ACADEMIC RESILIENCE, COGNITIVE ABILITY AND EMOTIONAL COMPETENCE OF SECONDARY SCHOOL STUDENTS

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Abstract:
The academic journey of students is shaped not only by intellectual abilities but also by emotional and adaptive resources that enable them to thrive in challenging contexts. The present study examines academic resilience, cognitive ability and emotional competence among secondary school students across gender and residential background. With growing academic pressures and psychological challenges, understanding how these three factors contribute to students' development which is crucial for effective teaching and learning. Stratified random sampling was used for selecting the sample. The sample for the present study consists of 1600 secondary school students 800 rural secondary school students (400 male, 400 female) and 800 urban secondary school students (400 male and 400 female). Employing a descriptive comparative research design, data were collected from representative sample students using standardized psychological scales. The study focuses on comparing groups based on selected demographic variables such as gender and residence. The findings indicated no significant differences in academic resilience with respect to gender and rural and urban background, whereas cognitive ability and emotional competence exhibited significant differences across both gender and rural and urban groups among secondary school students.
Keywords: Academic resilience, Cognitive ability, Emotional competence, Secondary school students

INTRODUCTION

Education in the twenty-first century emphasizes not only the acquisition of knowledge but also the development of emotional and adaptive capacities. The educational journey of adolescents at the secondary stage is marked by intense intellectual, emotional, and social transitions. Academic success in this phase is not determined solely by scholastic aptitude but is also influenced by a complex interplay of academic resilience, cognitive abilities and emotional competence. Researchers have increased emphasis on the need to examine these dimensions comparatively, as they illuminate the differential capacities of students to thrive in demanding educational contexts (Neisser, 2013). Resilience is the process and outcome of successfully adapting to challenging life experiences, especially through mental, emotional and behavioural flexibility and adjustment to external and internal demands. In educational research, academic resilience is recognized as a dynamic strength that enables students to negotiate academic stressors, recover from difficulties and remain productively engaged in learning. It reflects the adaptive interplay of personal agency of environmental support that collectively safeguard students' educational progress. Academic resilience is the students' ability to maintain or regain high levels of academic functioning despite adverse circumstances. It reflects persistence, adaptability and positive coping strategies in the face of challenges such as examination pressure, socio-economic difficulties or personal setbacks (Martin & Marsh, 2009). It has been proven that resilient students exhibit stronger problem-solving skills, optimism and self-regulation, which translate into better academic outcomes (Morales, 2010). Kumar and Singh (2019) revealed that resilience acts as a protective factor against academic stress, particularly among higher secondary school students preparing for competitive examinations. Masten (2001) finds that there has been an increased interest among scholars in understanding academic resilience due to dropout rates in schools and colleges.

Cognitive ability is defined as the intellectual capacity to reason, remember, pay attention, problem-solve, and process information. It plays a fundamental role in students' learning outcomes. It is a core mental process that enables individuals to acquire knowledge and apply it in academic and real-life contexts. It encompasses attention, perception, reasoning, and problem-solving, which play an essential role in students' academic achievement. Empirical evidence has consistently established a significant association between cognitive ability and academic performance. Deary et al. (2007) reported that individual differences in cognitive skills explain a large proportion of variance in educational outcomes. Piaget's (1972) theory of cognitive development and contemporary neuropsychological research both affirm that adolescence is a crucial period for the refinement of higher-order cognitive skills. Adeyemo (2015) demonstrates that reasoning and working memory are predictors of academic success at the secondary level. Thus, exploring cognitive abilities in this context provides a lens to understand disparities in students' academic growth.

Emotional competence encompasses the ability to perceive, understand, regulate and express emotions

constructively. It includes emotional awareness, regulation and interpersonal skills which have emerged as a significant predictor of learning, classroom behaviour, and psychological well-being. Unlike the traditional construct of intelligence, emotional competence highlights the effective and interpersonal dimensions of learning (Goleman, 1995; Saarni, 2000). In school settings, it governs students' capacity to cope with stress, build relationships, and sustain motivation for learning. Brackett and Rivers (2014) found that students with higher emotional competence report lower levels of classroom disengagement. Similarly, Petrides et al. (2016) observed that emotional regulation skills significantly predict academic persistence. Parker et al. (2004) stated that emotionally competent students are more capable of managing examinations and anxiety, which allows them to use their cognitive skills effectively. Mayer, Caruso and Salovey (2016) believe that emotional competence equips learners with self-awareness, emotional regulation, empathy and interpersonal skills which facilitate adaptation to school demands. These studies suggest that students' emotional capacities contribute to their academic adjustment and performance.

Need and Significance of the Study:
The secondary stage is decisive for student's career trajectories, yet it is also the phase most vulnerable to academic pressure, emotional stability and identity crises. The combined consideration of academic resilience, cognitive abilities and emotional competence provides a holistic framework for understanding secondary educational outcomes. Education serves as a foundation for nurturing student's academic resilience, cognitive abilities and emotional competence, which are essential for shaping successful and responsible individuals in society. Academic resilience not only influences intellectual growth but also contributes significantly to the development of emotional competence. The overall performance and success of an individual depends on constellation of attributes such as academic resilience, cognitive capacity and emotional maturity which holds a pivotal place. It is imperative to foster these dimensions among secondary school students so that they are equipped with the skills and dispositions necessary to adapt, persevere and excel in diverse life situations. The present study aims to investigate whether significant differences exist among secondary school students in terms of their academic resilience, cognitive abilities, and emotional competence, thereby offering insights for both educators and policymakers.

Objectives of the Study:
1. To study the academic resilience, cognitive abilities and emotional competence of secondary school students.
2. To compare male and female secondary school students on academic resilience.
3. To compare male and female secondary school students on cognitive abilities.
4. To compare male and female secondary school students on emotional competence.
5. To compare rural and urban secondary school students on academic resilience.
6. To compare rural and urban secondary school students on cognitive abilities.
7. To compare rural and urban secondary school students on emotional competence.

Hypotheses:
1. There is no significant difference between male and female secondary school students on Academic Resilience.
2. There is no significant difference between male and female secondary school students on Cognitive Abilities.
3. There is no significant difference between male and female secondary school students on Emotional Competence.
4. There is no significant difference between rural and urban secondary school students on Academic Resilience.
5. There is no significant difference between rural and urban secondary school students on Cognitive Abilities.
6. There is no significant difference between rural and urban secondary school students on Emotional Competence.

METHODOLOGY AND PROCEDURE

The present study employed a stratified random sampling technique to select 1600 secondary school students. The sample framework consisted of Government secondary school students located in district Srinagar and Ganderbal of Kashmir. The further breakup of the sample is as under:

Rural (800)	Male 400
	Female 400
Urban (800)	Male 400
	Female 400

Description of the Tools:
The following tools were selected for collecting the required data.
1) Academic Resilience Scale of Dr. Mihir Kr. Mallick and Simranjit Kour (ARS-MMKS) (2015)

2) Cognitive Ability Test (CAT) of Madhu Gupta and Bindiya Lakhani (2018)
3) Emotional Competence Scale (ECS) of Sarita Dahiya and Sonia Gahlawat (2018)

Statistical Techniques:
The Statistical techniques used to analyse the collected data are as follows:
Mean, S.D, t-test.

Analysis & Interpretation:

Table 1: Presents an overview of overall levels of Academic Resilience among secondary school students, N=1600

Levels of Academic Resilience	N	Percentage
Extremely high	94	5.9
High	245	15.3
Above Average	507	31.7
Average/Moderate	504	31.5
Below Average	158	9.9
Low	58	3.6
Extremely low	34	2.1
Total	1600	100%

Table 1 presents an overview of the overall academic resilience levels observed among secondary school students. The table depicts that on the above side 5.9% of secondary school students exhibit extremely high level, 15.3% students have high level, 31.7% above average, 31.5% average/moderate level of academic resilience. While on the lower side 9.9% students have below average, 3.6% low and 2.1% extremely low level of academic resilience.

Table 2: Showing the overall levels of Cognitive Ability among secondary school students, N=1600

Levels of Cognitive Ability	N	Percentage
High	164	10.25
Above Average	1,101	68.83
Average	329	20.58
Below Average	6	0.34
Total	1600	100%

Table 2 displays the overall levels of Cognitive Ability among secondary school students. The table reveals that on the above side 10.25% of secondary school students exhibit high level, 68.83% above average, 20.58% average and 0.34% below average levels of cognitive ability.

Table 3: Showing the overall levels of Emotional Competence among secondary school students, N=1600

Levels of Emotional Competence	N	Percentage
Extremely high	149	9.33
High	128	8.0
Above Average	660	41.25
Average	381	23.83
Below Average	272	17.0
Low	7	0.42
Extremely low	3	0.17
Total	1600	100%

Table 3 shows the overall levels of emotional competence among secondary school students. The table indicates that on the above side 9.33% of secondary students exhibit extremely high level, 8.0% high level, 41.25% above-average level and 23.83% average level of emotional competence. While on lower side 17.0% below average level, 0.42% low level and 0.17% extremely low level of emotional competence.

Table 4: Showing the significant difference between mean scores of male and female secondary school students on various dimensions of academic resilience (N=800 in each group)

Dimension	Gender	Mean	S.D.	t-Value	Level of Significance
Academic Confidence	Male/Female	32.52/32.28	3.20/2.90	1.57	Insignificant
Sense of Well-Being	Male/Female	41.89/41.46	3.76/4.40	2.10	Insignificant
Motivation and ability to get goals	Male/Female	43.53/42.03	4.14/5.22	6.37	Significant at 0.01 level
Resilience	Male/Female	38.38/37.49	4.72/5.47	3.48	Significant at

with Peers and Adults					0.01 level
Emotional Regulations and physical health	Male/Female	52.58/52.38	6.30/6.37	0.63	Insignificant
Overall Academic Resilience	Male/Female	208.9/205.64	21.83/24.70	2.21	Insignificant

The perusal of table 4 shows the mean comparison of male and female secondary school students on various dimensions of academic resilience and their overall scores. It is evident from the table that male and female secondary school students do not differ significantly at 0.01 level on the dimensions of academic confidence, sense of well-being, emotional regulation and physical health and overall score of academic resilience. This indicates that both groups exhibit almost similar level of resilience on these dimensions. Such similarity in these dimensions is attributed to equal educational opportunities, capacities to cope with academic challenges, recover from difficulties and maintain persistence towards scholastic achievement. However, it was found that male and female secondary school students differ significantly at 0.01 level on motivation and ability to get goals, resilience with peers and adults. This indicates that gender influences these specific aspects of academic resilience. This difference may be due to variation in goal orientation, motivational factors and interpersonal relationships.

Table 5: Showing the significant difference between mean scores of rural and urban secondary school students on various dimensions of academic resilience (N= 800 in each group)

Dimension	Locale	Mean	S.D.	t-Value	Level of Significance
Academic Confidence	Rural/Urban	30.52/30.29	3.12/3.05	1.49	Insignificant
Sense of Well-Being	Rural/Urban	42.77/42.22	4.77/4.38	2.40	Insignificant
Motivation and ability to get goals	Rural/Urban	40.90/40.65	4.46/4.55	1.10	Insignificant
Resilience with Peers and Adults	Rural/Urban	37.99/37.88	5.20/5.07	0.43	Insignificant
Emotional Regulations and Physical Health	Rural/Urban	52.50/52.46	6.57/6.08	0.13	Insignificant
Overall Academic Resilience	Rural/Urban	204.68/203.5	24.14/23.21	0.99	Insignificant

The table 5 shows the mean comparison between rural and urban secondary school students on various dimensions of academic resilience and their overall scores. A quick look on the above table reveals that rural and urban secondary school students do not differ significantly at the 0.01 level on the dimensions of academic confidence, sense of wellbeing, motivation and ability to get goals, resilience with peers and adults, emotional regulations and physical health and overall academic resilience. This indicates that both the groups possess almost similar levels of academic resilience. Both rural and urban secondary school students are equally confident in their academic abilities, maintain a comparable sense of well-being, demonstrate similar motivational and goal-setting capacity. They share moments of happiness and sorrow with their peers, work diligently, make appropriate decisions, exhibit emotional control, show respect for the feelings and emotions of others, participate in recreational activities and maintain persistence towards academic achievement.

Table 6: Showing the significant difference between Mean scores of male and female secondary school students on various dimensions of cognitive ability (N=800 in each group)

Dimension	Gender	Mean	S. D	t-Value	Level of Significance

Awareness	Male/Female	7.44/6.05	2.87/2.64	10.08	Significant at 0.01 level
Memory	Male/Female	8.86/7.95	2.73/2.53	6.91	Significant at 0.01 level
Understanding	Male/Female	7.75/6.64	2.43/2.94	8.23	Significant at 0.01 level
Reasoning Ability	Male/Female	8.54/7.52	2.16/1.87	10.10	Significant at 0.01 level
Problem solving	Male/Female	8.07/7.45	2.33/1.68	6.35	Significant at 0.01 level
Overall Cognitive Ability	Male/Female	40.66/35.61	12.52/11.66	8.35	Significant at 0.01 level

Table 6 shows the mean comparison of male and female secondary school students on different dimensions of cognitive ability and on their overall scores. It is quite clear from the above table that male and female secondary school students differ significantly at 0.01 level on the dimensions of awareness, memory, understanding, reasoning ability, problem-solving and their overall scores on cognitive abilities. It indicates that gender has a significant influence on students' cognitive functioning. Male secondary school students tend to perform better in certain areas such as reasoning, problem-solving, retention, and understanding as compared to their female counterparts.

Table 7: Showing the significant of difference between mean scores of rural and urban secondary school students on various dimensions of cognitive ability (N=800 in each group)

Dimensions	Locale	Mean	S. D	t-Value	Level of Significance
Awareness	Rural/Urban	7.63/ 8.26	2.20/1.78	6.30	Significant at 0.01 level
Memory	Rural/Urban	5.97/6.90	1.78/1.60	11.06	Significant at 0.01 level
Understanding	Rural/Urban	4.92/5.38	1.48/2.17	4.95	Significant at 0.01 level
Reasoning Ability	Rural/Urban	5.86/6.43	1.78/1.56	6.81	Significant at 0.01 level
Problem solving	Rural/Urban	4.84/5.25	1.86/1.58	4.75	Significant at 0.01 level
Overall Cognitive Ability	Rural/Urban	29.22/32.22	9.08/8.69	6.75	Significant at 0.01 level

The perusal of Table 7 shows the mean comparison of rural and urban secondary school students on various dimensions of cognitive ability and on their overall scores. It is evident from the above table that rural and urban secondary school students differ significantly at 0.01 level on the dimensions of awareness, memory, understanding, reasoning ability, problem-solving ability and their overall scores on cognitive ability. The result indicates that urban secondary school students tend to demonstrate higher levels of awareness, recall and retention, comprehension, reasoning and problem-solving skills compared to their rural counterparts. Greater access to enrich better teaching-learning facilities and supportive academic environments in urban areas likely contribute to enhanced cognitive development observed among these students. It depicts that urban secondary school students have high level of awareness, recall and retention, good understanding, reasoning ability and problem-solving ability as compared to rural secondary school students. This difference may be attributed to variation in educational resources, learning environments and exposure to stimulating cognitive tasks which are generally more readily available setting.

Table 8: Showing the significance of differences between mean scores of male and female secondary school students on various dimensions of emotional competence. The sample size (N=800 in each group).

Dimension	Gender	Mean	S.D.	t-Value	Level of Significance

Self-awareness	Male/Female	25.09/24.16	3.68/2.57	5.86	Significant at 0.01 level
Adaptability	Male/Female	30.80/29.58	4.21/3.68	6.17	Significant at 0.01 level
Motivation	Male/Female	20.10/19.16	3.62/2.53	5.98	Significant at 0.01 level
Empathy	Male/Female	26.98/27.88	3.24/4.48	4.60	Significant at 0.01 level
Social skills	Male/Female	28.55/27.51	4.58/3.43	5.14	Significant at 0.01 level
Overall emotional competence	Male/Female	131.52/128.29	19.23/16.69	3.59	Significant at 0.01 level

The perusal table 8 shows the mean comparison of male and female secondary school students on different dimensions of emotional competence and on their overall scores. It is quite clear from the table that male and female secondary school students differ significantly at 0.01 level on the dimensions of self-awareness, adaptability, motivation, empathy, social skills and on the overall scores. The table depicts that male secondary students demonstrate higher self-awareness, better adaptability, strong motivation and greater emotional development than female secondary students. This may be due to gender biased variations in their emotional development and socialization, where male students may be encouraged to express confidence, take initiatives and interact socially.

Table 9: Showing the significant difference between mean scores of rural and urban secondary school students on various dimensions of emotional competence (N=800 in each group).

Dimensions	Locale	Mean	S. D	t-Value	Level of Significance
Self-Awareness	Rural/Urban	22.07/22.48	2.48/2.78	3.11	Significant at 0.01 level
Adaptability	Rural/Urban	26.46/27.23	4.65/3.95	3.99	Significant at 0.01 level
Motivation	Rural/Urban	18.06/19.95	3.78/3.45	10.44	Significant at 0.01 level
Empathy	Rural/Urban	27.98/28.30	5.63/4.46	1.26	Insignificant
Social skills	Rural/Urban	28.61/27.83	4.89/4.84	3.21	Significant at 0.01 level
Overall emotional competence	Rural/Urban	123.18/125.88	21.43/19.48	2.64	Significant at 0.01 level

The perusal of Table 9 shows the mean comparison of rural and urban secondary school students on various dimensions of emotional competence and on their overall score. It is evident from the table that rural and urban secondary school students differ significantly at 0.01 level on the dimensions of self-awareness, adaptability, motivation, social skills and overall scores of emotional competence. This depicts local background of students has a considerable influence on their emotional functioning. Urban secondary school students tend to exhibit higher levels of self-awareness, better adaptability, strong motivation and greater social skills as compared to their rural counterparts. This difference may be attributed to their broader social exposure, enriched academic environment, involvement in extracurricular activities and wider learning opportunities. These factors contribute to enhancing the emotional competence of urban students.

CONCLUSION:

Education is not merely the accumulation of knowledge; it is a transformative process that cultivates intellectual acumen, emotional maturity and adaptive strength, all of which are indispensable for navigating the complexities of contemporary society. At the secondary stage students encounter a period of profound developmental transitions marked by intensified academic demands, heightened social expectations, and emerging identity formation. Within this context, academic resilience, cognitive abilities and emotional competence assume critical importance as interdependent constructs shaping both academic achievement and holistic development. Academic resilience functions as a protective factor that empowers students to withstand setbacks recover from failure and sustain motivation in the face of adversity. Equally, cognitive abilities underpin the processes of reasoning, problem solving, memory and critical thinking, thereby providing the intellectual scaffolding for success in diverse learning contexts. Emotional competence, on the other hand, enables learners to regulate, affect, interpret

social cues, and engage in empathetic and constructive interactions, which are essential for maintaining psychological balance and social cohesion. In an era characterized by rapid change, uncertainty and intense competition, the synergy of resilience, cognitive acuity, and emotional intelligence equips learners with the capacity to thrive amidst challenges while safeguarding their mental health and overall well-being. Thus, nurturing of these dimensions within secondary education is not merely desirable but imperative for producing individuals who are resilient, intellectually capable, and emotionally balanced enough to contribute meaningfully to the progress of both self and society.

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