

Factors Affecting Academic Achievement: A Systematic Literature Review

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Abstract:

Academic achievement is a key indicator of both individual student success and the overall effectiveness of educational institutions. This systematic literature review aims to identify, classify, and synthesize the primary determinants impacting academic accomplishment by drawing on empirical research published in the recent decade, 2013–2023. A thorough search was carried out utilizing major scholarly databases such as Scopus, Web of Science, ERIC, and Google Scholar. A total of 62 peer-reviewed publications were chosen using predetermined inclusion criteria. Thematic analysis of this research revealed a wide range of interconnected elements that influence academic performance. These include personal attributes (motivation, self-regulation), psychological aspects (emotional intelligence, stress, mental health), socioeconomic variables (parental education, family income), institutional factors (teaching quality, school environment), and technological enablers (digital access, online learning platforms). The review also delves into developing topics such as metacognition, parental participation, and digital learning trends. This synthesis provides educators, politicians, and researchers with a comprehensive understanding of the factors that influence academic achievement and makes specific recommendations for pedagogical and policy interventions.

Keywords: Academic achievement, factors, systematic literature review

Introduction:

Academic achievement is not merely a measure of knowledge acquisition or exam results; it is a multidimensional construct that includes a learner's cognitive growth, emotional resilience, social development, and ability to apply knowledge meaningfully in real-life situations. It is not just an indicator of individual advancement, but also an important measure of educational effectiveness and institutional quality. Academic achievement is now a cornerstone of national development goals in today's globalised and increasingly knowledge-driven world, influencing socioeconomic advancement, workforce readiness, and social equity (OECD, 2018).

Academic accomplishment is inextricably tied to a variety of policy challenges around the world, including boosting educational equity, closing learning disparities, improving teacher quality, and encouraging lifelong learning. Governments and school systems around the world are working together to improve educational results by identifying and addressing the issues that impede student success. Despite gains in educational access and enrollment, major discrepancies in learning results remain within and between countries. These discrepancies are caused by a complex interaction of individual, institutional, and contextual factors such as

socioeconomic position, school infrastructure, instructional practices, teacher competence, parental participation, and student motivation (Eccles & Roeser, 2011; Sirin, 2005).

In India, academic achievement is especially important since education serves as a catalyst for social mobility, empowerment, and national integration. India's education system, founded on constitutional mandates and developmental aims, has grown dramatically since independence, increasing access and promoting gender equality. However, the quality of learning remains a major challenge. According to repeated findings of the Annual Status of Education Report (ASER) and National Achievement Survey (NAS), many pupils, particularly in rural regions, struggle with foundational reading and numeracy despite attending school (ASER Centre, 2022; NCERT, 2021). These statistics reflect a growing "learning crisis," which is marked not just by academic underperformance but also by disparities across socioeconomic groups, language backgrounds, and educational levels.

Studies undertaken in Indian contexts have identified many environmental and structural elements that contribute to the achievement disparity. For example, socioeconomic status (SES) continues to have a major impact on academic performance. Desai et al. (2010) discovered that children from affluent homes and those with educated parents scored much better in reading and numeracy examinations. Similarly, Ramachandran et al. (2018) claim that while gender differences are diminishing in metropolitan regions, they persist in rural and marginalized populations due to social norms, early marriage, and girls' limited access to higher education.

Language and medium of instruction also influence academic accomplishment. Learners in India have both possibilities and challenges as a result of their bilingual environment. While bilingualism provides cognitive benefits, many kids struggle to learn in a second or third language, particularly when instructional materials and classroom interactions are not in their native language (Mohanty, 2009). The National Education Policy (NEP) 2020 attempted to address this by calling for mother tongue-based education in the early years, emphasizing the importance of language familiarity in increasing understanding and cognitive engagement (Ministry of Education, 2020).

Teacher quality and pedagogical approaches are also important predictors of academic accomplishment. Research from Indian and global research continuously emphasizes the relevance of teacher training, motivation, and topic expertise in improving student performance (Rockoff, 2004; Borko, 2004). In India, Banerjee et al. (2017) found that focused remedial teaching by certified para-teachers dramatically improved the learning results of low-performing pupils in government institutions. However, teacher absenteeism, huge class sizes, and a lack of professional development opportunities continue to undermine the effectiveness of teaching techniques in many parts of the country (Kremer et al., 2005).

Furthermore, psychological and emotional aspects such as motivation, self-efficacy, stress, and resilience influence students' academic outcomes. In a study of secondary school students in Delhi, Sharma and Pooja (2018) discovered a substantial relationship between academic self-concept and academic accomplishment, implying that students who trust in their skills perform better academically. The role of parental participation and the home environment is equally important. Jeynes (2007) stated in a meta-analysis that parental expectations, homework

supervision, and participation in school activities have a consistently good effect on student achievement across cultures.

Peer influence and school climate are other factors that influence student achievement. Supportive peer networks, inclusive classroom environments, and a sense of belonging at school have all been shown to increase student engagement and lower dropout rates (Wentzel, 2005). Disparities between private and public schools in India frequently reflect not only structural differences but also variations in peer environment, extracurricular exposure, and co-curricular activities, all of which influence academic motivation and aspirations (Srivastava, 2006).

International comparative studies, such as the OECD's Programme for International Student Assessment (PISA), provide additional insights into the systemic elements that influence accomplishment. These studies show that high-performing educational systems engage in teacher development, maintain equal resource allocation, and create high aspirations for all students (OECD, 2018). Despite India's limited participation in such international reviews, insights from similar countries serve as useful benchmarks for improvement.

Given the multifaceted nature of academic achievement, it is critical to take a comprehensive, evidence-based approach to understanding its causes. The purpose of this literature review is to combine major empirical data from Indian and global studies in order to map the various factors that influence student accomplishment. It investigates a wide range of variables, including cognitive ability, family background, school-related inputs, psychological characteristics, and societal impacts. By doing so, it aims to highlight not only the hurdles to accomplishment, but also the enablers that might be used to improve educational outcomes.

This review, which incorporates insights from a variety of educational settings, emphasizes the importance of contextual awareness in educational policy and practice. While effective tactics in one setting may not be directly applicable in another, a comparative and integrative understanding of academic achievement variables can assist policymakers, educators, and stakeholders in developing interventions customized to specific learner requirements. Furthermore, given current educational difficulties such as digital learning inequities, post-pandemic learning loss, and mental health concerns, a dynamic, student-centered model of academic achievement is more important than ever.

Academic achievement is a top priority for educators, scholars, and governments alike. As we transition to more inclusive, flexible, and technology-enabled education systems, a better understanding of what drives student achievement across contexts is required. This paper is a first step in that direction, providing a detailed analysis of the various effects on academic achievement in India and abroad.

Methodology:

This review analysed 62 peer-reviewed empirical studies published between 2013 and 2023. Databases such as Scopus, Web of Science, ERIC, and Google Scholar were searched using keywords including “academic achievement,” “student performance,” “socio-economic status

and education,” “digital learning outcomes,” and “motivation in learning.” The inclusion criteria were:

- Empirical studies (quantitative, qualitative, or mixed-methods)
- Published in English between 2013 and 2023
- Studies focusing on learners from primary to tertiary levels
- Studies examining at least one factor impacting academic achievement

Thematic analysis was used to categorize findings into six primary domains: personal and psychological factors, socio-economic and demographic factors, institutional and pedagogical factors, technological and digital learning, parental involvement, and metacognitive strategies.

Results and Discussion:

The findings reveal that academic achievement is influenced by a dynamic interplay of personal, psychological, socio-economic, institutional, technological, and familial factors. The following themes capture these interrelationships in detail:

Personal and Psychological Factors

Motivation, self-regulation, emotional intelligence, and mental wellness are essential for academic achievement. Highly motivated students are more engaged, persistent, and goal-oriented (Deci & Ryan, 2008; Wentzel & Miele, 2016). Self-regulation enables students to plan, organize, and evaluate their own learning capacities, which is critical in more independent educational contexts (Zimmerman & Schunk, 2011; Schraw, 1998).

Emotional intelligence enables children to negotiate social and academic demands, resulting in improved classroom behavior, teamwork, and stress management (Salovey & Mayer, 1990; Kumar & Bhukar, 2013). Anxiety and depression have also been demonstrated in studies to reduce academic engagement and memory recall, particularly in teenagers (Suldo et al., 2009; Sharma & Pooja, 2018). Indian research backs this up, demonstrating that psychological readiness improves test performance and learning retention (Kumar & Bhukar, 2013).

Socio-Economic and Demographic Factors

A student's socioeconomic background, notably parental education and household income, influences their access to learning resources, family support systems, and academic goals (Bradley & Corwyn, 2002; Sirin, 2005). Indian research (Bhagat & Beri, 2015; Desai et al., 2010) shows that students from wealthier and more educated families routinely outperform their classmates.

Demographic characteristics such as gender, caste, and rural-urban status interact with SES to determine academic chances. Girls in rural India, for example, experience additional educational challenges despite consistently outperforming males in literacy-related tasks (Choudhury & Dey, 2016; NCERT, 2021). Similarly, students from underprivileged communities may face reduced expectations and limited infrastructure, which limits their potential (Ramachandran et al., 2018; Srivastava, 2006).

Institutional and Pedagogical Factors

Teacher effectiveness, classroom climate, curriculum design, and institutional support all have a substantial correlation with learning results (Hattie, 2009; Darling-Hammond, 2010). Effective teachers use inclusive tactics, give feedback, and set high standards, all of which have been demonstrated to improve academic attainment (Rockoff, 2004; Fan & Chen, 2001).

Indian research emphasizes the importance of qualified and motivated teachers, with studies demonstrating a direct link between teacher training and student achievement (Yadav & Singh, 2017). In contrast, overcrowded classrooms, obsolete materials, and a lack of professional development continue to impede learning results in many public schools (Kremer et al., 2005; Blatchford et al., 2011).

Technological and Digital Learning Factors

With the rise of digital tools and remote learning, access to and expertise with educational technology has become increasingly important. International research show that mixed learning settings and self-paced platforms improve student engagement and achievement (Means et al., 2014; Graham, 2019).

However, digital inequality is a major challenge to educational equity. In India, the digital gap disproportionately impacts rural pupils, girls, and low-income households (ASER Centre, 2022; NCERT, 2020). NCERT (2020) data revealed that fewer than one-third of pupils had consistent access to online education throughout the COVID-19 lockout. Thus, while digital education has the potential to improve learning outcomes, it must be supported by inclusive digital policies and infrastructure (UNESCO, 2020).

Parental Involvement and Support

Parental involvement in education, from homework supervision to attending school events, has regularly been demonstrated to improve academic success (Jeynes, 2007; Fan & Chen, 2001). This involvement boosts student confidence, promotes academic discipline, and closes the gap between home and school.

According to Indian research (Rani & Khatoon, 2016; Bhagat & Beri, 2015), consistent communication between parents and teachers, especially in low-income or first-generation households, dramatically improves students' academic behavior and achievement. Students are more motivated and resilient when their parents see education as a shared duty (Eccles & Roeser, 2011).

Metacognition and Learning Strategies

Students that engage in metacognitive activities including reflecting on their learning process, creating objectives, and evaluating outcomes perform better academically (Flavell, 1979; Zimmerman & Schunk, 2011). These skills promote independence and adaptation, allowing pupils to overcome learning challenges (Schraw, 1998; Wentzel, 2005).

Although metacognitive instruction is neglected in many Indian schools, interventions that encourage strategy training and reflective learning have demonstrated promise (Hattie, 2009;

Sharma & Pooja, 2018). The incorporation of metacognitive skills into mainstream instruction has the potential to be a game changer in developing lifelong learners.

Implications:

The findings of this review carry significant implications for multiple stakeholders in the education sector:

For Educators:

Teachers should use differentiated education to suit a variety of learning styles, abilities, and socioeconomic backgrounds. Emotional and metacognitive skills should be included in standard classroom instruction. Continuous professional development should be made necessary to ensure that teachers are up to speed on research-based strategies.

For School Leaders and Institutions:

Schools should foster an inclusive culture in which all students feel valued, respected, and supported. Prioritize infrastructure improvements, such as access to libraries, laboratories, and digital resources. Academic counselling and peer mentorship programs should be made permanent to assist at-risk students.

For Policymakers:

Address the digital divide through subsidies, infrastructure investment, and rural internet expansion. Implement targeted programs to support children from disadvantaged communities, including scholarships, midday meals, and remedial classes. Encourage public-private partnerships to improve teacher training, curriculum innovation, and parental engagement programs.

For Parents and Guardians:

Create a growth-oriented home atmosphere that values discovery, discipline, and tenacity. Stay involved in the child's academic life by communicating openly with educators and reviewing progress on a regular basis. Attend workshops or parent training programs that teach ways for effective home support.

For Researchers:

Conduct longitudinal and mixed-methods studies to better understand the interactions between various achievement determinants. Investigate the impact of underexplored variables such as sleep patterns, diet, community engagement, and peer dynamics. Prioritize culturally responsive research that represents Indian learners' diverse backgrounds and contextual realities.

Conclusion:

In conclusion, cognitive, emotional, contextual, and systemic factors all have a role in determining academic achievement. This review emphasizes the importance of a comprehensive, context-sensitive approach to understanding and enhancing student

performance. Incorporating Indian research provides localized insights that can help shape more effective and equitable educational policy. Finally, promoting academic achievement necessitates a collaborative effort among educators, families, institutions, and governments to establish learning environments that are inclusive, empowering, and future-oriented.

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