

Descriptive Analysis Of Metacognition And Resilience Of Higher Secondary Scheduled Caste Students – Gender Wise

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ABSTRACT

The study aims to find out the descriptive analysis between Metacognition and Resilience of higher secondary scheduled caste students. The sample selected for the present study consists of 652 higher secondary scheduled caste students studying in government, government-aided and private schools from Tirunelveli, Tuticorin and Kanniyakumari districts of Tamil Nadu, India, the survey method used in the study in simple random sampling. For measuring, tool used the Metacognition Scale (2018) and Resilience Scale (2018) developed by the investigator and the guide. The data consists the background variables gender, major subject, type, nature and locality of the school, father's and mother's education, father's and mother's occupation and monthly income of the family for the calculation. The data collected is analyzed using level and 't' test. The finding shows that i) there is significant difference between male and female higher secondary scheduled caste students in their metacognition with regard to their gender. ii) there is significant difference between male and female higher secondary scheduled caste students in their resilience with regard to their gender.

Key words: *Metacognition, Resilience and Descriptive analysis between the variables of higher secondary scheduled caste students.*

Introduction

Education is the process of facilitating learning and acquisition of knowledge. It helps to change the world into something better. Education equips an individual with the ability to cope with the demanding situations of life. As an individual in the society, the student has to think critically about the various issues in educational area. Metacognitive knowledge is declarative knowledge stored in memory and comprises models of cognitive processes, such as language, memory and so forth. Resilience is what gives people the psychological strength to cope with stress and hardship. It is the mental reservoir of strength that people are able to call on in times of need to carry them through without falling apart. Likewise, special

metacognitive and resilience training helps the children in their high level achievement and gives an exposure to show their hidden talents.

Need and significance of the study

The scheduled castes are economically, socially and educationally backward classes of citizens in India. Educational backwardness affects some aspects of their social life too. So eradicate the learning difficulties Prof. Benjamin Bloom introduced 'Bloom's Taxonomy'. He set six hierarchical models namely knowledge, comprehension, application, analysis, synthesis and evaluation. All of these slot into the cognitive domain. Cognitive domain relates to how the brain processes information and thoughts.

Metacognition experts use the levels of Bloom's taxonomy to regulate their work by planning, monitoring and evaluating. It helps the students to increase the student's self-determining, self-assessing and self-evaluating progress. It consists of higher-order mental processes involved in learning. Resilience is the capacity to recover quickly from difficulties, discrimination, serious challenges etc. Resilient students are step out courageously, try something new, and worry less about failure instead, concentrate on the potential benefits. In this way, Metacognition and Resilience contribute a lot and impart a significant role in their academic role.

Objectives of the study

1. To find out the level of higher secondary scheduled caste students in their Metacognition.
2. To find out the level of higher secondary scheduled caste students in their Resilience.
3. To find out whether there is any significant difference between male and female higher secondary scheduled caste students in their Metacognition.
4. To find out whether there is any significant difference between male and female higher secondary scheduled caste students in their Resilience.

Methodology

The investigator has adopted normative survey method. Survey is a method of research involving collection of data directly from the students at a particular period.

Population and area of the study

The population for the present study consisted of all higher secondary scheduled caste students studying in government, government-aided and private schools in Tirunelveli, Tuticorin and Kanyakumari districts of Tamil Nadu.

Sample for the study

The investigator selected 652 higher secondary scheduled caste students by simple random sampling technique.

Descriptive analysis

1. To find out the level of Metacognition and Resilience of higher secondary scheduled caste students.

Table-1
Level of Metacognition and Resilience of higher secondary scheduled caste students

Metacognition and Resilience	Total	Low		Moderate		High	
		N	%	N	%	N	%
Metacognition	652	207	31.7	312	47.8	133	20.4
Planning	652	143	21.9	389	59.6	120	18.4
Monitoring	652	154	23.6	365	55.9	133	20.4
Evaluating	652	129	19.7	416	63.8	107	16.4
Resilience	652	471	72.1	110	18.0	47	6.4
Stability	652	120	18.4	473	72.5	59	9.1
Adaptive Capacity	652	119	18.2	450	69.0	83	12.7
Social Safety Needs	652	132	20.2	460	70.5	60	9.2

It is inferred from the table 1 that, 18.4 percent have high level of planning of metacognition. 20.4 percent have high level of monitoring of metacognition. 16.4 percent have high level of evaluating of metacognition. 20.4 percent have high level of metacognition of higher secondary scheduled caste students. 6.4 percent have high level of resilience. 9.1 percent have high level of stability of resilience. 12.7 percent have high level of adaptive capacity. 9.2 percent have high level of social safety needs of higher secondary scheduled caste students.

- To find out the level of Level of male and female higher secondary scheduled caste students in their Metacognition and its dimensions

Table-2
Level of male and female higher secondary scheduled caste students in their Metacognition and its dimensions

Metacognition and its Dimensions	Gender	Low		Moderate		High		Total	
		N	%	N	%	N	%	N	%
Planning	Male	56	8.5	142	21.8	44	6.8	242	37.2
	Female	87	13.4	247	37.8	76	11.6	410	62.8
Monitoring	Male	53	8.12	136	20.8	53	8.12	242	37.2
	Female	101	15.4	229	35.1	80	12.4	410	62.8
Evaluating	Male	53	8.12	144	22.0	45	6.9	242	37.2
	Female	76	11.6	272	41.7	62	9.6	410	62.8
Metacognition	Male	113	17.3	94	14.4	35	5.3	242	37.2
	Female	94	14.4	218	33.4	98	15.1	410	62.8

It is inferred from the table 2 that, 6.8 percent of the male higher secondary scheduled caste students have high level of planning. Among the female students 11.6 percent of them have high level of planning. The male higher secondary students 8.12 percent of them have high level of monitoring. Among the female students 12.4 percent of them have high level of

monitoring. The male higher secondary scheduled caste students 6.9 percent of them have high level of evaluating. Among the female students 9.6 percent of them have high level of evaluating. The male higher secondary scheduled caste students 5.3 percent of them have high level of met cognition. Among the female students 15.1 percent of them have high level of met cognition.

3. To find out the level of male and female higher secondary scheduled caste students in their Resilience and its dimensions

Table-3

Level of male and female higher secondary scheduled caste students in their Resilience and its dimensions

Resilience and its Dimensions	Gender	Low		Moderate		High		Total	
		N	%	N	%	N	%	N	%
Stability	Male	57	8.7	167	25.6	18	2.8	242	37.2
	Female	63	9.6	306	46.9	41	6.3	410	62.8
Adaptive Capacity	Male	42	6.4	170	26.0	30	4.6	242	37.2
	Female	77	11.8	280	42.9	53	8.2	410	62.8
Social Safety Needs	Male	42	6.4	184	28.2	16	2.5	242	37.2
	Female	90	13.8	276	42.3	44	6.7	410	62.8
Resilience	Male	44	6.4	300	46.1	29	4.3	242	37.2
	Female	33	5.2	169	26.0	75	11.4	410	62.8

It is inferred from the table 3 that, the male higher secondary scheduled caste students have 4.3 percent of high level in resilience. Among the female students 11.4 percent of them have high level of stability. The male higher secondary scheduled caste students have 2.8 percent of high level in stability. Among the female students 6.3 percent of them have high level of stability. The male higher secondary students 4.6 percent have high level of adaptive capacity. Among the female students 8.2 percent have high level of adaptive capacity. The male higher secondary students have 2.5 percent high level of social safety needs. Among the female students have 6.7 percent high level in social safety needs.

Hypothesis-1

1. There is no significant difference between male and female higher secondary scheduled caste students in their Metacognition and its dimensions.

Table-4

Difference between male and female higher secondary scheduled caste students in their Metacognition and its dimensions

Metacognition and its Dimensions	Gender	N	Mean	SD	df	Calculated 't' value	Remarks
Planning	Male	242	1.9504	.64224		.442	N.S
	Female	410	1.9732	.63072			

Monitoring	Male	242	2.0000	.66320	650	.953	N.S
	Female	410	1.9488	.66326			
Evaluating	Male	242	1.9669	.63682		.022	N.S
	Female	410	1.9659	.57986			
Metacognition	Male	242	1.6777	.71400		5.886	S
	Female	410	2.0098	.68509			

Note: At 5% level of significance, for 650 df, the table value of 't' is 1.96

NS = Not Significant, S = Significant.

The table 4 reveals that, the calculated 't' value for the dimensions of metacognition like planning, monitoring and evaluating are more than 0.05 and so are not significant at 5% level. It means that there is no significant difference in the metacognition of higher secondary scheduled caste students due to their gender. Hence the formulated null hypothesis, "There is no significant difference between metacognition of higher secondary scheduled caste students due to their gender to which they belong" is accepted. Thus, there is significant difference between male and female higher secondary scheduled caste students in their metacognition. While comparing the mean scores, the female (2.0098) higher secondary scheduled caste students have better than the male (1.6777) students in their metacognition.

Hypothesis: 2

There is no significant difference between male and female higher secondary scheduled caste students in their resilience and its dimensions.

Table- 5

Difference between male and female higher secondary scheduled caste students in their Resilience and its dimensions

Resilience and its Dimensions	Gender	N	Mean	SD	df	Calculated 't' value	Remarks
Stability	Male	242	27.79	3.107	650	2.406	S
	Female	410	28.38	2.946			
Adaptive Capacity	Male	242	27.62	3.696		0.858	NS
	Female	410	27.89	3.792			
Social Safety Needs	Male	242	27.73	2.346		0.241	NS
	Female	410	27.78	2.733			
Resilience	Male	242	93.65	16.065		4.165	S
	Female	410	99.00	15.701			

Note: At 5% level of significance, for 650 df, the table value of 't' is 1.96

The table 5 reveals that, the calculated 't' value for the dimensions of resilience like adaptive capacity, safety needs and resilience are more than 0.05 and so are not significant at 5% level. Hence the formulated null hypothesis, "there is no significant difference between gender and its dimensions of resilience namely adaptive capacity and social safety needs of higher

secondary scheduled caste students” is rejected. Thus, there is significant difference between gender and stability of resilience of higher secondary scheduled caste students. While comparing the mean scores, the female higher secondary scheduled caste students (28.38) have better than the male students (27.79) in their stability and the female higher secondary scheduled caste students (99.00) have better than the male students (93.65) in their resilience.

Recommendations

- i. The teachers should change their teaching method for male students by adopting novel and innovative methods of teaching. This will improve their cognitive level and competence level. In order to know the latest teaching methods and strategies, the teachers should be given training programmes highlighting the latest teaching techniques.
- ii. Some of the experienced teachers could be trained as master trainers to conduct seminars, workshops for the newly recruited teachers as resource persons to improve the arts students’ ability to attend, recognize, imagine, conceptualize and remember. It develops their metacognition skill and resilience ability.
- iii. Teachers should not be much interference in the students’ creative work that can prove their potentialities without any hesitation. Studies on moral value education and personality development courses should be conducted in the schools to inculcate self-confidence, freedom to deliver doubts, creativity and memory on things. It helps the girls and co-education student’s steps to journey towards destination.
- iv. Cognitive skill should be developed through encouraging the students and reward them when they perform better. Proper training should be given to the students to develop their cognitive skill. And also the teachers must be given practical work related to develop their cognitive skill.

Conclusion

The study has highlighted that level of metacognition and resilience of higher secondary scheduled caste students with regard to their gender are at moderate level. Hence all the possible effective measures should be taken to raise their potentialities. The present study have great recommendations for the students, teachers, parents, further researchers and the society at large in the process of promoting metacognition and resilience among students to make the world a better place to live in.

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