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Research Paper

Study Habits and Academic Achievement among Higher Secondary School Students of Odisha Adarsha Vidyalayas in Ganjam District

Sweta Panda[1], Seeman Rani Panda[2]*, Mina Sabar[3]

ABSTRACT

This study examined the association between study habits and academic achievement among Class XI students enrolled in Odisha Adarsha Vidyalayas (OAVs) in Ganjam District, Odisha, and compared male and female students on both measures. A cross-sectional, descriptive-correlational survey included 450 students (230 male and 220 female) during the 2025-2026 academic session. Study habits were measured with the Palsane and Sharma Study Habit Inventory (PSSHI); academic achievement was represented by annual examination marks out of 500. Analyses comprised independent-samples t tests, Pearson correlation, and simple linear regression. Female students had higher study-habit scores ($M = 66.24$, $SD = 7.79$) than male students ($M = 58.03$, $SD = 8.03$), $t(448) = -11.01$, $p < .001$, and higher examination marks ($M = 402.50$, $SD = 56.21$) than male students ($M = 386.00$, $SD = 48.20$), Welch's $t(431.33) = -3.34$, $p = .001$. Study habits and examination marks were positively associated, $r(448) = .727$, 95% CI [.680, .768], $p < .001$. A simple regression expressed with examination marks as the outcome indicated that study-habit scores statistically accounted for 52.9% of the variance in marks, $R^2 = .529$, $F(1, 448) = 502.85$, $p < .001$. The cross-sectional design supports an association, not a causal conclusion. The findings are specific to the participating OAV students and require replication in other settings.

Keywords: *Academic Achievement, Gender Differences, Higher Secondary Students, Odisha Adarsha Vidyalayas, Study Habits*

Academic achievement is commonly represented by assessed performance, yet examination marks are produced within a wider ecology of prior learning, motivation, instructional opportunity, attendance, and school and home conditions (Credé et al., 2010; Eccles & Wigfield, 2002; Fredricks et al., 2004; Richardson et al., 2012; Schneider & Preckel, 2017; Sirin, 2005). Study habits are a useful focus because they describe recurring ways students organise and engage with learning, including time management, reading, reviewing, note-taking, preparation, and sustained effort (Credé &

[1]M.Ed., Dibakar Patnaik Institute of Advanced Studies in Education (DPIASE), Berhampur, Odisha, India
[2]Research Scholar, Department of Education, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, India
[3]Assistant Professor in Educational Studies, Dibakar Patnaik Institute of Advanced Studies in Education (DPIASE), Berhampur, Odisha, India
*Corresponding Author

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Kuncel, 2008; Jafari et al., 2019; Pintrich, 2000; Zimmerman, 2002). Research on collegiate performance has found that inventories of study habits, skills, and attitudes are associated with academic outcomes, while also cautioning that these constructs overlap with motivation and learning strategies (Credé & Kuncel, 2008; Richardson et al., 2012; Schneider & Preckel, 2017).

Study habits can be situated within self-regulated learning (SRL), in which learners set goals, select strategies, monitor progress, and adapt their approach. SRL is not a single technique or fixed trait; it involves reciprocal relations among cognition, motivation, behaviour, and context (Boekaerts, 1999; Pintrich, 2000; Zimmerman, 2000, 2002). Classroom research links students' reported use of strategies and motivational beliefs with achievement-related outcomes (Pintrich & De Groot, 1990; Pintrich et al., 1993). This perspective helps explain why a total study-habit score may reflect several coordinated practices rather than one isolated behaviour.

The evidence does not support treating all study strategies as equally effective. Reviews and meta-analyses show that strategy use and instructional support matter, but the strength and transfer of effects vary with the learner, task, outcome, and implementation (Dignath & Büttner, 2008; Donker et al., 2014; Hattie et al., 1996; Hattie & Donoghue, 2016; Purdie & Hattie, 1999). Cognitive-psychology reviews identify practice testing and distributed practice as especially useful across many conditions, while highlighting, rereading, and other familiar techniques have more limited general utility (Dunlosky et al., 2013). These findings justify studying students' overall practices while avoiding the assumption that a high inventory score alone causes higher marks.

School-level studies provide a basis for local investigation. In a secondary-school sample in Pakistan, Abid et al. (2023) reported associations among reading habits, study skills, and achievement in English. Siahi and Maiyo (2015) examined study habits and achievement in an Indian school context, while Jafari et al. (2019) used the PSSHI in a medical-sciences student sample outside India. These studies differ in age, subject, setting, and measure; therefore, they offer context rather than direct estimates for OAV students in Ganjam.

Conceptual and empirical background

Study habits as self-regulated learning practices

In cyclical SRL models, learners prepare for a task, use strategies while working, and reflect on outcomes to guide subsequent action (Zimmerman, 2002). Strategies include planning, monitoring, effort regulation, and seeking help, alongside cognitive processes such as rehearsal, elaboration, and organisation (Pintrich, 2000; Weinstein & Mayer, 1986). Metacognitive awareness and motivational beliefs can influence whether a learner selects a strategy, persists with it, and changes it when progress stalls (Bandura, 1997; Eccles & Wigfield, 2002; Panadero, 2017; Schunk, 1991; Wolters, 1998). Student-reported study habits thus provide an informative but incomplete indicator of learning behaviour; they do not directly measure the quality of every strategy or the conditions under which it is used.

Evidence from childhood and adolescence indicates that SRL and achievement are related, with variation across components and study designs (Dent & Koenka, 2016). Strategy instruction can improve academic performance in primary and secondary education, although intervention effects depend on the strategies taught and how instruction is

implemented (Donker et al., 2014). Extended SRL training has also shown beneficial effects in university samples, which should not be assumed to transfer unchanged to school students (Theobald, 2021). Together, these findings support examining the association in the present population and interpreting it as context-specific evidence.

Gender and academic outcomes

Gender comparisons in school achievement require attention to subject area, assessment type, age, and social context. A large meta-analysis found an average female advantage in school marks, with meaningful variation by subject and other moderators (Voyer & Voyer, 2014). Cross-national analyses show that gender patterns in mathematics achievement vary substantially between countries, underscoring the limits of universal explanations (Else-Quest et al., 2010). The gender-similarities perspective cautions against interpreting group averages as descriptions of every individual (Hyde, 2005); evidence also indicates that average mathematics performance differences can be small even where other educational patterns differ (Hyde et al., 2008). Research on self-discipline and academic outcomes further illustrates that learning behaviours and performance may covary, without making gender a causal explanation (Duckworth & Seligman, 2005, 2006).

Rationale for the present study

The present study focuses on Class XI students in OAVs in Ganjam District. OAVs are a state initiative serving Classes VI to XII (Odisha Adarsha Vidyalaya Sangathan, n.d.), and the local setting provides a specific context for examining students' study-habit scores alongside annual examination marks. The study addresses four questions: whether male and female students differ in study habits; whether they differ in academic achievement; how study habits and achievement are associated; and how well study-habit scores statistically account for variation in examination marks in a simple linear model. This local focus complements broader findings while recognising that published evidence from other regions or educational levels does not establish the pattern in Ganjam.

Objectives and hypotheses

1. To compare the academic achievement of male and female higher secondary students in the sampled OAVs.
2. To compare the study-habit scores of male and female higher secondary students in the sampled OAVs.
3. To examine the relationship between study-habit scores and academic achievement.
4. To estimate the statistical predictive contribution of study-habit scores to academic achievement in a simple linear regression model.

The null hypotheses were: (H_{01}) male and female students do not differ significantly in academic achievement; (H_{02}) male and female students do not differ significantly in study-habit scores; (H_{03}) study-habit scores are not significantly associated with academic achievement; and (H_{04}) study-habit scores do not significantly predict academic achievement in the fitted linear model.

METHOD

Design, setting, and participants

A quantitative, cross-sectional descriptive-correlational survey design was used. The target population comprised higher secondary students enrolled in OAVs in Ganjam District during the 2025-2026 academic session. A multistage random sampling strategy was used:

Chhatrapur Subdivision was selected from the district's three subdivisions; participating OAVs were selected randomly within the subdivision; and students were selected randomly within participating schools. The final sample consisted of 450 Class XI students (230 male and 220 female). Data were collected in February and March 2026.

Measures

Study habits were assessed with the Palsane and Sharma Study Habit Inventory (PSSHI), identified in the study record and used in prior research (Jafari et al., 2019). The inventory is described in published work as covering practices such as time management, study conditions, motivation, reading, note-taking, memory, test preparation, and health-related study routines. The total study-habit score was analysed.

Academic achievement was operationalised as Class XI annual examination marks, with a maximum possible score of 500, obtained from school records. The supplied output reports an overall mean of 394.07 (SD = 52.86).

Procedure and ethical safeguards

Permission was obtained from participating school authorities. Students were informed about the purpose of the study, confidentiality, and voluntary participation. The questionnaire was administered during the stated data-collection period, and examination marks were obtained from school records.

Data analysis

Descriptive statistics summarised study-habit scores and examination marks. Independent-samples t tests compared the gender groups. Levene's test was used to inform the variance assumption; the equal-variance row was used for study habits, whereas Welch's t test was used for academic achievement because the variance test was significant. Pearson's product-moment correlation assessed the bivariate association. A simple linear regression was estimated with study-habit score as the predictor and examination marks as the outcome, consistent with the stated objective. Reporting follows standard recommendations to distinguish statistical association from causal inference and to interpret Welch's test when variances differ (Delacre et al., 2017; Field, 2018).

RESULTS

Descriptive statistics

The study-habit score averaged 62.04 (SD = 8.91) across the sample. The mean annual examination score was 394.07 (SD = 52.86) out of 500. Table 1 presents the overall and gender-specific descriptive statistics.

Table 1 Descriptive Statistics for Study Habits and Academic Achievement

Measure	Group	n	M	SD
Study-Habit Score	Male	230	58.03	8.03
Study-Habit Score	Female	220	66.24	7.79
Study-Habit Score	Total	450	62.04	8.91
Annual examination marks	Male	230	386.00	48.20
Annual examination marks	Female	220	402.50	56.21
Annual examination marks	Total	450	394.07	52.86

Note. Study-habit scores were measured using the PSSHI. Examination marks were out of 500. Values are rounded to two decimal places.

Gender differences

Female students had higher study-habit scores than male students. The gender difference was statistically significant, with equal variances assumed, t (448) = -11.008, p < .001, mean difference (male - female) = -8.215, 95% CI [-9.681, -6.748]. The standardised mean difference calculated from the supplied group summaries was approximately d = 1.04. For academic achievement, Levene's test was significant, F = 11.248, p = .001; accordingly, the unequal-variances result is reported. Female students scored an average of 16.500 marks higher than male students, Welch's t (431.33) = -3.336, p = .001, 95% CI for the male-female difference [-26.222, -6.779]. The standardised mean difference from rounded group summaries was approximately d = 0.32. The comparison indicates differences in these sampled groups; it does not establish why the differences occurred.

Table 2 Independent-Samples Comparisons by Gender

Outcome	Male M (SD)	Female M (SD)	Test	Mean difference (M - F)	95% CI
Study-habit score	58.03 (8.03)	66.24 (7.79)	t (448) = -11.008, p < .001	-8.215	[-9.681, -6.748]
Annual examination marks	386.00 (48.20)	402.50 (56.21)	Welch t (431.33) = -3.336, p = .001	-16.500	[-26.222, -6.779]

Note. The mean difference is calculated as male minus female. Levene's test for study habits: F = 0.425, p = .515; for examination marks: F = 11.248, p = .001. Cohen's d, calculated from rounded group summaries, was approximately 1.04 for study habits and 0.32 for marks.

Association and regression

Study-habit scores were positively associated with examination marks, r(448) = .727, p < .001, 95% CI [.680, .768]. Students reporting stronger study habits tended, on average, to have higher annual examination marks. The simple linear regression model with examination marks as the outcome was statistically significant, F(1, 448) = 502.849, p < .001, and explained 52.9% of the observed variance in marks (R^2 = .529; adjusted R^2 = .528). The model's unstandardised slope was B = 4.315 (SE = 0.192), β = .727, t(448) = 22.424, p < .001. Thus, each one-point higher study-habit score was associated with an estimated 4.315-point higher examination score in this sample. This statistical prediction is not evidence that study habits caused higher achievement.

Table 3 Association and Simple Linear Regression

Analysis/statistic	Estimate	Interpretation
Pearson correlation, r	.727	Positive association; p < .001
95% CI for r	[.680, .768]	Fisher z interval
R^2 / adjusted R^2	.529 / .528	52.9% of score variance accounted for
Model test	F (1, 448) = 502.849, p < .001	One-predictor model statistically significant
Study habits slope	B = 4.315; SE = 0.192; β = .727	Approx. +4.32 examination marks per one-point increase in study-habit score
Slope test	t (448) = 22.424, p < .001	Study-habit score is the predictor; examination marks are the outcome

Note. The reported model specifies examination marks as the dependent variable and study-habit score as the predictor.

DISCUSSION

The study produced three main findings. First, female students in the sample had higher mean study-habit scores than male students. Second, female students also had higher mean annual examination marks. Third, study-habit scores and marks showed a strong positive bivariate association, and the simple model accounted statistically for just over half of the variance in marks. These results are consistent with the broader literature linking study-related practices and academic performance, while their magnitude should be interpreted in light of the specific sample, instrument, and examination context (Abid et al., 2023; Credé & Kuncel, 2008; Jafari et al., 2019; Siahi & Maiyo, 2015).

The association can be interpreted through SRL theory: planning, monitoring, effort regulation, and reflection may help students sustain engagement with course material and respond to learning demands (Panadero, 2017; Pintrich, 2000; Zimmerman, 2002). However, the present study did not measure these processes separately or manipulate students' study routines. The regression therefore quantifies the fit between two observed scores; it does not show that improving an inventory score would produce a specific increase in marks. Prior achievement, motivation, self-efficacy, classroom instruction, and other conditions may influence both study habits and examination outcomes (Eccles & Wigfield, 2002; Mega et al., 2014; Richardson et al., 2012; Wolters, 1998).

The gender differences are descriptive group findings, not evidence of an inherent difference in learning capacity. Meta-analytic work reports average female advantages in school marks but also substantial variation by subject and context (Voyer & Voyer, 2014). Cross-national differences and the gender-similarities hypothesis further caution against treating these means as universal or applying them to individual students (Else-Quest et al., 2010; Hyde, 2005; Hyde et al., 2008). The current study did not test mechanisms such as access to study time, attendance, subject stream, family responsibilities, or school practices; these are plausible topics for future investigation, not explanations established by these results.

The findings support practical attention to study support in OAVs. Teachers may help students set realistic weekly goals, distribute practice over time, retrieve material through low-stakes testing, monitor understanding, and seek feedback when strategies are not working (Dunlosky et al., 2013; Hattie & Donoghue, 2016; Weinstein & Mayer, 1986; Zimmerman & Martinez-Pons, 1986). School-level guidance should be formative and responsive rather than a uniform prescription, because strategy effectiveness depends on task and learner characteristics (Donker et al., 2014; Hattie et al., 1996). This implication is consistent with research on self-discipline, motivation, and engagement, but it should be evaluated through a designed intervention before causal claims are made (Duckworth & Seligman, 2005, 2006; Fredricks et al., 2004; Theobald, 2021).

The strong coefficient of determination merits cautious interpretation. A one-predictor model with $R^2 = .529$ is substantial for these observed measures, but it may reflect shared method variance, score construction, selection of participating schools, or omitted variables as well as a substantive relation. Meta-analytic evidence has repeatedly shown that academic outcomes are multidetermined and that predictors vary across levels and populations (Credé & Kuncel, 2008; Dent & Koenka, 2016; Richardson et al., 2012; Schneider & Preckel, 2017). Future studies should use longitudinal or intervention designs, report school-level structure and instrument reliability, and test whether specific practices predict later achievement after accounting for prior marks and relevant covariates.

Educational implications

For classroom practice, the results warrant structured opportunities to teach and revisit effective learning routines. This may include helping students plan study sessions, break large tasks into manageable steps, use retrieval practice and spaced review, track completion, and reflect on which approaches work for different subjects. Teachers can connect these routines to classroom instruction and feedback rather than locating responsibility solely within individual students. Meta-analyses of school-based strategy instruction and SRL interventions suggest that explicit teaching and practice can support academic outcomes, although programme effects depend on implementation and learner context (Dignath & Büttner, 2008; Donker et al., 2014; Hattie et al., 1996).

For school leadership, the gender pattern should prompt equitable access to academic guidance, not gender stereotyping. OAVs may review whether students have adequate time, quiet study conditions, learning materials, and access to teacher support. Guidance can be offered to all learners while being adapted to students' reported needs. The present results do not evaluate any school programme, so such recommendations should be monitored through attendance, participation, study-habit measures, and subsequent achievement rather than assumed to be effective.

Limitations and directions for future research

The cross-sectional correlational design prevents causal inference and does not establish temporal order. The study-habit measure is self-reported and may be affected by recall or social-desirability bias; annual marks are a single school-based indicator and may vary in comparability across subjects or schools. School-wise sample sizes, response rate, subject stream, prior achievement, socioeconomic indicators, inventory scoring range, current-sample reliability, and distributional diagnostics were not reported, so their influence could not be assessed. The sampling covered one selected subdivision, limiting generalisation beyond the participating OAVs. The regression is a one-predictor model without adjustment for potential confounders; its statistical predictive result should not be interpreted causally. Future research should report these details, use longitudinal measurement, include relevant covariates, examine the PSSHI domains separately where justified, and test practical supports using a transparent intervention design.

CONCLUSION

Among 450 sampled Class XI students in OAVs in Ganjam District, higher study-habit scores were associated with higher annual examination marks. Female students recorded higher group means on both measures. The one-predictor regression accounted for 52.9% of the variance in marks, but this statistical result should not be read causally. The study adds a local, school-based result to research on study practices and achievement. Future work should report the instrument's measurement properties and document ethics and consent procedures in detail.

REFERENCES

Abid, N., Aslam, S., Alghamdi, A. A., & Kumar, T. (2023). Relationships among students' reading habits, study skills, and academic achievement in English at the secondary level. *Frontiers in Psychology, 14*, Article 1020269. https://doi.org/10.3389/fpsyg.2023.1020269

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.

Boekaerts, M. (1999). Self-regulated learning: Where we are today. *International Journal of Educational Research, 31*(6), 445–457. https://doi.org/10.1016/S0883-0355(99)00014-2

Credé, M., Roch, S. G., & Kieszczynka, U. M. (2010). Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research, 80*(2), 272–295. https://doi.org/10.3102/0034654310362998

Credé, M., & Kuncel, N. R. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. *Perspectives on Psychological Science, 3*(6), 425–453. https://doi.org/10.1111/j.1745-6924.2008.00089.x

Delacre, M., Lakens, D., & Leys, C. (2017). Why psychologists should by default use Welch's t-test instead of Student's t-test. *International Review of Social Psychology, 30*(1), 92–101. https://doi.org/10.5334/irsp.82

Dent, A. L., & Koenka, A. C. (2016). The relation between self-regulated learning and academic achievement across childhood and adolescence: A meta-analysis. *Educational Psychology Review, 28*(3), 425–474. https://doi.org/10.1007/s10648-015-9320-8

Dignath, C., & Büttner, G. (2008). Components of fostering self-regulated learning among students: A meta-analysis on intervention studies at primary and secondary school level. *Metacognition and Learning, 3*(3), 231–264. https://doi.org/10.1007/s11409-008-9029-x

Donker, A. S., de Boer, H., Kostons, D., Dignath van Ewijk, C. C., & van der Werf, M. P. C. (2014). Effectiveness of learning strategy instruction on academic performance: A meta-analysis. *Educational Research Review, 11*, 1–26. https://doi.org/10.1016/j.edurev.2013.11.002

Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science, 16*(12), 939–944. https://doi.org/10.1111/j.1467-9280.2005.01641.x

Duckworth, A. L., & Seligman, M. E. P. (2006). Self-discipline gives girls the edge: Gender in self-discipline, grades, and achievement test scores. *Journal of Educational Psychology, 98*(1), 198–208. https://doi.org/10.1037/0022-0663.98.1.198

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest, 14*(1), 4–58. https://doi.org/10.1177/1529100612453266

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53*, 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153

Else-Quest, N. M., Hyde, J. S., & Linn, M. C. (2010). Cross-national patterns of gender differences in mathematics: A meta-analysis. *Psychological Bulletin, 136*(1), 103–127. https://doi.org/10.1037/a0018053

Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). SAGE Publications.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Hattie, J., Biggs, J., & Purdie, N. (1996). Effects of learning skills interventions on student learning: A meta-analysis. *Review of Educational Research, 66*(2), 99–136. https://doi.org/10.3102/00346543066002099

Hattie, J. A. C., & Donoghue, G. M. (2016). Learning strategies: A synthesis and conceptual model. *npj Science of Learning, 1*, Article 16013. https://doi.org/10.1038/npjscilearn.2016.13

Hyde, J. S. (2005). The gender similarities hypothesis. *American Psychologist, 60*(6), 581–592. https://doi.org/10.1037/0003-066X.60.6.581

Hyde, J. S., Lindberg, S. M., Linn, M. C., Ellis, A. B., & Williams, C. C. (2008). Gender similarities characterize math performance. *Science, 321*(5888), 494–495. https://doi.org/10.1126/science.1160364

Jafari, H., Aghaei, A., & Khatony, A. (2019). Relationship between study habits and academic achievement in students of medical sciences in Kermanshah-Iran. *Advances in Medical Education and Practice, 10*, 637–643. https://doi.org/10.2147/AMEP.S208874

Mega, C., Ronconi, L., & De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology, 106*(1), 121–131. https://doi.org/10.1037/a0033546

Odisha Adarsha Vidyalaya Sangathan. (n.d.). *About the Sangathan*. https://oav.edu.in/submenupagecontent.php?GROUP_CODE=OAVS&id=2&type=

Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology, 8*, Article 422. https://doi.org/10.3389/fpsyg.2017.00422

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). Academic Press. https://doi.org/10.1016/B978-012109890-2/50043-3

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33–40. https://doi.org/10.1037/0022-0663.82.1.33

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the Motivated Strategies for Learning Questionnaire (MSLQ). *Educational and Psychological Measurement, 53*(3), 801–813. https://doi.org/10.1177/0013164493053003024

Purdie, N., & Hattie, J. (1999). The relationship between study skills and learning outcomes: A meta-analysis. *Australian Journal of Education, 43*(1), 72–86. https://doi.org/10.1177/000494419904300106

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin, 138*(2), 353–387. https://doi.org/10.1037/a0026838

Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education: A systematic review of meta-analyses. *Psychological Bulletin, 143*(6), 565–600. https://doi.org/10.1037/bul0000098

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*(3–4), 207–231. https://doi.org/10.1080/00461520.1991.9653133

Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research, 75*(3), 417–453. https://doi.org/10.3102/00346543075003417

Siahi, E. A., & Maiyo, J. K. (2015). Study of the relationship between study habits and academic achievement of students: A case of Spicer Higher Secondary School, India. *International Journal of Educational Administration and Policy Studies, 7*(7), 134–141. https://doi.org/10.5897/IJEAPS2015.0404

Theobald, M. (2021). Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Contemporary Educational Psychology, 66*, Article 101976. https://doi.org /10.1016/j.cedpsych.2021.101976

Voyer, D., & Voyer, S. D. (2014). Gender differences in scholastic achievement: A meta-analysis. *Psychological Bulletin, 140*(4), 1174–1204. https://doi.org/10.1037/a0036 620

Weinstein, C. E., & Mayer, R. E. (1986). The teaching of learning strategies. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 315–327). Macmillan

Wolters, C. A. (1998). Self-regulated learning and college students' regulation of motivation. *Journal of Educational Psychology, 90*(2), 224–235. https://doi.org/10 .1037/0022-0663.90.2.224

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press. https://doi.org/10.1016/B978-012109890-2/50031-7

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

Zimmerman, B. J., & Martinez-Pons, M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal, 23*(4), 614–628. https://doi.org/10.3102/00028312023004614

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Conflict of Interest

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