



Scholastic Difficulty: Scale Development and Implications for Future Research

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The present study is an attempt to develop a scale to measure Scholastic Difficulty among Pre-University college students. The students of II pre-university courses (PUC) were the real and objective source to identify different scholastic difficulties. So, 140 students of PUC were contacted. The information given by 140 students were pooled and the scholastic difficulties were identified. 68 different scholastic difficulties were adopted by the students. These difficulties were considered as scholastic difficulties. Each of the difficulty was expressed in a statement form. Initially, there were 68 statements, these items with "Always, Sometimes, Rarely and Never" alternatives were administered on 200 II PUC students (108 male and 92 female). The data of these students were subjected to percentage, correlation and t-test analysis. Finally, 66 items were included in the Scholastic Difficulty scale. Scholastic Difficulty scale consisting of 66 items with 5 alternative answers such as always, most of the times, sometime, rarely and never was administered on a

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random sample of 150 II PUC students to judge the reliability. The coefficient of split-half reliability was 0.93, which was significant at 0.01 level of significance. Test-retest reliability of scholastic difficulty scale was undertaken. The scale was administered on a sample of 35 students of I year B.H.Sc. twice with an interval of 10 days. The coefficient of test and retest scores was 0.800, which was significant at 0.00 level of significance.

Keywords: Scholastic difficulty; II PUC students; scale developments; scholastic backwardness.

1. INTRODUCTION

College plays a crucial and formative role in the intellectual, cognitive, emotional, social and moral development of an adolescent. Scholastic backwardness usually engenders feelings of anxiety and inadequacy in adolescents. This in turn can have negative impact on the emotional and social functioning of the adolescents. Hence scholastic problem is an issue of concern not only for students, but also for parents and all the professionals involved in child welfare.

College students encounter a wide range of problems, some of which fall within the students' mental health domain. Additionally, attending university or college can be a challenging experience for most of the new undergraduate students. Students are faced with new demands or challenges in the transition from high-school to college. College students encounter a wide range of problems, some of which fall within the students' mental health domain. Additionally, attending university or college can be a challenging experience for most of the new undergraduate students. Students are faced with new demands or challenges in the transition from high-school to college. Poor performance in schools can be attributed to emotional trauma, physical problems, low self-esteem, or more complex problems such as learning disabilities [1].

Academic failure is emerged as a significant problem in the recent years. It is widely acknowledged that a student's ability depends on both internal and external factors such as proper study habits, intelligence, educational aspiration of self and parents, medium of instruction, socio-economic status of family and so on. If these situations are not conducive for learning it may lead to scholastic difficulty or failure [2].

For scholastic excellence as well as taking advantage of future opportunities, second year pre-university examination assumes great importance. It is the terminal stage in setting the stage for ones academic career and future life.

Studies have shown that the effects of poor academic achievement or failure during the pre-university college results in higher proportion of college dropouts, behavioural problems and even delinquency among this population [3].

Various factors influence poor performance of students of PUC such as interest of students in studies, volume of work completed, students task orientation, skill acquisition, students personality, feeling of inadequacy, anxiety and depression. Students of PUC lack skills and resources to cope with these problems which would in turn determine the course of their psychological adjustment during academic life [4-6]. Efforts to alter these problematic situations, using strategies to manage the negative emotions experienced and the support received from family and friends, all contribute to successful resolution of problems and challenges.

The biggest challenge which the students have to face is the pre-university examination. The students of PUC experience a transition from restricted and guided life of high school to environmental freedom and unrestricted style of college. Correspondingly, this period is considered as the most stressful time, where the students are confronted by a multitude of stressors arising from physical and cognitive development, social and emotional changes along with academic pressures and expectations. During this period, the students are required to develop a sense of identity, to fulfill social roles with peers and members of opposite sex, complete the requirements of college, fulfill the expectations of parents and society and make decisions regarding a career [7]. In view of this the present study was conducted with an objective to develop a scale to measure Scholastic Difficulty among Pre-University college students.

2. METHODOLOGY

Scale development procedure involves preparing the items followed by administration of the draft scale and finally scoring the items.

a. Scholastic difficulty

Scholastic difficulty is operationally defined as “the difficulty faced by the students pertaining to their academics”. The students of II pre-university courses were the real and objective source to identify different scholastic difficulty. So, 140 students of pre-university were contacted. Each student was asked a question “What are your difficulties/problems related to the subjects and studies of scholastic difficulty?” Each student was requested to write down their scholastic difficulty which they are facing in their academics or studies. The information given by 140 students were pooled. Identification of the scholastic difficulty resulted 68 different scholastic difficulty faced by the students. These difficulties were considered as scholastic difficulty. Each scholastic difficulty was expressed in a statement form. Initially, there were 68 statements, these items with “Always, ST, Rarely and Never” alternatives were administered on 200 II PUC students (108 male and 92 female). The data of these students were subjected to percentage, correlation and t-test analysis. If 5 percentage or above of the students had answered each item by selecting ‘Always’ alternative answer, then only it was statistically indicative that the item had potentially to measure scholastic difficulty.

b. Development of scholastic difficulty scale

- Selection of item by percentage
- Selection of item by coefficient of correlation
- Selection of item by criterion groups t-value

3. RESULTS AND DISCUSSION

3.1 Selection of Item

a. Selection of item by percentage

The results of Table - 1 featured that frequency and percentage of the students for the alternative answers of each item. There were 4 alternative answers such as always, sometime, rarely and never. Each student had answered each item by selecting one of the alternative answers. A total of 200 students (108 male and 92 female) had answered each item. The frequency and percentage of responses for the alternatives of each item were calculated (Table 1). Among 68 items 67 items had 5 percentage or above for the ‘always’ alternative answer. Therefore 67 items were selected for coefficient of correlation

analysis. The value of item number 1 was 2.50. This item was deleted.

b. Selection of item by coefficient of correlation

The results of Table 2 exhibited coefficient of correlation of each item with the scale. The results of the Table 2 endorsed that the coefficient of correlation of each item was between 0.22 and 0.73 and was significant at least at 0.05 level. Among 67 items, the coefficient of correlation of 66 items was significant. The coefficient of the item number 23 was 0.90. This value was not significant even at 0.05 level of significance. Therefore, out of 67 items, 66 items were retained for criterion groups t-test analysis.

c. Selection of item by criterion groups t-test analysis

The results of Table 3 explicated criterion groups t-value. The results of Table 3 established that the t-value of each statement was between 2.32 and 15.72 and each item was significant at least at 0.05 level. Therefore all the 66 items were included in the scholastic difficulty scale none of the items were deleted, so all 66 items were selected.

3.2 Validity of the Scale

a. Content validity

140 students of II PUC were the judges to identify most common scholastic difficulty and another group of 200 II pre-university students was the basis for identification of scholastic difficulty scale by percentage, coefficient of correlation and t-test analysis. So, scholastic difficulty scale has content validity. Among 68 statements, 1 statement was deleted (Table 1) because it was not having potentiality to measure the specific scholastic difficulty. The data of remaining 67 statements was to establish internal validity. So, scholastic difficulty scale has content validity.

b. Internal validity/convergent validity

The data of 67 statements of 200 II pre-university students were subjected to analysis of coefficient of correlation. The results of Table 2 proved that the 66 statements were having significant relation with component and total of the scale which mean that each item was having convergent validity. It means that the scholastic difficulty scale has internal validity.

**Table 1. Frequency and percentage of each item of scholastic difficulty scale
n=200**

Sl. No	Statements	Always	Some times	Rarely	Never
1	I do not attend classes#	5 (2.50)	47 (23.50)	49 (24.50)	99 (49.50)
2	I get confusion in writing the answers in examination	60 (30.00)	85 (42.50)	43 (21.50)	12 (6.00)
3	I lack concentration in studies	78 (39.00)	80 (40.00)	24 (12.00)	18 (9.00)
4	I have problem of English language	40 (20.00)	60 (30.00)	58 (29.00)	42 (21.00)
5	I forget what is learnt	76 (38.00)	77 (38.50)	26 (13.00)	21 (10.50)
6	I am not able to byheart the formulae	27 (13.50)	57 (28.50)	66 (33.00)	50 (25.00)
7	I do not study some chapters in each subjects	28 (14.00)	76 (38.00)	48 (24.00)	48 (24.00)
8	I am afraid to get clarifications from friends	13 (6.50)	54 (27.00)	31 (15.50)	102 (51.00)
9	I have to study many chapters in each subjects	136 (68.00)	28 (14.00)	25 (12.50)	11 (5.50)
10	I have difficulty in understanding biology	45 (22.50)	79 (39.50)	26 (13.00)	50 (25.00)
11	I have difficulty in understanding maths	43 (21.50)	71 (35.50)	44 (22.00)	42 (21.00)
12	I have difficulty in understanding chemistry	44 (22.00)	84 (42.00)	39 (19.50)	33 (16.50)
13	I have difficulty in understanding physics	47 (23.50)	80 (40.00)	36 (18.00)	37 (18.50)
14	I have difficulty in understanding English subject	27 (13.50)	31 (15.50)	52 (26.00)	90 (45.00)
15	I am not interest in studying biology	24 (12.00)	62 (31.00)	33 (16.50)	81 (40.50)
16	I am not interested in studying physics	13 (6.50)	40 (20.00)	40 (20.00)	107 (53.50)
17	I am not interested in studying chemistry	11 (5.50)	54 (27.00)	44 (22.00)	91 (45.50)
18	I am not interested in studying maths	16 (8.00)	36 (18.00)	42 (21.00)	106 (53.00)
19	I am not interested in studying English subject	13 (6.50)	45 (22.50)	45 (22.50)	97 (48.50)
20	I have fear of examination	71 (35.50)	53 (26.50)	32 (16.00)	44 (22.00)
21	I do not understand whatever is read	42 (21.00)	78 (39.00)	52 (26.00)	28 (14.00)
22	I am attracted towards TV	80 (40.00)	66 (33.00)	25 (12.50)	29 (14.50)
23	I am attracted towards computers	88 (44.00)	41 (20.50)	19 (9.50)	52 (26.00)
24	I spend time with friends	87 (43.50)	52 (26.00)	44 (22.00)	17 (8.50)
25	I am not regular in studies	62 (31.00)	63 (31.50)	46 (23.00)	29 (14.50)
26	I think about opposite sex	15 (7.50)	38 (19.00)	41 (20.50)	106 (53.00)
27	I do not understand lecturers	14	83	51	52

Sl. No	Statements	Always	Some times	Rarely	Never
		(7.00)	(41.50)	(25.50)	(26.00)
28	I have low confidence	38	64	35	63
		(19.00)	(32.00)	(17.50)	(31.50)
29	I have not solved earlier papers	49	45	33	71
		(24.50)	(22.50)	(16.50)	(35.50)
30	I hesitate to clarify doubts from lecturers	71	55	36	38
		(35.50)	(27.50)	(18.00)	(19.00)
31	I read when examination is near	100	30	22	48
		(50.00)	(15.00)	(11.00)	(24.00)
32	I have fear of failure	44	49	40	67
		(22.00)	(24.50)	(20.00)	(33.50)
33	I require more time to learn subjects	94	63	28	14
		(47.00)	(31.50)	(14.00)	(7.00)
34	I am not able to do day-to-day activities of classes	46	77	35	42
		(23.00)	(38.50)	(17.50)	(21.00)
35	I do not work hard	37	61	48	54
		(18.50)	(30.50)	(24.00)	(27.00)
36	I do not have the ability to study	12	31	20	137
		(6.00)	(15.50)	(10.00)	(68.50)
37	I feel bore to attend the classes	11	41	58	90
		(5.50)	(20.50)	(29.00)	(45.00)
38	I feel inferior in studies	25	56	40	79
		(12.50)	(28.00)	(20.00)	(39.50)
39	I remember of past events	104	54	29	13
		(52.00)	(27.00)	(14.50)	(6.50)
40	I am not able to maintain time-table of studies	55	74	39	32
		(27.50)	(37.00)	(19.50)	(16.00)
41	I am unable to complete work within time	61	66	48	25
		(30.50)	(33.00)	(24.00)	(12.50)
42	I fear of criticisms by teachers	63	61	32	44
		(31.50)	(30.50)	(16.00)	(22.00)
43	I hurry in exam	82	75	23	20
		(41.00)	(37.50)	(11.50)	(10.00)
44	I do not understand the lessons	16	78	65	41
		(8.00)	(39.00)	(32.50)	(20.50)
45	I lack motivation to read.583	33	47	32	88
		(16.50)	(32.50)	(16.00)	(44.00)
46	I am not able to take down notes	29	51	51	69
		(14.50)	(25.50)	(25.50)	(34.50)
47	I loss interest to study	21	38	30	111
		(10.50)	(19.00)	(15.00)	(55.50)
48	I do not know how to read and write for exam	65	37	40	58
		(32.50)	(18.50)	(20.00)	(29.00)
49	I am slow in writing	52	45	47	56
		(26.00)	(22.50)	(23.50)	(28.00)
50	I have bad handwriting	30	62	18	90
		(15.00)	(31.00)	(9.00)	(45.00)
51	I postpone studies	62	59	45	34
		(31.00)	(29.50)	(22.50)	(17.00)
52	It is hard for me to sit for studies	27	60	53	60
		(13.50)	(30.00)	(26.50)	(30.00)
53	I am not interested to prepare notes	36	48	51	65
		(18.00)	(24.00)	(25.50)	(32.50)
54	I am not interested to write important points while reading	27	33	38	102
		(13.50)	(16.50)	(19.00)	(51.00)
55	I am not interested in repetition of	41	41	43	75

Sl. No	Statements	Always	Some times	Rarely	Never
56	same chapter for perfection I fear of getting less marks in Physics	(20.50) 24 (12.00)	(20.50) 55 (27.50)	(21.50) 26 (13.00)	(37.50) 55 (27.50)
57	I fear of getting less marks in Chemistry	49 (14.50)	70 (35.00)	30 (15.00)	51 (25.50)
58	I fear of getting less marks in Maths	66 (33.00)	42 (21.00)	35 (17.50)	57 (28.50)
59	I fear of getting less marks in Biology	44 (22.00)	51 (25.50)	25 (12.50)	80 (40.00)
60	I fear of getting less marks in English	23 (11.50)	29 (14.50)	31 (15.50)	117 (58.50)
61	I get bored in reading Physics	14 (7.00)	53 (26.50)	45 (22.50)	88 (44.00)
62	I get bored in reading Chemistry	8 (4.00)	58 (29.00)	58 (29.00)	76 (38.00)
63	I get bored in solving problems of Maths	19 (9.50)	43 (21.50)	27 (13.50)	111 (55.50)
64	I get bored in reading Biology	33 (11.50)	47 (23.50)	34 (17.00)	86 (43.00)
65	I get confused in writing answers of Physics	54 (27.00)	66 (33.00)	39 (19.50)	41 (20.50)
66	I get confused in writing answers of Chemistry	52 (26.00)	80 (40.00)	34 (17.00)	34 (17.00)
67	I get confused in solving problems of Maths	67 (33.50)	55 (27.50)	35 (17.50)	43 (21.50)
68	I get confused in writing answers of Biology	37 (13.50)	74 (37.00)	29 (14.50)	60 (30.00)

: Deleted statement

Table 2. Coefficient of correlation between each item of scholastic difficulty and overall scale n=200

Sl. No	Statements	r
2	I get confusion in writing the answers in examination	0.65**
3	I lack concentration in studies	0.73**
4	I have problem of English language	0.46**
5	I forget what is learnt	0.71**
6	I am not able to byheart the formulae	0.61**
7	I do not study some chapters in each subjects	0.61**
8	I am afraid to get clarifications from friends	0.22**
9	I have to study many chapters in each subjects	0.27**
10	I have difficulty in understanding biology.	0.50**
11	I have difficulty in understanding maths	0.61**
12	I have difficulty in understanding chemistry	0.63**
13	I have difficulty in understanding physics	0.58**
14	I have difficulty in understanding English subject	0.39**
15	I am not interest in studying biology	0.38**
16	I am not interested in studying physics	0.50**
17	I am not interested in studying chemistry	0.52**
18	I am not interested in studying maths	0.43**
19	I am not interested in studying English subject	0.45**
20	I have fear of examination	0.65**
21	I do not understand whatever is read	0.70**
22	I am attracted towards TV	0.46**

Sl. No	Statements	r
23	I am attracted towards computers#	0.09NS
24	I spend time with friends	0.35**
25	I am not regular in studies	0.69**
26	I think about opposite sex	0.28**
27	I do not understand lecturers	0.56**
28	I have low confidence	0.68**
29	I have not solved earlier papers	0.50**
30	I hesitate to clarify doubts from lecturers	0.68**
31	I read when examination is near	0.59**
32	I have fear of failure	0.59**
33	I require more time to learn subjects	0.49**
34	I am not able to do day-to-day activities of classes	0.50**
35	I do not work hard	0.67**
36	I do not have the ability to study	0.48**
37	I feel bore to attend the classes	0.40**
38	I feel inferior in studies	0.61**
39	I remember of past events	0.33**
40	I am not able to maintain time-table of studies	0.50**
41	I am unable to complete work within time	0.63**
42	I fear of criticisms by teachers	0.53**
43	I hurry in exam	0.40**
44	I do not understand the lessons	0.62**
45	I lack motivation to read	0.35**
46	I am not able to take down notes	0.58**
47	I loss interest to study	0.52**
48	I do not know how to read and write for exam	0.53**
49	I am slow in writing	0.33**
50	I have bad handwriting	0.26**
51	I postpone studies	0.72**
52	It is hard for me to sit for studies	0.70**
53	I am not interested to prepare notes	0.46**
54	I am not interested to write important points while reading	0.59**
55	I am not interested in repetition of same chapter for perfection	0.59**
56	I fear of getting less marks in Physics	0.59**
57	I fear of getting less marks in Chemistry	0.61**
58	I fear of getting less marks in Maths	0.59**
59	I fear of getting less marks in Biology	0.58**
60	I fear of getting less marks in English	0.40**
61	I get bored in reading Physics	0.59**
62	I get bored in reading Chemistry	0.62**
63	I get bored in solving problems of Maths	0.53**
64	I get bored in reading Biology	0.58**
65	I get confused in writing answers of Physics	0.62**
66	I get confused in writing answers of Chemistry	0.63**
67	I get confused in solving problems of Maths	0.56**
68	I get confused in writing answers of Biology	0.57**

: Deleted statement

NS – Not significant

** Significant at 0.01 level

**Table 3. Criterion-groups t-value of each item of scholastic difficulty
n=200**

Sl. No.	Statements	Gp(1) n=54	Gp(2) n=54	Criterion groups (t-value)
2	I get confusion in writing the answers in examination	3.90 (0.85)	2.28 (0.74)	10.6**
3	I lack concentration in studies	4.24 (0.64)	2.28 (0.81)	13.95**
4	I have problem of English language	3.22 (0.95)	2.02 (0.74)	7.04**
5	I forget what is learnt	4.00 (0.80)	2.09 (0.93)	11.4**
6	I am not able to byheart the formulae	2.98 (0.79)	1.53 (0.60)	10.6**
7	I do not study some chapters in each subjects	3.24 (1.00)	1.59 (0.74)	9.69**
8	I am afraid to get clarifications from friends	2.03 (1.00)	1.59 (0.98)	2.32*
9	I have to study many chapters in each subjects	3.94 (0.95)	3.37 (1.30)	2.6*
10	I have difficulty in understanding biology	3.16 (1.14)	1.83 (1.07)	6.23**
11	I have difficulty in understanding maths	3.59 (0.96)	1.70 (0.76)	11.27**
12	I have difficulty in understanding chemistry	3.44 (0.92)	1.79 (0.87)	9.5**
13	I have difficulty in understanding physics	3.40 (1.00)	1.90 (0.87)	8.29**
14	I have difficulty in understanding English subject	2.51 (1.12)	1.53 (0.92)	4.9*
15	I am not interest in studying biology	2.51 (1.17)	1.57 (0.74)	4.98*
16	I am not interested in studying physics	2.46 (1.12)	1.29 (0.57)	6.78**
17	I am not interested in studying chemistry	2.51 (1.04)	1.35 (0.64)	6.98**
18	I am not interested in studying maths	2.38 (1.21)	1.22 (0.46)	6.5**
19	I am not interested in studying English subject	2.42 (1.14)	1.31 (0.488)	6.61**
20	I have fear of examination	3.78 (1.08)	1.68 (0.88)	11.05**
21	I do not understand whatever is read	3.70 (0.81)	1.82 (0.88)	10.19**
22	I am attracted towards TV	3.72 (1.18)	2.29 (1.25)	6.06**
24	I spend time with friends	3.68 (0.84)	2.61 (1.03)	5.62**
25	I am not regular in studies	3.92 (0.88)	1.77 (0.74)	13.63**
26	I think about opposite sex	2.40 (1.07)	1.48 (0.79)	5.09**
27	I do not understand lecturers	2.75 (0.80)	1.55 (0.63)	7.87**
28	I have low confidence	3.40 (0.96)	1.18 (0.38)	15.72**

Sl. No.	Statements	Gp(1) n=54	Gp(2) n=54	Criterion groups (t-value)
29	I have not solved earlier papers	3.27 (1.41)	1.64 (0.88)	7.13**
30	I hesitate to clarify doubts from lecturers	3.85 (0.81)	1.64 (0.78)	14.38**
31	I read when examination is near	4.00 (0.81)	1.87 (1.21)	10.31**
32	I have fear of failure	3.50 (0.90)	1.58 (1.12)	9.70**
33	I require more time to learn subjects	4.27 (.81)	2.81 (1.27)	7.11**
34	I am not able to do day-to-day activities of classes	3.57 (1.08)	2.03 (1.02)	7.53**
35	I do not work hard	3.40 (0.98)	1.58 (0.76)	10.71**
36	I do not have the ability to study	2.29 (1.12)	1.03 (0.19)	8.09**
37	I feel bore to attend the classes	2.22 (1.00)	1.18 (0.80)	4.64*
38	I feel inferior in studies	3.33 (0.86)	1.44 (0.74)	12.13**
39	I remember of past events	3.94 (0.87)	3.01 (1.38)	4.16*
40	I am not able to maintain time-table of studies	3.70 (1.20)	2.03 (0.80)	8.45**
41	I am unable to complete work within time	3.75 (0.98)	2.05 (0.89)	9.36**
42	I fear of criticisms by teachers	3.81 (1.04)	1.88 (0.98)	9.84**
43	I hurry in exam	3.77 (1.00)	2.70 (1.14)	5.19**
44	I do not understand the lessons	3.00 (.75)	1.75 (0.79)	8.30**
45	I lack motivation to read.583	2.83 (1.28)	1.40 (0.87)	6.72**
46	I am not able to take down notes	2.96 (1.22)	1.51 (0.60)	7.75**
47	I loss interest to study	2.98 (1.12)	1.14 (0.49)	10.98**
48	I do not know how to read and write for exam	3.57 (1.12)	1.50 (0.74)	11.38**
49	I am slow in writing	3.14 (1.44)	1.94 (0.85)	5.26**
50	I have bad handwriting	2.70 (1.46)	1.68 (0.96)	4.26*
51	I postpone studies	3.92 (0.74)	1.68 (0.79)	15.06**
52	It is hard for me to sit for studies	3.5 (1.00)	1.37 (0.55)	13.60**
53	I am not interested to prepare notes	2.85 (1.01)	1.68 (0.92)	6.22**
54	I am not interested to write important points while reading	2.92 (1.37)	1.24 (0.51)	8.45**
55	I am not interested in repetition of same chapter for perfection	3.35 (1.21)	1.46 (0.63)	10.11**
56	I fear of getting less marks in Physics	3.55	1.61	10.49**

Sl. No.	Statements	Gp(1) n=54	Gp(2) n=54	Criterion groups (t-value)
57	I fear of getting less marks in Chemistry	(1.05) 3.37 (0.83)	(0.85) 1.50 (0.81)	11.78**
58	I fear of getting less marks in Maths	3.64 (1.10)	1.66 (0.86)	10.37**
59	I fear of getting less marks in Biology	3.16 (1.22)	1.44 (0.81)	8.5**
60	I fear of getting less marks in English	2.27 (1.20)	1.22 (0.53)	5.88**
61	I get bored in reading Physics	2.87 (0.89)	1.24 (0.54)	11.45**
	I get bored in reading chemistry	0.87 (0.89)	1.24 (0.54)	11.45**
63	I get bored in solving problems of Maths	2.74 (0.97)	1.24 (0.54)	9.86**
64	I get bored in reading Biology	2.96 (1.30)	1.40 (0.63)	7.90**
65	I get confused in writing answers of Physics	3.53 (1.02)	1.79 (0.83)	9.69**
66	I get confused in writing answers of Chemistry	3.68 (0.84)	1.87 (0.86)	10.01**
67	I get confused in solving problems of Maths	3.68 (0.96)	2.00 (1.00)	8.85**
68	I get confused in writing answers of Biology	3.40 (1.14)	1.74 (0.93)	8.30**

c. Discriminative validity

The data of 200 students on 66 items was subjected to the criterion groups t-value analysis of 200 II pre-university students (Table 3). The results confirmed that 66 item of the scale had discriminative potentiality which means that each item discriminate between the group of the individuals who had developed scholastic difficulty to the maximum level and also who had developed scholastic difficulty to the minimum level.

3.3 Reliability

a. Split-half reliability: Scholastic difficulty scale consisting of 66 items with 5 alternative answers such as always, most of the times, sometime, rarely and never was administered on a random sample of 150 II PUC students. The data of 150 students was subjected to split-half reliability test with Spearman Brown formula to test reliability of the scale. The coefficient of split half reliability which was 0.93 significant at 0.01 level of significance.

b. Test-Retest reliability: Test-retest reliability of scholastic difficulty scale was undertaken. The scale was administered on a sample of 35 students of I year B.H.Sc. twice with on interval

of 10 days. The coefficient of test and retest scores was 0.800 which was significant at 0.00 level of significance.

4. CONCLUSION AND IMPLICATION

The students of II pre-university courses (PUC) were the real and objective source to identify different scholastic difficulties. 68 different scholastic difficulties were adopted by the 140 students. These difficulties were considered as scholastic difficulties. Each of the difficulty was expressed in a statement form. Initially, there were 68 statements, these items with “Always, Sometimes, Rarely and Never” alternatives were administered on 200 II PUC students (108 male and 92 female). The data of these students were subjected to percentage, correlation and t-test analysis. Finally, 66 items were included in the Scholastic Difficulty scale.

The coefficient of split-half reliability was 0.93, which was significant at 0.01 level of significance. Test-retest reliability of scholastic difficulty scale was 0.800, which was significant at 0.00 level of significance.

The developed scholastic difficulty is unique to II PUC students. It provides an insight to the difficulties faced by the II PUC students

pertaining to their academics. The scale provides awareness among parents, educators, administrators and counsellors to capture the clear picture regarding the student's academic weakness. The developed scholastic difficulty is unique to II PUC students and has proven to be an acceptable and reliable tool for assessing the scholastic difficulty faced by the student. The scale has been subjected to numerous analyzes to confirm its reliability and validity, and is therefore suitable for researchers to use in future studies on studying the scholastic difficulty of Indian junior college students as there are very few reliable region specific and culturally fair tools.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Roberts RE, Roberts CR, Xing Y. Rates of DSM-IV psychiatric disorders among adolescent in a large metropolitan area. J. Psychiatric Res. 2006;41:959-967.
2. Hughes A. Somatic complaints in children with anxiety disorders and their unique prediction of poorer academic performance. Child Psychiatry. 2004; 29:211-220.
3. Cullinan D, Sabornic EJ. Characteristics of emotional disturbance in middle and high school students. J. Emotional and Behavioural Disorders. 2004;12:157-167.
4. Rapport MD, Scanlan SW, Denney CB. Attention-deficit/hyperactivity disorder and scholastic achievement: A model of dual developmental pathways. The Journal of Child Psychology and Psychiatry and Allied Disciplines. 1999;40(8):1169-83.
5. Skoric MM, Teo LL, Neo RL. Children and video games: addiction, engagement, and scholastic achievement. Cyberpsychology & behavior. 2009;12(5):567-72.
6. Rapport MD, Denney CB, Chung KM, Hustace K. Internalizing behavior problems and scholastic achievement in children: Cognitive and behavioral pathways as mediators of outcome. Journal of Clinical Child Psychology. 2001;30(4):536-51.
7. Frydenberg E, Lewis R. Adol coping scale administrators Manual, Australian Council for Edtl. Res. Melbourne; 1993.

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