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Assessing the effects of self-concept and study habits as determinants of academic achievement of secondary school students

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Abstract
Rapid advancements in science and technology have introduced unprecedented challenges for the younger generation worldwide. In response to the demands of a dynamic and competitive global landscape, cultivating a well-educated, well-trained, and highly skilled youth population has become a strategic imperative. This priority is underscored in the visionary preamble of the World Programme of Action for Youth (1995), which identifies education as a cornerstone for youth empowerment and sustainable development. Since India, home to the world's largest adolescent population, holds a pivotal role in this global endeavour. As the principal stakeholder in shaping the future of youth, India's educational policies and interventions carry profound implications—not only for national progress but also for global human capital development. Against this backdrop, the present study was conducted with a randomly selected sample of 200 secondary school students from both urban and rural areas of Siwan district, Bihar. To assess students' self-concept, the Self-Concept Questionnaire developed by Dr. R. K. Saraswat (2011) was administered. Study habits were measured using the Test of Study Habits (TSHA) constructed by Dr. C. P. Mathur (1974). Academic achievement was operationalized as the percentage of marks obtained in the previous year's grade examination. Statistical analyses confirmed all hypotheses formulated to address the study's objectives, highlighting significant relationships among gender, locality, self-concept, study habits, and academic achievement.

Keywords: Self-concept, study habits, academic achievement, secondary school students

1. Introduction
Globalization and swift progress in science and technology have presented multifaceted challenges for contemporary youth. Addressing these demands necessitates both resilience and a solid foundation in education, training, and skill development. The future of a civilized society relies upon its ability to nurture a generation of educated, qualified, and socially responsible younger people. Evidently, the contribution of youth to nation-building has been crucial and beyond comparison. The acceptance of young people's leadership achieved international prominence in 1995 when the United Nations General Assembly ratified the "*World Programme of Action for Youth to the Year 2000 and Beyond*." This ground breaking initiative created an extensive framework to tackle critical challenges impacting youth worldwide. Of the 10 identified priority areas, education was assigned the highest priority, highlighting its essential role in enabling young people to contribute actively to social advancement. India, as a key participant in this worldwide discussion, occupies a distinctive position. India has a significantly large teenage population of almost 243 million persons aged 10-19 years (Hindustan Times, 2011), indicating significant potential for dramatic change. Leveraging this demographic dividend will require strategic investment in youth-focused policies, inclusive educational frameworks, and avenues for civic participation.

Adolescence
Adolescence is a time of massive physiological, cognitive, and socioemotional changes that occur between childhood and maturity. These changes help in the development of a more intricate, cohesive, and steady self-concept. It is a time of increased learning sensitivity and important discoveries that influence how adult life unfolds. G. Stanley Hall (1904) [13],

regarded as the progenitor of the child study movement, formally acknowledged adolescence as a distinct developmental stage. Hall characterized this phase as a "new" developmental stage arising from societal transformation in his seminal work, Adolescence. Hall emphasized the emotional instability of teens, particularly the frequency of their mood swings. Furthermore, Hall characterized adolescence as the stage of "storm and stress." Contemporary scholars have broadened this perspective, presenting adolescence as a period during which people undergo important life changes (Ellis, 2004 [9]; Seginer & Somech, 2000 [20]). Both protective and risk variables are involved in psychological development at this time. The development of self-regulation abilities, which are necessary for adaptive behavioural and emotional outcomes, is a crucial element. Adolescents who demonstrate the ability to manage conflicting demands—such as those arising from academic, familial, and peer contexts—tend to exhibit greater emotional and behavioral adjustment. The moderation effect of teacher-student relationships on the association between effortful control and adolescent adjustment. Wang, Brinkworth, and Eccles (2013) [23] demonstrate that effortful control—a behavioral manifestation of self-regulation—predicts better adjustment outcomes. Adolescents who can navigate conflicting demands effectively, especially with relational support, show lower levels of depression and misconduct. This aligns with neurobiological models that view adolescence as a period of heightened vulnerability and opportunity for adaptive growth.

The capacity to navigate competing demands during adolescence is intricately linked to neurodevelopmental alterations in self-regulation and decision-making. Casey *et al*. (2010) [5] emphasize the asynchronous development of the limbic system and prefrontal brain, which leads to increased emotional reactivity and propensity for risk-taking. Galvan (2014) [10] underscores the significance of reward sensitivity in teenage behavior, indicating that motivational systems frequently supersede cognitive control in emotionally charged situations. Spear (2000) [21] highlights the distinctive neurochemical changes occurring during adolescence that affect social and emotional processing. The findings indicate that teenagers' adjustment is influenced not only by external pressures but also by developing internal abilities to manage behavior and emotions.

In this context the role of educational institutions is highly crucial because it has been universally accepted that the educational environment plays a pivotal role in adolescent development, given the substantial amount of time teenagers spend in school settings. However, despite its potential to foster growth and resilience, schools have increasingly become sites where psychological challenges such as stress, anxiety, and depression are prevalent among students. This trend underscores the urgent need for targeted interventions and the cultivation of supportive, emotionally enriching educational climates that promote mental well-being alongside academic achievement.

Self-Concept

Self-concept denotes an individual's comprehensive perception of themselves, including beliefs, feelings, and attitudes influenced by personal experiences and environmental interactions (Eccles, 2005 [8]; Hurlock, 1979 [15]). This construct is multidimensional and develops through self-evaluation in multiple domains, such as academic, social, and emotional areas.

The development of self-concept is fundamentally grounded in phenomenological experience, as highlighted by Carl Rogers (1951) [19]. He differentiates between the actual self, which reflects individuals' current self-perceptions, and the ideal self, an aspirational construct influenced by personal objectives and societal norms. Variations among these identities can affect motivation, self-esteem, and psychological adaptation. Kelly's (1973) [16] personal construct theory emphasizes the influence of environmental reinforcements and significant others on self-concept, illustrating its dynamic and socially constructed characteristics.

Academic self-concept is an essential subdomain that relates to students' perceptions of their academic abilities and performance. It both influences and is influenced by academic achievement, establishing a reciprocal relationship substantiated by empirical research (Trautwein *et al*., 2006 [22]; Guay, 2003 [12]; Harter, 1998 [14]; Brookover *et al*., 1965 [4]). This construct functions as an educational outcome and a mediating variable in the analysis of achievement patterns.

Study Habits

Study habits denote the organised patterns and behaviours that students employ in their learning processes, including both effective and ineffective strategies (Good, 1973) [11]. These habits are acknowledged as essential factors influencing academic performance, connecting learning readiness with intentional engagement (Armstrong, 1956) [2].

Effective study habits are essential for learners, enabling mastery in specific fields and enhancing academic performance (Azikiwe, 1998) [3]. Poor study habits are often associated with emotional distress and reduced academic motivation, highlighting the necessity for structured study guidance. This guidance seeks to assist students in clarifying their study systems and addressing learning challenges.

Empirical evidence consistently demonstrates a positive correlation between study habits and academic achievement. Ansari highlights the substantial impact of study habits and study behaviour on student performance. Kemjika (1998) [17] identifies key elements of effective study habits, which encompass: • The establishment and maintenance of a daily study schedule • Active participation in teaching and learning activities • The cultivation of robust reading practices • The prompt completion and submission of assignments • Note-taking during both instructional and independent study periods. These components collectively enhance academic success and are essential for promoting self-study.

In the light of the literature reviewed, the present study is an attempt to discover strategies for healthy study habits and to find out the effect of self-concept on the academic achievement of adolescent students. The study also tends to explore the self-concept and study habits of rural and urban adolescents and their effects on academic achievement, which have not been properly studied so far. This work will provide significant cues to educational planners and educational psychologists. This justifies the present work. Here's a thematically organized and citation-supported literature review on study habits, self-concept, and academic achievement, with attention to gender and locality differences.

2. Review of Literature

Self-Concept and Academic Performance: Kumar, V (2015) [18] examined the influence of gender and academic achievement on self-concept among 226 senior secondary students. Using a 2×2 factorial design and ANOVA, the study found that students with higher academic achievement had significantly better self-concept scores. Gender differences were also evident, with female students showing stronger academic self-concept in some domains. Chamundeswari *et al*. (2014) [6] also reported that self-concept was a significant predictor of academic success, reinforcing the idea that students' beliefs about their abilities shape their motivation and performance. Yilmaz (2017) [24] found that positive self-concept was strongly correlated with higher academic achievement. Gender differences were observed, with female students reporting higher academic self-concept. Marsh & Craven (2006) conducted a longitudinal study and found that academic self-concept and achievement reinforce each other over time.

Gender and Locality Differences: Anju Sharma (2022) [1] compared rural and urban secondary school students and found significant differences in study habits, self-concept, and academic achievement. Urban students generally scored higher across all three variables, possibly due to better access to educational resources and structured environments. Gender-based analysis revealed that female students often exhibited more disciplined study habits and higher academic motivation, while male students showed more variability in self-concept and performance.

Study Habits and Institutional Context: Sharma (1971) compared the study habits of Gurukula and non-Gurukula students. The results showed no significant difference in study habits between the two groups, indicating that institutional type may not strongly influence students' study behavior. Chinna (1985) [7] investigated study habits in relation to overachievement and underachievement in English. The study emphasized how specific study strategies may correlate with academic performance, particularly in language subjects.

Study Habits and Academic Achievement: Chamundeswari *et al*. (2014) [6] conducted a survey of 381 higher secondary students and found that effective study habits were positively correlated with academic achievement. Students who practiced time management, concentration, and systematic note-taking tended to perform better academically. Sharma (2022) highlighted that unsatisfactory study habits were prevalent among underachievers in both rural and urban settings. The study emphasized the need for targeted interventions to improve study behaviors and thereby enhance academic performance.

Hypotheses: The present study will be conducted to examine the following hypotheses:

H_1: Secondary school male students of urban and rural areas differ significantly in their study habits.

H_2: Secondary school female students of urban and rural areas differ significantly in their study habits.

H_3: Secondary school students of urban and rural areas differ significantly in their academic achievement.

H_4: Secondary school male and female students differ significantly in their academic achievement.

3. Materials and Methods

1. **Sample**: The study will be undertaken on a sample of 200 secondary school students randomly drawn from different secondary schools located in urban and rural localities in Siwan district. The sample will consist of male and female subjects in equal proportion.
2. **Measuring Instruments**: The following measuring tools and instruments will be applied to obtain data:

- The Self-Concept Questionnaire by Dr. R. K. Saraswat (2011).
- Test of Study Habits and Attitudes (TSHA) constructed by Dr. C.P. Mathur (1974) will be applied.
- Cumulative Grade Point Average (CGPA) or percentage scores from recent school exams are used to assess the level of academic achievement.

3. **Operational Definition**

- Academic achievement can be measured using Cumulative Grade Point Average (CGPA) or percentage scores from recent school exams.
- Self-Concept: Students' perception of their own abilities, worth, and identity in academic and social domains.
- Study Habits: Patterns and strategies students use to manage time, concentrate, take notes, prepare for exams, and organize learning materials.

4. Results and Discussion

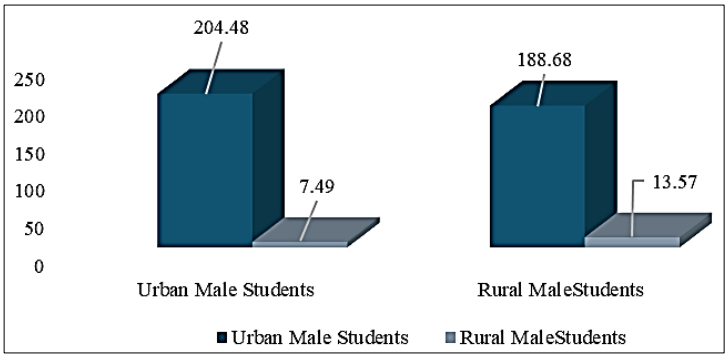
The data obtained for this investigation has been analyzed and discussed under the following headings:

Table 1: Self-Concept Comparison Between Urban Male and Rural Male Students of H/S Schools

Self-Concept	N	Mean	S.D.	SE_D	df	t-Stat	Level of Significance
Male Urban Students	50	204.48	7.49	2.25	98	7.21*	p<.01
Male Rural Students	50	188.68	14.02				

*Significant at 0.01 level

Figure 1



The results of the study reveal a statistically significant difference in self-concept between male and female students, with male students scoring substantially higher (Mean = 204.48) than their female counterparts (Mean = 188.68). The t-value of 7.21, significant at the 0.01 level, confirms that this difference is not due to chance but reflects a real disparity in self-perception between genders. The higher self-concept scores among male students may be influenced by societal expectations, cultural norms, or differences in upbringing that encourage assertiveness and confidence in males more than females. As far as the educational environment is concerned, classroom dynamics, teacher's expectations, and peer interactions might also contribute to shaping students' self-concept. Males may receive more reinforcement for leadership and independence, while females may face subtle discouragement from expressing self-confidence. It is also found that the observed gender gap suggests that female students may benefit from targeted interventions to boost their self-worth and self-perception. In addition, the data and accompanying bar chart in Figure 1 visualize a significant difference in self-concept between male and female high school students.

Table 2: Self-Concept Comparison Between Urban Female and Rural Female Students of H/S Schools

Self-Concept	N	Mean	S.D.	SE_D	df	t-Stat	Level of Significance
Female Urban Students	50	182.14	12.99	2.62	98	3.88*	p<.01
Female Rural Students	50	171.96	13.26				

*Significant at 0.01 level

An independent samples t-test was conducted to compare the self-concept scores of female students from urban and rural areas. The results revealed a statistically significant difference in self-concept between the two groups, t (98) = 3.88, p <.01. Female urban students (M = 182.14, SD = 12.99) reported significantly higher self-concept than their rural counterparts (M = 171.96, SD = 13.26). Cohen's d ≈ 0.78, indicating a moderate to large effect size, suggesting that the difference is not only statistically significant but also practically meaningful. The statistical calculation confirmed the H_2, which is "*Secondary school female students of urban areas differ significantly in their study habits.*"

Figure 2

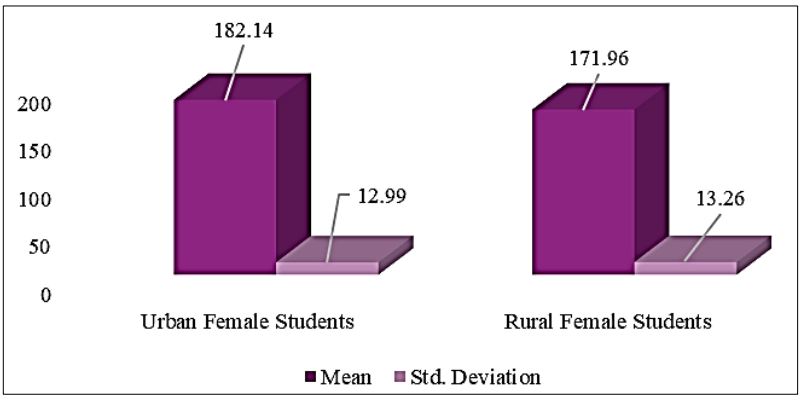
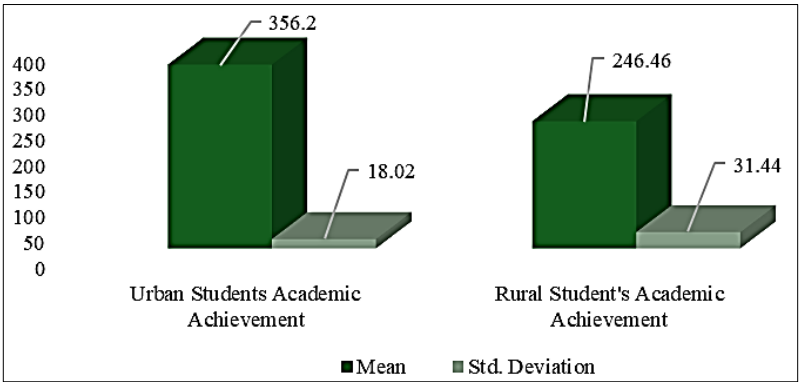


Table 3: Academic Achievement Comparison Between Urban and Rural Students of H/S Schools

Academic Achievement	N	Mean	S.D.	SE_D	df	t-Stat	Level of Significance
Urban Student's Academic Ach.	100	356.20	18.02	3.62	198	30.28*	p<.01
Rural Student's Academic Ach.	100	246.46	31.44				

*Significant at 0.01 level

Figure 3



The present study revealed a significant disparity in academic achievement between urban and rural secondary school students, with urban students outperforming their rural counterparts by a substantial margin. The mean difference of 109.74 points and a very large effect size (Cohen's d ≈ 4.28) underscore not only statistical significance but also practical relevance. Several factors may contribute to this urban-rural divide. Urban students often benefit from better infrastructure, access to qualified teachers, enriched learning environments, and exposure to co-curricular activities that foster cognitive and emotional development. In contrast, rural students may face challenges such as limited educational resources, teacher shortages, and socio-economic constraints that hinder academic performance.

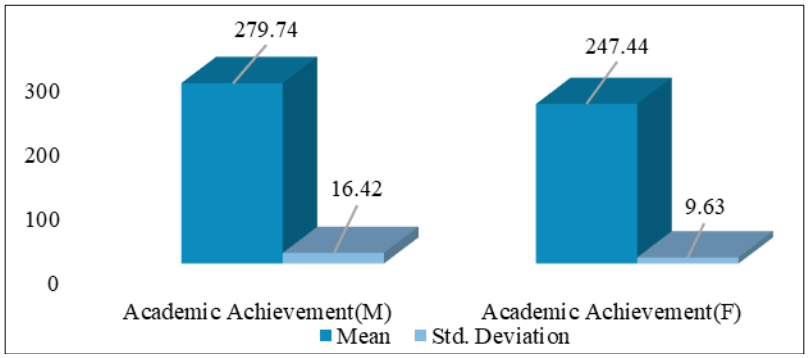
The lower standard deviation among urban students suggests greater consistency in academic achievement, possibly due to more standardized educational inputs. Conversely, the higher variability among rural students may reflect uneven access to quality education and support systems. These findings align with prior research indicating that locality plays a critical role in shaping educational outcomes (e.g., Singh & Misra, 2021; NCERT, 2020). In sum, the significant urban-rural disparity in academic achievement demands urgent attention from policymakers, educators, and researchers. Addressing these inequities is essential for fostering inclusive and equitable education in India.

Table 4: Academic Achievement Comparison Between Male and Female Students of H/S Schools

Academic Achievement	N	Mean	S.D.	SE_D	df	t-Stat	Level of Significance
Male Students	100	279.74	16.42	2.50	198	16.97*	p<.01
Female Students	100	247.44	9.63				

*Significant at 0.01 level

Figure 4



The findings revealed a statistically significant difference in mean scores, with male students (M = 279.74, SD = 16.42) outperforming female students (M = 247.44, SD = 9.63). The independent samples t-test yielded a t-value of 16.97, which was significant at the 0.01 level, indicating that the observed difference is unlikely due to chance. This result suggests that male students in the sampled population exhibit higher academic achievement compared to their female counterparts. The large effect size (Cohen's d ≈ 2.38) further supports the practical significance of this difference. Several factors may contribute to this disparity, including differential access to academic resources, variations in study habits, self-concept, parental expectations, and sociocultural influences that shape gender roles and educational priorities. The study concludes that male students in higher secondary schools demonstrate significantly higher academic achievement than female students, as evidenced by both statistical and practical measures. This finding underscores the need for targeted educational interventions to improve their metacognitive strategies, address potential barriers to their academic success, and promote gender equity in educational outcomes.

References

1. Sharma A. A comparative study of study habits, self-concept, and academic achievement among rural and urban secondary school students. International Journal of Education and Psychological Research. 2022;11(2):45-52.
2. Armstrong WH. Studying is hard work. Psychological Abstracts. 1956;30.
3. Azikiwe U. Study approaches of university students. WCCI Region II Forum. 1998;2:106-114.
4. Brookover WB, LePere JM, Hamachek DE, Thomas S, Erickson EL. Self-concept of ability and school achievement, II. USOE Cooperative Research Report, Project No. 1636. East Lansing: Michigan State University; 1965.
5. Casey A, Goldman E. Enhancing the ability to think strategically: A learning model. Management Learning. 2010;41:167-185.
6. Chamundeswari S, Sridevi V, Kumari A. Self-concept, study habits, and academic achievement of students. International Journal of Humanities Social Sciences and Education. 2014;1(10):47-55.
7. Chinna R. A study of study habits and academic achievement of higher secondary students [M.Ed. dissertation]. Tamil Nadu: Madurai Kamaraj University; 1985.
8. Eccles JS. Studying the development of learning and task motivation. Learning and Instruction. 2005;15:161-171.
9. Ellis LA. Peers helping peers: The effectiveness of a peer support program in enhancing self-concept and

other desirable outcomes [doctoral dissertation]. Sydney: University of Western Sydney; 2004.
10. Galván A. Neural systems underlying reward and approach behaviours in childhood and adolescence. In: The Neurobiology of Childhood. Berlin Heidelberg: Springer; 2014. p. 167-188.
11. Good CV. Dictionary of Education. 3rd ed. New York: McGraw Hill Book Company; 1973.
12. Guay F, Marsh HW, Boivin M. Academic self-concept and achievement: A developmental perspective on their causal ordering. Journal of Educational Psychology. 2003;95:124-136.
13. Hall GS. Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education. Vols. 1-2. New York: D. Appleton & Company; 1904.
14. Harter S. The development of self-representations. In: Damon W, Eisenberg N, editors. Handbook of Child Psychology. Vol. 3(5). New York: John Wiley and Sons; 1998. p. 553-617.
15. Hurlock EB. Personality Development. New York: McGraw-Hill Kogakusha; 1979. p. 93-95.
16. Kelly GA. The psychology of personal constructs. Vols. 1-2. New York: Norton; 1973. (Original work published 1955).
17. Kemjika OA. Study habits and academic performance of secondary school students [M.Ed. dissertation]. Nsukka: University of Nigeria; 1998.
18. Kumar V. Influence of gender and academic achievement on self-concept among secondary school students. International Journal of Advance Research and Innovative Ideas in Education. 2015;1(4):239-244.
19. Rogers CR. Client-centered therapy: Its current practice, implications, and theory. Boston: Houghton Mifflin; 1951.
20. Seginer R, Somech A. In the eyes of the beholder: How adolescents, teachers, and school counsellors construct adolescent images. Social Psychology of Education. 2000;4(2):139-157.
21. Spear LP. The adolescent brain and age-related behavioral manifestations. Neuroscience and Biobehavioral Reviews. 2000;24:417-463.
22. Trautwein U, Ludtke O, Koller O, Baumert J. Self-esteem, academic self-concept, and achievement: How the learning environment moderates the dynamics of self-concept. Journal of Personality and Social Psychology. 2006;90:334-349.
23. Wang M-T, Brinkworth M, Eccles JS. School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. Learning and Instruction. 2013;28:12-23.
24. United Nations. World Programme of Action for Youth to the Year 2000 and Beyond. Economic and Social Council, Substantive Session (Resumed). New York: UN; 1995.
25. Yilmaz M. Academic achievement in relation to study habits, mental health, and intelligence among high school students. International Journal of Indian Psychology. 2017;4(4):Article DIP:18.01.086/20170404.