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The Role of Self-Efficacy in Enhancing Academic Achievement of Secondary School Students

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Abstract:

The term "self-efficacy" describes students' perceptions of their own abilities to plan and carry out the activities required to get the intended academic results. These ideas have a direct impact on how students approach assignments, put up effort, persevere through challenges, manage their own learning, and ultimately do on tests in secondary school environments. Higher self-efficacy secondary students routinely outperform those with lower efficacy beliefs on exams, participate more actively in class activities, and recover from academic setbacks more successfully, according to research. This is due to the fact that self-assured students are more inclined to take on difficult assignments, see setbacks as teaching moments, and modify their approaches rather than giving up.

Using Bandura's social cognitive theory—which emphasises how mastery experiences, vicarious learning, social feedback, and emotional states impact students' perceptions about their competence—this research investigates the conceptual underpinnings of self-efficacy. After that, it examines empirical research that shows the connection between secondary academic success and self-efficacy, incorporating data from both Indian and foreign settings. By suggesting a researchable technique that can be used in school-based studies—such as survey designs, quasi-experimental treatments, and mixed-methods approaches—to examine how self-efficacy operates in actual classroom settings, the study goes beyond simple description. It also highlights research shortcomings, such as the lack of classroom-driven interventions in developing-country schools, the preponderance of cross-sectional designs, and the restricted emphasis on domain-specific effectiveness. The paper intends to direct future research on how self-efficacy can be actively fostered through goal-setting, structured mastery tasks, constructive feedback, peer modelling, and emotionally supportive classroom environments, thereby improving academic achievement and motivation among secondary school students. It does this by developing specific research questions.

Keywords: *self-efficacy, academic achievement, secondary school students, academic motivation, social cognitive theory, mastery experiences, self-regulated learning, educational intervention*

Introduction

Academic success in secondary schools is usually recognised as a crucial predictor of subsequent educational courses and employment chances. At this important period, students meet increased academic pressure, topic specialization, and high-stakes tests, all of which may



dramatically impair their confidence, motivation, and as a whole learning experience. Among the multiple psychological elements that impact academic performance, self-efficacy has emerged as a fundamental concept because it helps explain how students evaluate their own abilities to satisfy academic objectives and overcome problems in the classroom.

Bandura defines self-efficacy as “people’s beliefs about their capabilities to organize and execute the courses of action required to produce given attainments.” In educational settings, this means that students’ performance is shaped not only by their actual knowledge and skills but also by their belief in their capacity to succeed in specific tasks, such as solving mathematics problems, writing coherent essays, or preparing for important tests. This divide becomes particularly relevant in secondary school, as frequent comparison with peers, fear of failure, and exam-related stress may undermine students’ self-confidence and diminish their willingness to persevere.

The current research intends to investigate the function of self-efficacy in boosting the academic accomplishment of secondary school pupils by methodically combining theoretical viewpoints, empirical facts, and practical insights from the literature. It also presents a consistent methodological framework through which researchers and educators may explore self-efficacy in school-based contexts. In addition, the paper identifies existing research gaps—such as limited focus on domain-specific efficacy, over-reliance on cross-sectional designs, and a shortage of context-sensitive interventions—and formulates research questions that can guide future studies on how self-efficacy can be nurtured to support both academic success and psychological well-being among secondary learners.

Literature Review

Theoretical foundations of self-efficacy

Self-efficacy is a basic concept in Bandura’s social cognitive theory, which underlines the dynamic and reciprocal link between personal variables, conduct, and the surrounding environment. Within this approach, self-efficacy is seen as a direct and immediate effect on motivation, learning, and academic success, frequently having a bigger impact than general self-esteem or wide self-concept. It impacts the way students see their own talents in certain circumstances, such as classroom assignments, exams, or project work, and directs their judgements about which activities they are inclined to do and how much energy they are prepared to devote.

Self-efficacy impacts various characteristics of student conduct. It determines how pupils handle new or tough tasks—whether they perceive them as chances to improve or as risks to avoid. It also impacts how much effort individuals are willing to expend, how long they continue working when they meet hurdles, and how fast they recover and adapt after suffering failure. Students with greater self-efficacy tend to continue longer, adopt more strategic learning ways, and retain an imagining of control over their academic progress, while those with lower efficacy are more prone to give up quickly and view failures as reflections of their incapacity. In this sense, self-efficacy works as a psychological bridge between students’ potential and their actual academic performance, especially in the rigorous environment of secondary school.

Bandura identifies four main sources of self-efficacy:



- **Mastery experiences** – successful performance in a task is the most powerful source of self-efficacy. **Vicarious experiences** – observing similar peers succeed through effort and strategy enhances one’s own beliefs of capability.
- **Verbal persuasion** – credible encouragement and performance-linked feedback from teachers and parents strengthen self-efficacy.
- **Physiological and affective states** – anxiety, stress, or calmness during exams or presentations influence students’ judgments about their competence.

The domain-specific aspect of self-efficacy—that is, students may feel very effective in language classes but uncertain in science or math—is also highlighted in recent theoretical work. This has consequences for how educators provide support and interventions.

Self-efficacy and academic achievement

Empirical studies time and again show a strong, positive link between academic self-efficacy and actual achievement in school. For instance, a systematic review of research on self-efficacy reveals that students who truly believe in their abilities tend to shine in exams, dive deeper into their work, and push through tough challenges without giving up. Just last year, a 2025 study with secondary school students confirmed this pattern: even after accounting for things like family background, self-efficacy still correlated strongly with better grades. Earlier research on higher-secondary learners echoes the same story—self-efficacy not only ties to stronger performance but also accounts for a solid chunk of what drives those results.

On the qualitative side, interviews and observations paint an even richer picture, suggesting self-efficacy acts as a key bridge between smart teaching strategies—like timely feedback, supportive scaffolding, or collaborative group activities—and students' grit in sticking with their learning. All in all, the evidence makes it clear: self-efficacy isn't just some static personality quirk lurking in the background. It's a dynamic force that actively shapes how students succeed.

Research conducted in school contexts

Plenty of studies zoom in on school kids, especially those in secondary and higher-secondary levels. Take the research on teens with strong self-efficacy: they pick up smarter study habits, manage their time like pros, and actually thrive on teacher feedback instead of brushing it off. Other work with adolescent groups shows this belief in themselves cuts down on that stomach-churning test anxiety and makes them more eager to tackle the really tough stuff—both of which pave the way for better grades overall.

That said, there's a catch. Most of these studies are pretty limited—small groups, one-time snapshots, or stuck to a single subject or school—which makes it hard to apply the lessons broadly or design big-picture fixes for entire schools. That's why experts are pushing for beefier research: studies spanning multiple institutions, tracking kids over time, and especially digging into self-efficacy in places like India and other developing countries where the context is so different.

Research Gap and Rationale

1. Limited attention on secondary pupils in Indian / underdeveloped environments
While numerous researches have explored self-efficacy among college or engineering students, comparatively fewer studies concentrate systematically on secondary school learners in school-based settings, notably in India and South Asia.
2. Over dependence on cross sectional designs
Most known research employs cross sectional data, which restricts the capacity to



draw causal correlations between self-efficacy and academic attainment. Longitudinal or quasi experimental designs are rather unusual.

3. Inadequate attention to domain specific self-efficacy

Many studies approach self-efficacy as a universal notion rather than studying topic specific efficacy (e.g., mathematics self-efficacy, science self-efficacy, language self-efficacy), even though accomplishment is typically subject restricted.

4. Sparse integration of classroom-based interventions

Few researches integrate measuring of self-efficacy with specific classroom level interventions (e.g., mastery focused activities, feedback training, peer modelling tactics) to investigate how self-efficacy may be actively promoted and its influence on accomplishment tracked.

Research Questions

Based on the literature and identified gaps, the following research questions can guide an empirical study on secondary school students:

- 1) What is the level of academic self-efficacy among secondary school students, and how does it vary by gender, grade level, and stream (e.g., science, commerce, humanities)?
- 2) Is there a substantial link between students' self-efficacy views and their academic accomplishment in key courses (e.g., mathematics, physics, English, social science)?
- 3) How does topic specific self-efficacy (e.g., mathematics self-efficacy vs. language self-efficacy) relate to success in that particular subject?
- 4) Which forms of self-efficacy (mastery experiences, peer modelling, teacher feedback, emotional state) are most significantly connected with academic accomplishment among secondary students?
- 5) Can a classroom-based intervention meant to promote self-efficacy (e.g., organised mastery tasks, goal setting, peer modelling, feedback training) lead to quantifiable improvement in students' academic achievement?

Methodology

Research design

A mixed-methods approach can be adopted:

1. Quantitative phase: A descriptive correlational survey supplemented with an experimental/quasi experimental module to examine the impact of an intervention.
2. Qualitative phase: Focus group talks or semi structured interviews with a subset of students and instructors to study the lived experience of self-efficacy and classroom practices that promote or impede it.

Population and sample

Target population:

- Secondary school students (Classes IX–X or IX–XII), both girls and boys, from government and private schools in a selected district or urban-rural cluster.

Sampling:



- Stratified random sampling can be used to select schools and classes, ensuring representation across gender, stream, and medium of instruction.
- Sample size: 300–500 students, depending on the district and feasibility, with a control group and an intervention group for the experimental module.

Data collection procedure

The investigation proceeds in three identifiable parts. First, during the pre-test phase, we'll get approvals from school officials and guardians before administering the academic self-efficacy measure and collecting baseline accomplishment data. Next comes the intervention phase, but only for the experimental group: we'll roll out a targeted self-efficacy-boosting module over 4–6 weeks, packed with classroom activities like mastery-oriented tasks (think well-graded assignments designed for success, complete with clear criteria and prompt feedback), goal setting (short-term, syllabus-linked goals set weekly or fortnightly, tracked for progress), peer modelling (through structured group work, peer tutoring, and demos by similar-ability students), feedback training (equipping teachers to deliver specific, effort- and strategy-focused comments instead of generic praise), and emotional regulation strategies (quick sessions on handling stress, reframing failure as growth, and embracing a growth mindset). Meanwhile, the control group keeps to their normal teachings. Finally, in the post-test phase, we'll re-administer the self-efficacy measure, update accomplishment statistics, and go into focus group talks with students plus teacher interviews for those rich qualitative insights.

Data analysis

For analysing the data, we'll break it down into quantitative and qualitative approaches to get a well-rounded view. On the quantitative front, we'll start with descriptive statistics—things like means, standard deviations, frequencies, and percentages—to give us a solid snapshot of self-efficacy levels and academic achievement across the board. From there, we'll dive into Pearson's correlation coefficient to explore the link between self-efficacy and achievement. To spot differences between groups, we'll run independent samples t-tests or ANOVA, comparing things like gender, academic stream, or the control versus intervention groups. Finally, regression analysis will tie it all together, showing just how much self-efficacy predicts achievement once we control for background factors like prior grades or demographics.

Qualitatively, we'll use thematic analysis on transcripts from interviews and focus group discussions. This will help us uncover recurring patterns and deeper insights, such as the main sources of self-efficacy, effective teacher practices, and how participants really felt about the intervention's impact.

Conclusion

Self-efficacy isn't just a term in psychology—it's a game-changer when it comes to improving academic success among secondary school kids. At its heart, self-efficacy shapes how kids approach their schoolwork: it influences the tasks they choose to tackle (like picking challenging math problems over easy ones), the effort they pour in, their grit to keep going when things get tough, the smart strategies they use to study, and even how they handle the emotional rollercoaster of exams and deadlines. Picture a kid who feels they can master algebra—they're more likely to delve deep, bounce back from a terrible quiz, and remain cool under pressure. Mountains of current research support this idea, indicating a strong beneficial correlation between self-efficacy and improved grades, test scores, and general performance. That said, there are still some annoying gaps in the literature. For starters, most research remain too generic, neglecting how self-efficacy plays out in particular topics like science or languages. Then there's the absence of long-term, longitudinal research that analyses these



impacts across months or years, rather than simply snapshots. And don't get me started on classroom interventions—they're uncommon in real-world secondary school environments, when instructors are handling overcrowded courses and tight timetables. By stepping into these gaps with a mixed-methods approach—blending factual data from surveys and grades with rich insights from student interviews and teacher observations—we can develop targeted, intervention-focused research. The payoff? Practical, evidence-backed techniques that schools can actually roll out, like fast self-efficacy seminars or peer mentorship programs, can improve kids' confidence and, in turn, enhance their academic achievement.

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