35 and maximum score of the tool is 175. The selected tool has five dimensions namely; Conduct Disorder, Anxiety Disorder, Substance Abuse, Eating Disorder and Depression. Each dimension has 7 items, totally 35 items.

Table-3: FINAL TOOL: Adolescent Behavioral Problem Scale (ABPS) scale

S. No.	Statements	Not at all	Rarely	Occasionally	Often	Very often
	Conduct Disorders:					
1	I disobey my parents.					
2	I engage in fights.					
3	I steal from my home.					
4	I deliberately try to harm or endanger myself.					
5	I make threats of physical harm.					
6	I damage things that belong to others.					
7	I bite my fingernails.					
	Anxiety Disorders:					
8	I have a fear of attending school.					
9	I have constant fears that others are out to harm me.					
10	I struggle with sleep disturbances.					
11	I easily become self-conscious or embarrassed.					
12	I feel dizzy or light-headed.					
13	I worry about getting involved with others.					
14	I engage in excessive worrying.					
	Substance Abuse:					
15	I use drugs for non-medical purposes (excluding alcohol/tobacco).					
16	I've experimented with illegal drugs.					
17	I've had legal trouble due to substance use.					
18	I've lost interest in activities I once enjoyed.					
19	I've continued substance use despite health problems.					
20	I've kept my substance use hidden from others.					
21	I use substances to escape from problems.					
	Eating Disorders:					
22	I struggle with overeating.					
23	I have low energy levels.					
24	I've restricted my food intake significantly.					
25	I've engaged in purging behaviors like vomiting or using laxatives.					
26	I've used extreme measures to lose weight.					
27	I exercise excessively to control my weight.					
28	I have trouble sleeping.					
	Depression:					
29	There are very few things that bring me joy.					
30	I often feel lonely.					
31	I feel that I must be perfect.					
32	My moods or feelings change suddenly.					
33	I refuse to engage in conversations.					
34	I wish I were the opposite sex.					
35	I cry frequently.					

Conclusion

This research tool focuses on gathering information about the Behavioural Problem. This research tool will be of immense use for identifying the Behavioral Problems of Adolescence aged students.

Adolescence, as a pivotal developmental stage, is marked by unique challenges, including behavior problems that can significantly impact academic achievement. These challenges are especially relevant in the context of differing school types, where government and private schools often serve students from diverse socio-economic backgrounds and adopt distinct educational approaches.

Existing research has shed light on behavior problems among Adolescence in schools of Higher secondary level, but there remain gaps and limitations in our understanding that this study seeks to address. Understanding behavior problems in both government and private schools is crucial for educational policymakers as the results can inform decisions related to school management and student support, ultimately leading to improved student well-being, enhanced classroom environments, and better academic outcomes. Thus, this research endeavors to examine whether disparities exist in behavior problems between these school types, with a focus on the potential implications for educators and policymakers.

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