Development of Adjustment Scale for College Students with Loco-motor Disability

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ABSTRACT:

A human being is a complex entity created by God consists of the physique and psyche, that is the body and the mind. Physical disability is accompanied by some sort of psychological disturbance. Loco-motor disability, being the largest group of disability disorders, call for a gigantic effort to tackle. "Loco-motor disability" means disability of the bones, joints muscles leading to substantial restriction of the movement of the limbs or any form of cerebral palsy".Dwarfism and acid attack victims are also part of loco-motor disability as per the latest the RIGHTS OF PERSONS WITH DISABILITIES ACT, 2016.The loco-motor impairment limits the function of an individual's activities like moving, toileting, bathing, grooming and so on.Therefore an individual with a loco-motor disability experiences a continuous struggle between his needs and his capacity of realizing these needs. An individual with a locomotor disability has to reconcile with his struggle and thus maintain an equilibrium which is generally called adjustment. Adjustment although a universal phenomenon but investigator studied it through its various aspects or dimensions. The investigator self-designed the adjustment scale on the college students with a locomotor disability in the age group of 18 to 23 years. Thereafter the tool was administered to 200 students with loco-motor disability taken from heterogeneous colleges/ universities of Lucknow district. The Adjustment scale developed by the investigator contains 45 items which belong to five dimensions of Adjustmentviz. home adjustment, health adjustment, social adjustment, emotional adjustment and educational adjustment.It may be mentioned here that if the needs of the students with Loco-motor disability are not met it would lead to personality problems which disturb the whole educational scenario.Considering the role of adjustment in various aspect of student's life, the accessibility of adjustment of students with a locomotor disability is needed to be realized.

Keywords: Locomotor disability, Adjustment, Dwarfism.

INTRODUCTION

Human beings are born with a number of needs eg. physiological needs, psychological needs and with time in the course of developing some additional needs emerge. In order to have a peaceful life in this world, these needs of an individual must be satisfied. This process of arriving at a balanced state between the needs of an individual and their satisfaction is called adjustment. An individual starts adjusting right from the birth and continues till death. In the process of adjustment, an individual has to modify his/her behavior or his /her environment to correspond to each other. When the demands of an individual go on increasing and become more complicated. A State of frustration arises due to non-fulfillment of all his demands and incapability to achieve satisfaction which leads to maladjustment. Those individuals who are capable of maintaining a balance between his needs and the external forces are said to be adjusted and those who fail to maintain such balance get maladjusted or vanish. Every human being seeks an adjustment in different situations because it is essential for leading a happy life and gaining satisfaction.

A well-adjusted person knows his strengths and limitations, shows flexibility in behavior and is capable of struggling with odd circumstances. Hence adjustment acquires extraordinary importance in an individual's life because every individual faces diverse problems in his/her day to day life and these problems are jeopardized in case of disabled. Because in spite of their physical disability their desires and ambitions are similar to normal individuals except their physical deformity. Actually, they have to bear a double-burden, social handicap and actual physical loss. According to Hardwick (1942) "Disabled person is much more exposed to physical and mental strain than the average man. Very often he receives unfavorable attitudes from society. These produce maladjustments in him. The disabled man is like someone running a business with a minimum of capital."

Any deformity of the body may give birth to feelings of inferiority in a child. Moreover, he may face adjustment problems in the different spheres viz, home health, social, emotional, and educational consequently they may lag behind in the race of development pertaining to various aspects of his/her personality.   In INcent years many steps have been taken by the government for the upliftment of the handicapped, and thereby to bring them in the mainstream of the society.

There has been little research on the physically handicapped college students. Available researchers indicate the difference between normal and handicapped students. Cruckshank (1951) evaluated that children with various types of orthopedic, cardiac and neurological handicaps see themselves a having more fear than normal children. George, Pillay, and Dharmangadan (1967) found in his study that physically defective pupils were inferior in comparison to non-defective counterparts in the home, health and school adjustment. The normal college students probably due to better body structure and performance at college and society get more love and affection and show better adjustment in these areas. Chawla (1978) have found out that normally showed better adjustment in the entire areas-emotional, social, and educational as compared to physically handicapped. Although there are some studies that show that impaired persons are better adjusted in social and emotional areas (Satapathy and Singhal, 2003). However, there seems a dearth of the knowledge base concerning adjustment of the college students with Loco-motor disability.Hence, the investigator felt the dire need to construct a scale to assess adjustment of college students with a locomotor disability.Adjustment although a universal phenomenon, can be studied through its various aspects or dimensions like home adjustment, health adjustment, social adjustment, emotional adjustment and educational adjustment.

OBJECTIVE OF THE STUDY

The present study is intended to construct an adjustment scale for college students with Loco-motor disability.

Construction of the scale

In the context of the present investigation, development of adjustment scale based on the Likert method of adjustment scale construction was considered appropriate. The Likert method has certain advantages namely: (a) the scale construction procedure was easier and simpler, (b) the technique was claimed to provide more information about subjects adjustment since the response would be given to each of the many items and (c) the method was relatively more reliable, valid and understood.

1.   Preparation of items

For the preparation of the preliminary form first, the nature and scope of the statements that were to be included in the proposed adjustment scale were examined in the light of the operational definition of the concept 'Adjustment of students with Loco-motor disability'. All the favorable or unfavorable statements that were suggested to indicate the adjustment of the students with a locomotor disability on various aspects of adjustment were pooled together from the available literature.The statements were further supplemented by interviewing various students with loco-motor disability randomly from the universities and colleges of Lucknow city.The statements thus obtained were subjected to scrutiny and relevant ones were chosen and added to the list. After this to avoid ambiguity and overlapping, all the statements together were reviewed and rewritten.

The preliminary form thus prepared, consisted of 65 items of which 37 were supposed to represent positive items and 28 were negative items. This was presented to 8 experts with a request to suggest improvements wherever necessary. The suggestions of the experts were carried out. In all,60 items remained in the preliminary form of which 34 items were supposed to represent positive and test negative.

2.   Try out

Sample

The sample consisted of 200 students with a locomotor disability from various colleges and university of Lucknow district. The sampling was done by employing purposive sampling.

The preliminary form of adjustment scale thus formulated was administered to 200 students with a locomotor disability from various colleges and universities of the Lucknow city. The preliminary form was administered to the students in order to examine whether the statements were easily understood by the students and to know whether they possessed clarity or not. In the light of experience gained improvements were carried out in the statements wherever necessary. In doing so, assistance was taken from the eight university-level teachers(who served as panel experts for the scrutiny of the statements in the preliminary form).Then the positive and negative statements were mixed together with the help of random numbers. While doing this, the sequence of the statements was maintained as far as possible(the assistance of the university level teachers was taken here also).

Rating procedure for the statements

The way the adult learners of the sample have to rate each statement in the final form was also determined. It was thought appropriate to consider the rating that would be as simple as possible in order to help the students with Loco-motor disability indicate their rating with ease. The numerical rating scale consisting of five descriptive cues, viz., Strongly agree, Agree, Undecided, Disagree and Strongly disagree was chosen considering it as appropriate one for the sample.

Scoring of the statements

For the purpose of the scoring of the statements, numerical values were assigned to the five categories of responses (ratings) against each statement. The following numerical values were assigned to the ratings of positive /negative statements in the scale.

S.NO.	Nature of response	Positive statement	Negative statement

1.	Strongly Agree	5	1
2.	Agree	4	2
3.	Undecided	3	3
4.	Disagree	2	4
5.	Strongly Disagree	1	5

3.   **Item Analysis**

On the basis of the scores obtained by the respondents on all statements, the scale was arranged in descending order. Then, top 54 individuals (top 27%) with highest total scores on the scale and the bottom 54 respondents (bottom 27 percent)with lowest total scores on the scale were extracted out to form criterion groups in order to evaluate each individual item of the scale as suggested by Edwards, 1957. Afterwards, means and S.D. were computed for each individual item separately for top 27% group of respondents. Finally, the t-value for all the 60 items were calculated and only those statements retained for final from the scale which were having t-value greater than 1.75. At-value equal to or greater than 1.75 indicates that the average response of the top and bottom groups of respondents to a statement differs significantly. Thus, on the basis of this, out of 60 statements, 15statements were rejected and remaining 45 statements were selected for the final form of adjustment scale. The t-values in respect of 60 statements are given in Table.

Item	t-value	Selection /rejection
1	1.33	Rejected
2	2.190	Selected
3	5.33	Selected
4	2.543	Selected
5	1.824	Selected
6	0.16	Rejected
7	3.5	Selected
8	1.515	Rejected
9	2.003	Selected
10	2.316	Selected
11	2.9	Selected
12	2.08	Selected
13	2.858	Selected
14	0.145	Rejected
15	0.9702	Rejected
16	2.077	Selected
17	0.629	Rejected
18	5.845	Selected
19	2.057	Selected
20	4.022	Selected
21	2.39	Selected
22	0.595	Rejected
23	0.5339	Rejected
24	0.2845	Rejected
25	0.5056	Rejected
26	2.39	Selected
27	0	Rejected
28	5.446	Selected
29	0.806	Rejected
30	4.043	Selected
31	2.336	Selected
32	4.36	Selected
33	0.826	Rejected
34	1.789	Selected
35	2.187	Selected
36	2.34	Selected
37	1.823	Selected
38	0.3224	Rejected
39	1.77	Selected

40	3.083	Selected
41	2.571	Selected
42	2.319	Selected
43	5.048	Selected
44	2.832	Selected
45	5.568	Selected
46	4.94	Selected
47	1.901	Selected
48	4.148	Selected
49	3.4	Selected
50	1.733	Rejected
51	0.896	Rejected
52	3.846	Selected
53	1.430	Rejected
54	4.584	Selected
55	1.834	Selected
56	3.98	Selected
57	4.851	Selected
58	3.137	Selected
59	4.616	Selected
60	3.380	Selected

4. Final Draft

The 't' test values for each of the statements of the measure were calculated to find out the discrimination power and usefulness of the statements chosen. Statements that had calculated 't' value equal to or greater than 1.75 were selected for inclusion in the final form. All the other statements were discarded. As per this procedure, 15 statements were discarded.Of these 45 statements, 29 statements were positive and 16 statements were negative.

Reliability

Reliability was estimated by test-retest method, 200 subjects were administered on the Adjustment scale twice after a gap of one month and reliability was calculated, initially area wise reliability was calculated separately as

Adjustment Areas	Reliability Index
1. Home	0.722
2. Social	0.867
3. Health	0.867
4. Emotional	0.934
5. Educational	0.723
Total Reliability	0.722

Validity

To assess the validity of the Adjustment scale, content validity and item validity are established.

Content validity

Content validity refers to establishment and evaluation of the significance of the test items individually and as a whole.Every item should be a sampling of that aspect which the test purports to measure. In addition, items should collectively constitute a representative sample of the variable that is measured.

Items for the measure were collected from different sources viz., review of the literature, university-level teachers, in addition, these were supplemented by noting the comments of field experts, it was also supplemented by interviewing selected students to make sure that all the possible items were covered. Thus it can be reasonably assumed that the adjustment scale developed possesses satisfactory content validity.

Item Validity

Item validity stresses the number of discriminations of the desired sort that the item is capable of making. It stresses the extent to which the item predicts segregation of respondents into those with high versus low criterion scores. The discriminative power of each of the items of the present measure was established by calculating their 't' value

Out of these 60 statements, 34 were positive (favorable) nature and remaining 26 statements were negative (unfavorable) type.

Use of the Scale

The Investigator hopes that the significance and practicalimportance of the study may be made use of by the individuals,organizations and governmental agencies concerned for the betterment of the loco-motor disable. It is hoped that every effort should bemade to understand the effect of adjustment factors on the loco-motor disable. The information received from this study can thus beused by psychologists, counselors, government; or the voluntaryorganizations in order to meet the various needs and solve theproblems of the college student with a locomotor disability in our society.The Investigator would feel gratified if the results andimplications are of use to those involved in the welfare of the loco-motor disable personsand also for those involved in prospective research in the area.

Discussion

In India, there is hardly any tool which measures adjustment exclusively for college students with a locomotor disability.The Adjustment scale developed by the investigator contains 45 items which belong to five dimensions of Adjustment viz. home adjustment, health adjustment, social adjustment, emotional adjustment and educational adjustment.Adjustment is not a simple term like adaptation or accommodation.It is actually a condition or state of mind and behavior in which one feels that one's need has been, or will be gratified.The satisfaction of these needs, however, must lie within the framework and requirements of one's culture and society.As long as this happens, the individual remains adjusted; failing this he may drift towards maladaptation and mental illness. Students with locomotor disability in spite of their disability have dreams and desires which are none less than the students without any disabilities. When the social and psychological needs of thestudents with Loco-motor disabilities are not gratified, they may develop adjustment problems. They face many problems in their adequate adjustment on account of their physical deformitywhich disturb the whole educational scenario. Considering the role of adjustment in various aspect of student's life, the accessibility of adjustment of students with a locomotor disability is needed to be realized. The high value of inter-item and inter-total item correlation along with high reliability and validity indicate it is a reliable tool to measure adjustment of college students with Loco-motor disability.

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