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INFLUENCE OF TEACHER EXPECTATION BIAS ON STUDENT MOTIVATION, ACADEMIC SELF-CONCEPT, AND ACHIEVEMENT

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Abstract

Although teachers' expectations do play an important role in the educational experiences of students, the effects of perceived underestimation should be investigated in view of psychological characteristics and previous levels of achievement. The current study examines the relationship perceived negative teacher expectations with the academic motivation and academic self-concept and their effects on academic achievement in the higher secondary education by students. The design used was quantitative with cross sectional type with the number of samples of respondents of students between grade XI and XII aged 16 years– 19 years totaling 400 number of respondents. Descriptive statistics, Pearson correlation and multiple linear regression analyses were performed, with age, gender, grade, SES, and prior achievement entered as covariates. Perceived negative expectations were negatively correlated with motivation (r=−.572, p< .001), self-concept (r=−.670, p< .001) and current achievement (r=−.657, p< .001). Adjusted analyses confirmed negative associations for motivation (B=−0.360; 95% CI [−0.443, −0.278]) and self-concept (B=−0.461; 95% CI [−0.536, −0.387]). Each 1 point increment in expectation score equated to an additional 1.537 percentage points decrease in achievement (95% CI [−2.733, −0.342]; p=.012) in the achievement model. The positive correlation of the criteria of motivation and self-concept with achievement were 4.270 and 5.375 percentage points respectively. There were 39.0%, 50.4%, and 72.8% variance accounted for by the models for motivation, self-concept, and achievement respectively. Results indicate that perceived negative teacher expectations correlate positively with less positive

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psychological and educational outcomes beyond background variables. The findings indicate that more research is necessary on classroom activities involving perceived underestimation. However, the cross-sectional study design also precludes causal conclusions, and it is simply students' perceptions that prove teacher bias. Multilevel analysis, teacher-report and classroom observation should be included in longitudinal research to explain temporal relationships and to determine the effectiveness of educational interventions.

INTRODUCTION

Teachers' expectations constitute a significant aspect of the classroom environment, shaping students' development of academic skills, motivation, and self-perceptions of ability. These expectations reflect teachers' beliefs about students' potential achievements and are conveyed through feedback, instructional opportunities, classroom interactions, and the degree of challenge presented. A systematic review identified teacher expectations as a major area of educational research, encompassing the formation of expectations, differential treatment, and their relationships with student outcomes (Wang et al., 2018). Understanding these relationships necessitates consideration of both academic achievement and the psychological processes through which students interpret teachers' judgments.

It is essential to distinguish teacher expectation bias from the accurate recognition of differences in students' prior performance. Low expectations are not inherently indicative of bias, and a correlation between expectations and achievement does not alone establish a self-fulfilling prophecy. Jussim and Harber (2005) found that self-fulfilling effects in classrooms exist but are generally modest, with expectations often predicting performance due to their reflection of pre-existing student differences. Therefore, prior academic achievement must be considered when evaluating whether negative expectations are linked to subsequent educational outcomes.

Research that directly assesses expectation bias often examines discrepancies between teachers' expectations and those predicted from relevant student characteristics. In a longitudinal study, de Boer et al. (2010) found that such discrepancies were associated with academic performance over several years. These findings underscore the importance of distinguishing expectation bias from the information that informs reasonable expectations. In studies utilizing student reports, it is also necessary to differentiate: perceived negative teacher expectations reflect students' experiences of teachers' judgments, rather than providing independent evidence that those judgments are inaccurate or discriminatory.

The educational significance of teacher expectations also derives from their potential relationship with students' opportunities to learn. Rubie-Davies et al. (2006) identified differences in teacher expectations and academic progress among ethnic groups in New Zealand classrooms, suggesting that sustaining expectations may partly explain limited progress for some students. This evidence indicates that expectations should be examined as integral components of the instructional environment. However, researchers should investigate the magnitude and interpretation of these relationships within the specific studied population rather than presume they are consistent across all educational contexts.

Academic motivation offers a theoretical framework for understanding the significance of students' perceptions of teacher expectations. Self-determination theory posits that motivation is fostered when educational environments fulfill students' needs for autonomy, competence, and relatedness. Ryan and Deci (2020) explain that supportive teaching can promote intrinsic motivation and meaningful engagement with

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learning. From this perspective, consistently feeling underestimated may be linked to diminished perceptions of competence or weaker connections to teachers. However, this remains a theoretical proposition that requires empirical investigation, rather than an inference that can be drawn solely from observed negative correlations.

Situated expectancy-value theory provides a complementary perspective by situating students' expectations of success and perceptions of task value within their broader social and cultural contexts. Eccles and Wigfield (2020) argue that achievement-related choices and persistence are shaped by these beliefs and the environments in which they are formed. Teachers' judgments may thus influence how students assess their likelihood of success and the value they assign to sustained effort. This framework supports the examination of perceived teacher expectations in conjunction with motivation, while also acknowledging the importance of family circumstances and prior academic experiences.

Motivation is closely linked to educational outcomes, but it is important to recognize that different forms of motivation are not interchangeable. Howard et al. (2021), through a large meta-analysis, investigated the relationships between various motivational orientations and student performance, persistence, and well-being. Their results highlight the significance of motivational quality in understanding student outcomes. Consequently, motivation is relevant both as a potential outcome associated with perceived teacher expectations and as a correlate of academic achievement. However, a general motivation score should not be assumed to capture distinct motivational orientations unless the measurement instrument is designed for that purpose.

Academic self-conAcademic self-concept constitutes another key dimension of students' educational experiences, referring to their perceptions of their own academic abilities and remaining conceptually distinct from motivation. Rubie-Davies (2006) tracked students whose teachers held high or low classroom expectations and found that academic self-concept differed over time, with students from low-expectation teachers reporting declining self-perceptions. These findings support further investigation into whether students who perceive greater underestimation by teachers also report less favorable views of their academic capabilities. The relationship between academic self-concept and achievement is potentially reciprocal. Marsh and Craven (2006) emphasized that academic self-concept should be distinguished from general self-esteem and described evidence consistent with mutually reinforcing relationships between academic self-beliefs and performance. Huang's (2011) meta-analysis of longitudinal studies likewise identified associations in both directions. Consequently, lower achievement may contribute to a less favorable self-concept, while self-concept may also influence later performance. This complexity provides a strong rationale for considering prior achievement and avoiding one-directional causal interpretations of cross-sectional findings.

Integrating these perspectives enables the consideration of teacher expectations in relation to both psychological and academic outcomes. Hornstra et al. (2023) identified significant overlap between high-expectation teaching and practices that support students' psychological needs, such as fostering supportive classroom relationships and providing meaningful learning. A review of expectation interventions supports the practical relevance of this work, finding that such interventions can enhance both teachers' expectations and student achievement (de Boer et al., 2018). These findings support investigating expectation-related experiences, while acknowledging that observational studies cannot determine whether altering expectations would yield similar improvements among their own participants.

Building on this foundation, the present study investigates perceived negative teacher expectations, academic motivation, academic self-

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concept, and current achievement among 400 students in Grades 11 and 12. The study evaluates whether perceived negative expectations are associated with motivation and self-concept after adjusting for age, sex, grade, household socioeconomic status, and prior achievement. It further examines whether perceived negative expectations remain linked to current achievement when motivation and self-concept are included as covariates. By analyzing these constructs together, the study seeks to clarify their distinct statistical associations within the sample. The study's contribution lies in elucidating students' perceptions and adjusted relationships, rather than establishing objective teacher bias, causality, or mediation.

Literature Review

Teacher expectations refer to teachers' beliefs about students' likely academic performance and potential for progress. Their educational significance depends partly on whether they accurately reflect existing performance or introduce judgments that shape subsequent learning opportunities. Jussim and Harber (2005) distinguished accurate expectations from perceptual bias and self-fulfilling effects. Their review concluded that self-fulfilling prophecies occur in classrooms but are generally modest, while much of the association between expectations and achievement reflects teachers' knowledge of students' existing capabilities. This distinction challenges explanations that attribute achievement differences entirely to teacher expectations and highlights the importance of accounting for prior performance.

The literature further differentiates between expectations directed at individual students and those held for entire classes. Wang et al. (2018) reviewed three decades of research and identified several interconnected domains, including the formation of expectations, their communication through teaching practices, and their relationships with student outcomes. This range demonstrates that expectations do not constitute a single, uniform classroom process. Teachers' beliefs, student characteristics, and instructional contexts may each contribute to observed relationships. In the context of the present study, it is important to note that students' perceptions of negative expectations reflect their experience of being underestimated, but do not independently confirm that teachers' judgments are objectively biased.

Longitudinal research provides evidence that expectation bias can be associated with achievement beyond differences in students' initial performance. De Boer et al. (2010) followed approximately 11,000 students over five years and defined bias as the difference between observed teacher expectations and expectations predicted from prior achievement, cognitive ability, and achievement motivation. Expectation bias was associated with later performance; its effects partly diminished during the first two years and subsequently remained relatively stable. This study demonstrates the importance of examining expectations against relevant baseline characteristics. It also shows why a student-reported expectation score and a statistically estimated measure of teacher bias should not be treated as equivalent constructs.

Gentrup et al. (2020) examined longitudinal data from 1,026 first-grade students in 64 German classrooms. Inaccurately high expectations were associated with greater achievement in reading and mathematics, whereas inaccurately low expectations were associated with lower reading achievement. These relationships remained after adjustment for prior achievement, cognitive ability, motivation, and background characteristics. However, although feedback differed according to inaccurate expectations, it did not substantially explain the expectation–achievement relationship. These findings caution against assuming that one classroom behavior accounts for all expectation effects. Their focus on younger children also means that the findings cannot automatically be generalized to students in Grades 11 and 12.

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Self-determination theory offers a framework for understanding the relationship between classroom experiences and academic motivation. Ryan and Deci (2020) emphasized that motivation is enhanced in environments that support autonomy, competence, and relatedness. Within this framework, constructive feedback and supportive relationships help students engage in learning for personally meaningful reasons. Conversely, persistent experiences of being underestimated may be linked to diminished perceptions of competence or belonging. Applied to teacher expectations, this framework suggests a potential psychological link between perceived negative judgments and reduced motivation. However, this remains a theoretical proposition unless researchers empirically measure the relevant psychological relationships.

Hornstra et al. (2018) reported direct evidence linking expectations and motivation. Their study of 276 secondary students and 11 teachers found that teacher expectations were positively associated with intrinsic motivation and engagement and negatively associated with amotivation. Statistical mediation analyses identified need-supportive teaching as an explanatory link, although the indirect effects were small. The study is particularly relevant because it examined secondary education and connected teacher expectations with motivational experiences. Nevertheless, its findings do not mean that mediation can be inferred whenever teacher expectations and motivation are correlated; such a claim requires an appropriate model and supporting evidence.

The relationship between motivation and achievement is influenced by the specific type of motivation considered. Howard et al. (2021) synthesized evidence from 344 samples, encompassing 223,209 participants. Intrinsic motivation was associated with student success and well-being, while personally valuing an activity was particularly related to persistence. In contrast, motivation driven by external rewards or the desire to avoid punishment did not demonstrate similarly favorable associations. These findings support the inclusion of motivation in models of academic achievement, but also caution against treating all forms of motivation as interchangeable. Accordingly, interpretations in the present study should align with the construct measured by its overall academic motivation scale.

Academic self-concept concerns students' perceptions of their academic capabilities. Motivation concerns the reasons and willingness to engage in learning, whereas self-concept concerns how students evaluate themselves as learners. Rubie-Davies (2006) followed 256 students whose teachers held high or low classroom expectations. Although the groups initially did not differ significantly on the academic self-perception measures, differences emerged by the end of the year, largely because self-perceptions declined among students with low-expectation teachers. The findings suggest that expectation-related classroom experiences may matter for students' academic self-beliefs as well as their measured performance.

The relationship between self-concept and achievement is not necessarily one-directional. Huang (2011) integrated evidence from 39 independent longitudinal samples and found associations between earlier self-concept and later achievement, as well as between earlier achievement and later self-concept. The specificity of the self-concept measure also mattered for these relationships. These findings support considering academic self-concept and achievement as potentially reinforcing processes. They further justify including prior achievement in statistical models, since current self-beliefs may partly reflect previous academic experiences. Cross-sectional associations alone cannot determine whether less favorable self-concept precedes or follows lower performance.

Research that examines multiple student beliefs within a single model provides a more nuanced understanding of expectation-related outcomes. Rubie-Davies et al. (2020) investigated 692 students and 31 teachers with high or low

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classroom expectations. Reading achievement and teacher expectations predicted students' reported teacher support and academic competence, but did not directly predict reading self-concept in the same manner. Several relationships were found to be indirect rather than direct. These findings indicate that competence beliefs, subject-specific self-concept, and perceived support should not be presumed to respond uniformly to teacher expectations. They underscore the importance of examining motivation, self-concept, and achievement together while maintaining their conceptual distinctions.

Intervention research offers stronger evidence about whether changing expectation-related teaching practices can improve outcomes. Rubie-Davies et al. (2015) evaluated an intervention in which teachers were randomly allocated to intervention or control conditions. Intervention teachers participated in workshops and implemented practices modeled on those of high-expectation teachers. Students taught by intervention teachers showed greater improvement in mathematics achievement over one year than students in the control condition. Because the intervention involved changes in teaching practices, its findings concern a package of classroom changes rather than the isolated effect of a teacher privately holding higher expectations.

Broader evidence comes from de Boer et al. (2018), who reviewed 19 teacher expectation interventions. The review identified approaches focused on changing teacher behavior, raising awareness of expectancy effects, and addressing underlying beliefs. The meta-analysis reported positive average effects on teacher expectations and student achievement, with Hedges' g values of 0.38 and 0.30, respectively. These findings support the practical relevance of expectation research, although the limited number of interventions constrained comparisons of their effectiveness. They indicate that expectation-related practices can be modified, but do not establish that every intervention will produce similar outcomes across settings.

The reviewed literature supports examining teacher expectations alongside motivation, self-concept, and achievement, but also reveals important differences in measurement, educational stage, and research design. Studies using teacher-reported expectations, estimated expectation bias, and student perceptions address related but distinct questions. Similarly, evidence from primary classrooms or classroom-level interventions does not directly determine the relationships experienced by higher secondary students.

The present study investigates whether perceived negative teacher expectations are associated with motivation, self-concept, and current achievement among students in Grades 11 and 12, after adjusting for relevant background characteristics and prior achievement. By examining motivation and self-concept separately and then including both in the achievement model, the study enables assessment of their distinct adjusted associations. This research contributes evidence regarding students' perceived experiences and their relationships with psychological and academic outcomes. However, its cross-sectional design does not permit conclusions about objective teacher bias, temporal ordering, or mediation.

Methodology

Research Design

A quantitative cross-sectional analytical design was employed to examine associations among perceived negative teacher expectations, academic motivation, academic self-concept, and academic achievement in higher secondary students. The individual student served as the unit of analysis. Descriptive statistics, Pearson correlations, and multiple linear regression were utilized to assess both unadjusted and adjusted relationships. This design enabled the evaluation of associations but did not permit causal inference.

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Study Population and Sample

The analytical sample consisted of 400 students aged 16 to 19 years enrolled in Grades 11 and 12. The sample included 210 male and 190 female students, with 206 participants in Grade 11 and 194 in Grade 12. All participants provided complete data for the variables analyzed, and the same sample was used for all analyses.

Study Variables and Operational Definitions

Perceived Negative Teacher Expectations

Perceived negative teacher expectations served as the principal explanatory variable. Scores ranged from 1 to 5, with higher values reflecting stronger perceptions of negative expectations or underestimation by teachers. This measure represented students' perceptions and was not considered an independently validated indicator of teacher bias.

Academic Motivation and Academic Self-Concept

Academic motivation and academic self-concept were assessed as distinct constructs using scales ranging from 1 to 5. Higher scores indicated greater academic motivation and more favorable perceptions of academic ability, respectively. Each variable functioned as the dependent variable in separate regression models, and both were included as predictors in the academic achievement model. All three psychosocial measures were analyzed as continuous variables without categorization.

Current and Prior Academic Achievement

Current academic achievement was measured as a percentage(0-100) and served as the dependent variable in the achievement model. Prior academic achievement, also expressed on a 0 to 100 scale, was included in all regression models to control for differences in earlier academic performance.

Household Socioeconomic Conditions

Household socioeconomic conditions were measured using an index ranging from 0 to 10, where higher scores indicated more favorable socioeconomic circumstances. This index was included as a continuous covariate in all regression models.

Demographic Covariates

Demographic covariates included age, sex, and grade level. Age was entered as a continuous variable in completed years. Sex and grade were coded as categorical indicators, with male students and Grade 11 students designated as the reference categories.

Statistical Analysis

Descriptive Statistics

Frequencies and percentages were used to summarize categorical characteristics, such as sex, age categories, and grade level. Means and standard deviations summarized age and other continuous study variables. Percentages were rounded to one decimal place.

Correlation Analysis

Pearson product–moment correlations were used to assess the direction and strength of unadjusted relationships among perceived negative teacher expectations, academic motivation, academic self-concept, and current academic achievement. All correlations were calculated using 400 observations. Tests were two-sided, and p values were not adjusted for multiple comparisons.

Multiple Linear Regression

Three multiple linear regression models were estimated using ordinary least squares. The first model used academic motivation as the dependent variable, and the second used academic self-concept. Each model included perceived negative teacher expectations, age, sex, grade level, household socioeconomic index, and prior academic achievement as predictors.

The third model used current academic achievement as the dependent variable. Eight predictors were entered simultaneously: perceived negative teacher expectations, academic

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motivation, academic self-concept, age, sex, grade level, household socioeconomic index, and prior academic achievement. Each coefficient represented an association conditional on the other predictors. The inclusion of motivation and self-concept in this model did not constitute a formal mediation analysis.

Statistical Reporting and Model Fit

Regression findRegression results were reported as unstandardized coefficients, 95% confidence intervals, standardized coefficients, and p-values. Unstandardized coefficients indicated differences in the outcome per one-unit change in a continuous predictor or relative to the reference category for categorical predictors. In the achievement model, these differences were expressed in percentage points. summarized using R^2, adjusted R^2, and the overall F test. All significance tests were two-sided, with $p < .05$ used as the significance threshold. R^2 values described the proportion of outcome variation explained within the analyzed sample and were not interpreted as measures of predictive accuracy in other populations.

Analytical Assumptions and Interpretation

Conventional ordinary least squares confidence intervals assumed independent observations and constant error variance. The reported models did not account for clustering within teachers, classrooms, or schools. Therefore, consider potential dependence among students sharing these settings when interpreting statistical uncertainty. Findings were interpreted as associations subject to possible unmeasured confounding and uncertainty regarding the direction of relationships.

Ethical Considerations

The relevant institutional ethics committee approved the study prior to data collection. Participants were informed of the study's purpose, the voluntary nature of participation, and their right to withdraw without penalty. Informed consent was obtained from students aged 18 years or older, while parental or guardian consent and student assent were obtained for participants younger than 18 years. Participant confidentiality was maintained, and data were used exclusively for research purposes.

Results

The study included 400 students with complete data for all variables. Descriptive statistics, Pearson correlations, and multiple linear regression analyses were used to assess associations among perceived negative teacher expectations, academic motivation, academic self-concept, and academic achievement. All significance tests were two-sided.

Table 1. Characteristics of the sample (N = 400)

Characteristic	Category	n	%
Sex	Male	210	52.5
	Female	190	47.5
Age	16 years	64	16.0
	17 years	164	41.0
	18 years	137	34.3
	19 years	35	8.8
Grade	Grade 11	206	51.5
	Grade 12	194	48.5

Note. Percentages may not total exactly 100% because of rounding.

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Interpretation. The sample was approximately balanced by sex and grade, and most students (75.3%) were 17 or 18 years old. The mean age was 17.36 years (SD = 0.85). These characteristics describe the sample and do not establish that it represents any student population.

Table 2. Descriptive statistics for the study variables

Variable	Possible score range	Mean	SD
Perceived negative teacher expectations	1–5	2.80	0.80
Academic motivation	1–5	3.37	0.69
Academic self-concept	1–5	3.31	0.69
Current academic achievement	0–100	64.40	12.36
Prior academic achievement	0–100	61.70	11.54
Household socioeconomic index	0–10	4.95	1.79

Note. SD = standard deviation. Higher scores indicate a greater degree of the named construct. Achievement scores are percentages.

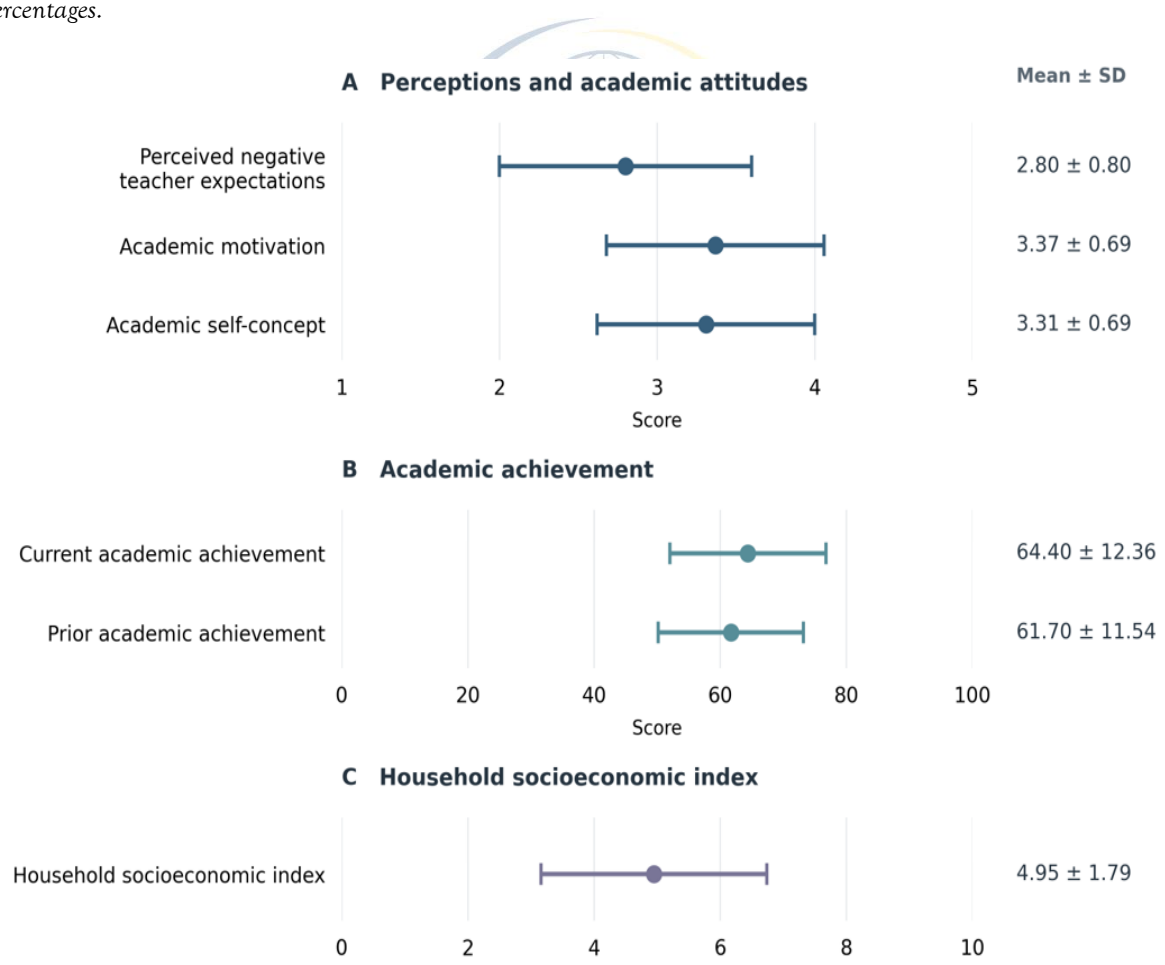


Figure 1 Descriptive statistics for the study variables

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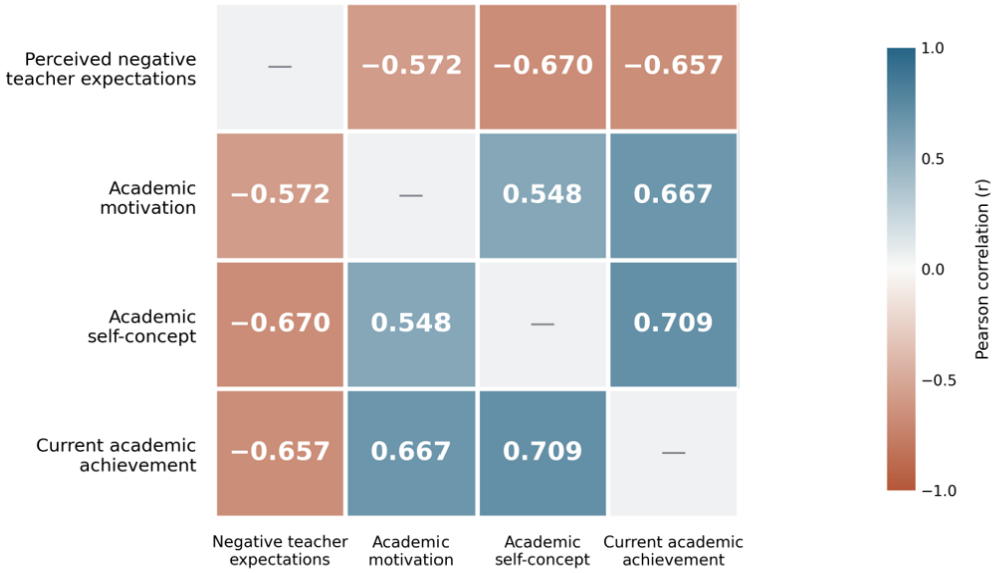
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Interpretation. The mean perceived negative teacher expectation score was 2.80, just below the scale midpoint. Academic motivation and academic self-concept averaged 3.37 and 3.31, respectively, both above the midpoint. Current academic achievement averaged 64.40%, with a standard deviation of 12.36 percentage points, reflecting variation in student performance. These means should not be labeled "low," "moderate," or "high" without validated interpretive thresholds.

Table 3. Pearson correlations between perceived negative teacher expectations and student outcomes

Variable	1	2	3	4
1. Perceived negative teacher expectations	—			
2. Academic motivation	−.572***	—		
3. Academic self-concept	−.670***	.548***	—	
4. Current academic achievement	−.657***	.667***	.709***	—

*Note. N = 400 for all correlations. ***p < .001; tests were two-sided and unadjusted for multiple comparisons.*



Interpretation. Perceived negative teacher expectations were negatively associated with academic motivation (r = −.572), academic self-concept (r = −.670), and achievement (r = −.657). Accordingly, students who perceived greater underestimation tended to report lower motivation, hold less favorable views of their academic abilities, and achieve lower scores. Academic motivation was positively associated with academic self-concept (*r* = .548) and achievement (*r* = .667). Academic self-concept showed the strongest bivariate association with achievement (*r* = .709). These correlations describe unadjusted relationships and do not establish their direction or independence from background characteristics.

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Table 4. Adjusted associations of perceived negative teacher expectations with academic motivation and academic self-concept

Outcome	Predictor	B	95% CI for B	Standardized β	p
Academic motivation	Negative teacher expectations	−0.360	−0.443 to −0.278	−.414	<.001
	Age, years	−0.017	−0.081 to 0.046	−.021	.591
	Female, versus male	0.022	−0.086 to 0.129	.016	.692
	Grade 12, versus Grade 11	−0.030	−0.138 to 0.078	−.022	.586
	Household socioeconomic index	0.047	0.013 to 0.081	.121	.008
	Prior academic achievement	0.013	0.007 to 0.019	.216	<.001
Academic self-concept	Negative teacher expectations	−0.461	−0.536 to −0.387	−.529	<.001
	Age, years	0.060	0.003 to 0.117	.073	.041
	Female, versus male	−0.030	−0.127 to 0.068	−.021	.551
	Grade 12, versus Grade 11	0.114	0.016 to 0.211	.082	.022
	Household socioeconomic index	0.006	−0.025 to 0.037	.016	.697
	Prior academic achievement	0.014	0.008 to 0.020	.233	<.001

Note. Separate ordinary least squares models were estimated for each outcome (N = 400 per model). B = unstandardized coefficient; CI = confidence interval; β = standardized coefficient. For the motivation model, R^2 = .390, adjusted R^2 = .380, $F(6, 393) = 41.82$, $p < .001$. For the self-concept model, R^2 = .504, adjusted R^2 = .496, $F(6, 393) = 66.53$, $p < .001$. Intercepts are omitted.

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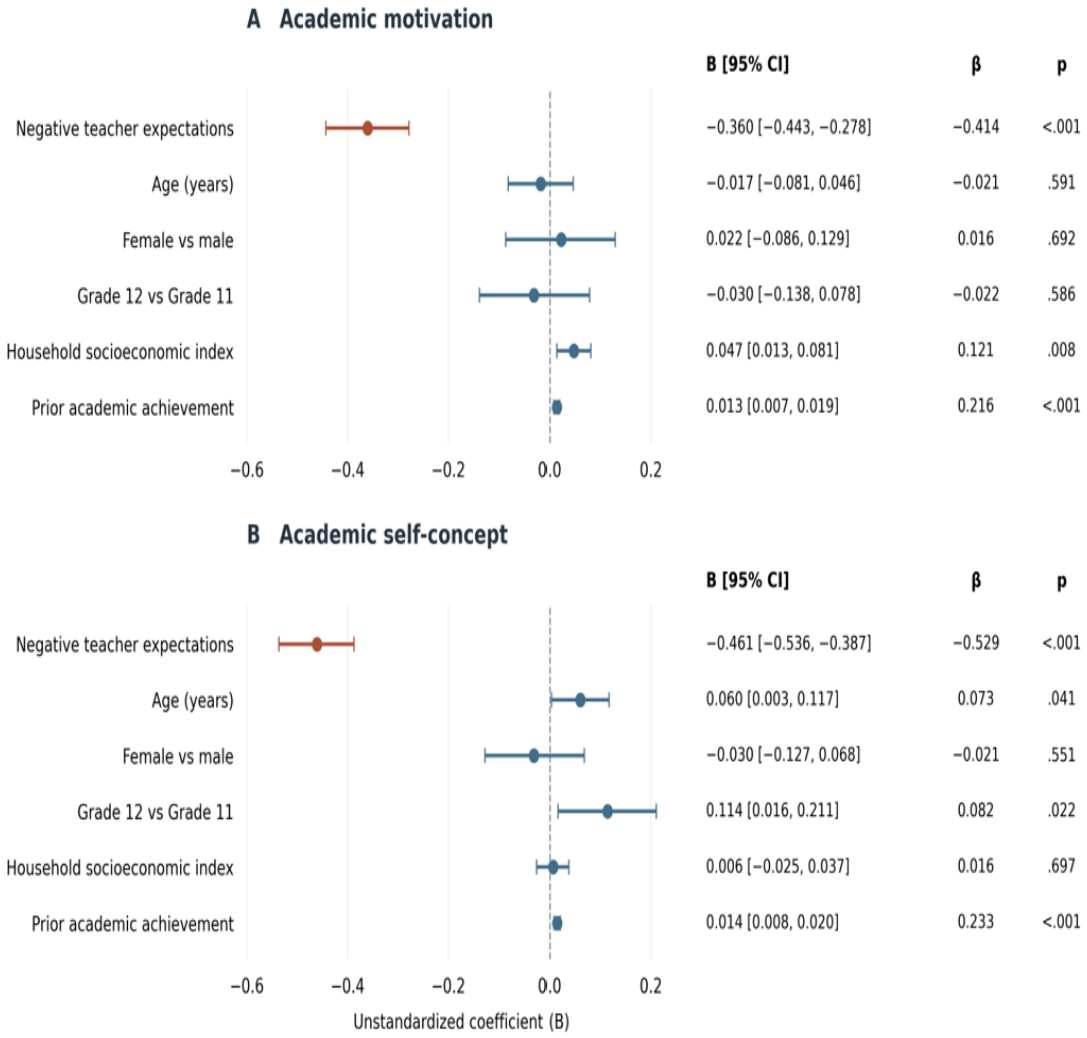


Figure 1 Adjusted associations of perceived negative teacher expectations with academic motivation and academic self-concept

Interpretation. After adjustment for age, sex, grade, household socioeconomic conditions, and prior achievement, perceived negative teacher expectations remained negatively associated with academic motivation. A one-point increase in the expectation score was associated with a 0.360-point decrease in motivation (95% CI: −0.443 to −0.278). Household socioeconomic conditions and prior achievement were positively associated with motivation, while age, sex, and grade were not significantly associated. Together, the predictors explained 39.0% of the variation in motivation.

For academic self-concept, each one-point increase in the negative expectation score was associated with a 0.461-point decrease in self-concept (95% CI: −0.536 to −0.387). Negative teacher expectations had the largest absolute standardized coefficient in the model (β = −.529). Prior achievement, age, and Grade 12 enrollment were positively associated with self-concept. The model explained 50.4% of the variation in self-concept.

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Table 5. Multiple linear regression model for current academic achievement

Predictor	B	95% CI for B	Standardized β	p
Perceived negative teacher expectations	−1.537	−2.733 to −0.342	−.099	.012
Academic motivation	4.270	3.055 to 5.484	.239	<.001
Academic self-concept	5.375	4.029 to 6.720	.301	<.001
Age, years	−0.496	−1.257 to 0.264	−.034	.200
Female, versus male	−0.203	−1.490 to 1.084	−.008	.757
Grade 12, versus Grade 11	0.509	−0.792 to 1.810	.021	.442
Household socioeconomic index	0.867	0.454 to 1.279	.126	<.001
Prior academic achievement	0.341	0.263 to 0.418	.318	<.001

Note. N = 400. B coefficients indicate percentage-point differences in current achievement for each one-unit increase in the predictor, controlling for the other variables. R^2 = .728, adjusted R^2 = .723, F(8, 391) = 131.12, p < .001. The intercept is omitted. Conventional ordinary least squares confidence intervals assume that observations are independent.

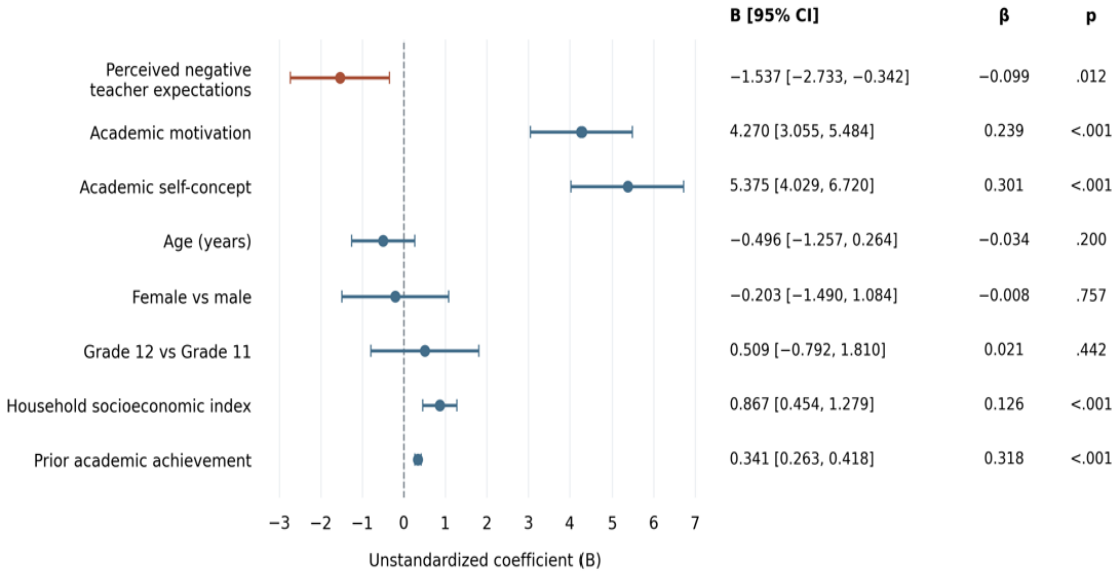


Figure 2Multiple linear regression model for current academic achievement

Interpretation. Perceived negative teacher expectations remained negatively associated with current achievement after including motivation, self-concept, background characteristics, and prior achievement simultaneously. A one-point increase in the negative expectation score was associated with a 1.54-percentage-point decrease in achievement (95% CI: −2.73 to −0.34). Academic motivation and self-concept were positively associated with achievement. Each one-point increase in motivation corresponded to a 4.27-percentage-point increase in achievement, while each one-point increase in self-concept corresponded to a 5.38-percentage-point increase. Prior achievement had the largest standardized coefficient (β = .318), followed by academic self-concept (β = .301) and motivation (β = .239).

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Household socioeconomic conditions were also positively associated with achievement. Age, sex, and grade were not statistically significant predictors in this model.

The model explained 72.8% of the variation in current academic achievement in the analyzed sample. This figure reflects in-sample model fit and does not establish predictive accuracy in other populations. The associations do not demonstrate causation or show that academic motivation and academic self-concept mediate the relationship between perceived negative teacher expectations and achievement.

Discussion

The present study examined associations between perceived negative teacher expectations, academic motivation, academic self-concept, and academic achievement among 400 higher secondary students. Greater perceived negative expectations were associated with lower motivation, less favorable academic self-concept, and lower current achievement. These relationships remained statistically significant after adjustment for age, sex, grade, household socioeconomic conditions, and prior achievement. However, the findings concern students' perceptions of teachers' expectations and should not be interpreted as direct evidence of objectively measured teacher bias. This distinction is consistent with Jussim and Harber (2005), who emphasized that relationships between teacher expectations and student outcomes may reflect a combination of accurate judgments, perceptual bias, and self-fulfilling processes.

Perceived negative teacher expectations were negatively correlated with academic motivation ($r = -.572$). After adjustment, a one-point increase in the expectation score was associated with a 0.360-point decrease in motivation (95% CI [−0.443, −0.278]). The standardized coefficient ($\beta = -.414$) indicated that perceived negative expectations had the largest absolute standardized association within the motivation model. This finding is consistent with Hornstra et al. (2018), who reported positive relationships between teacher expectations, intrinsic motivation, and engagement among secondary students. Together, these findings suggest that students' experiences of teachers' expectations matter for their willingness to engage with learning, beyond differences in previous performance and background characteristics.

One possible explanation is that perceived underestimation diminishes students' sense of competence or their connection with teachers. Self-determination theory identifies competence, autonomy, and relatedness as essential conditions for sustained motivation. Ryan and Deci (2020) contend that classroom environments supporting these needs foster more autonomous engagement with learning. The present findings align with this explanation: students who perceive less confidence in their abilities may feel less capable or less supported academically. However, psychological need satisfaction was not measured in this study, so this remains a theoretical interpretation rather than an established mechanism. The positive associations of household socioeconomic conditions and prior achievement with motivation further indicate that motivational experiences should be considered within the broader context of students' educational circumstances.

The association with academic self-concept was particularly pronounced. Perceived negative expectations were negatively correlated with self-concept ($r = -.670$), and each one-point increase in the expectation score was associated with a 0.461-point decrease in self-concept after adjustment (95% CI [−0.536, −0.387]). Its standardized coefficient ($\beta = -.529$) was the largest in absolute magnitude within this model. This pattern corresponds with Rubie-Davies (2006), whose longitudinal research identified declining academic self-perceptions among students taught by low-expectation teachers. The present findings similarly suggest that feeling underestimated is closely associated with how students evaluate their academic abilities.

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However, the apparent difference between the motivation and self-concept coefficients was not formally tested and should not be presented as a demonstrated difference in effect strength.

The positive association between self-concept and achievement (r = .709) further emphasizes the relevance of academic self-beliefs. In the adjusted achievement model, a one-point increase in self-concept was associated with a 5.375-percentage-point increase in current achievement (95% CI [4.029, 6.720]). Huang's (2011) meta-analysis found longitudinal relationships in both directions between self-concept and achievement, suggesting that students' beliefs and performance may reinforce one another. Accordingly, the present association may reflect both the academic relevance of favorable self-beliefs and the contribution of successful performance to those beliefs. Adjustment for prior achievement addresses part of this relationship but does not establish its direction.

Perceived negative teacher expectations remained associated with current achievement after simultaneously including motivation, self-concept, demographic characteristics, socioeconomic conditions, and prior achievement. A one-point increase in negative expectations corresponded to a 1.537-percentage-point decrease in achievement (95% CI [−2.733, −0.342]; p = .012). This finding is compatible with de Boer et al. (2010), who identified associations between teacher expectation bias and later performance after accounting for earlier student characteristics. However, their study measured discrepancies between observed and predicted teacher expectations, whereas the present study assessed students' perceptions. The findings therefore converge at the broader level of expectation-related experiences and performance, while differing in how expectations were measured.

The adjusted expectation coefficient was modest in standardized terms (β = −.099), particularly compared with its bivariate correlation with achievement (r = −.657). This contrast indicates that the unadjusted association should not be interpreted independently of motivation, self-concept, prior performance, and background characteristics. It does not demonstrate that motivation or self-concept mediates the relationship. Gentrup et al. (2020) similarly found that identifying an expectation–achievement association did not automatically establish the process responsible: although teacher feedback differed with expectation inaccuracy, it did not substantially mediate the relationship. The present study therefore supports an adjusted association without identifying a specific causal pathway.

Academic motivation also remained positively associated with current achievement. Each one-point increase in motivation corresponded to a 4.270-percentage-point increase in achievement (95% CI [3.055, 5.484]), holding the other predictors constant. This finding is consistent with Howard et al. (2021), whose meta-analysis connected intrinsic motivation with student success and personally valued engagement with persistence. Their findings also demonstrate that motivational quality matters. Because the present study used an overall motivation score, its results should not be attributed specifically to intrinsic motivation or other motivational subtypes without supporting measurement evidence.

Prior achievement had the largest standardized coefficient in the achievement model (β = .318), followed by self-concept (β = .301) and motivation (β = .239). Household socioeconomic conditions were also positively associated with current achievement, whereas age, sex, and grade were not statistically significant in that model. These findings indicate that psychological characteristics and perceived expectations should be examined alongside students' previous performance and household circumstances. They align with the broader approach of Rubie-Davies et al. (2020), who showed that relationships among teacher expectations, achievement, and student beliefs differed across psychological constructs. Examining several constructs together therefore provides a more differentiated account than focusing on expectations alone.

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The models explained 39.0% of the variation in motivation, 50.4% in self-concept, and 72.8% in current achievement. These values indicate substantial explanatory fit within the analyzed sample, particularly when prior achievement and psychological variables were considered together. However, they do not establish predictive accuracy in other student populations. The absence of statistically significant age, sex, or grade associations in the achievement model also should not be interpreted as proof that these characteristics are irrelevant; their associations were estimated conditional on the other included predictors.

The findings underscore the importance of how teachers communicate expectations through feedback, classroom participation opportunities, and responses to academic difficulty. A practical implication is to combine appropriately challenging learning opportunities with constructive guidance and explicit expressions of confidence in students' capacity to improve. Intervention evidence supports further investigation of such approaches: de Boer et al. (2018) reported positive average effects of teacher expectation interventions on both expectations and achievement. However, the present observational findings do not establish which specific intervention would be effective for these students. Any application should therefore be evaluated empirically rather than assumed to reproduce the reported associations.

A strength of the study is its simultaneous examination of motivation, self-concept, and achievement, with adjustment for prior performance and relevant background characteristics. Using the same 400 observations across analyses also allows consistent comparison of the reported relationships.

Several limitations warrant consideration. The cross-sectional design prevents determination of temporal ordering, and students with lower motivation or achievement may perceive teachers' expectations more negatively. Perception-based measures may also share response tendencies that contribute to their correlations. Unmeasured factors, including instructional quality, parental expectations, and classroom climate, could influence the observed associations. In addition, conventional regression inference did not account for possible clustering within teachers, classrooms, or schools, which may affect confidence intervals and significance tests. Generalizability depends on the sampling frame and recruitment procedures.

Future research should combine repeated student assessments with teacher-reported expectations, classroom observations, and comparable achievement records. Longitudinal and multilevel designs would help distinguish individual perceptions from classroom processes and clarify the ordering of relationships. The present findings provide a basis for this work by identifying consistent adjusted associations between perceived negative teacher expectations and students' motivational, self-concept, and achievement outcomes.

Conclusion

Consistent associations were identified between perceived negative teacher expectations, academic motivation, academic self-concept, and academic achievement among higher secondary students. Students who perceived greater underestimation by teachers reported lower motivation, a less favorable academic self-concept, and lower achievement. These associations persisted after adjusting for demographic characteristics, household socioeconomic conditions, and prior performance, indicating that perceived expectations remained relevant within the broader educational context modeled.

These findings underscore the importance of considering motivational experiences and academic self-beliefs alongside achievement. Perceived negative expectations were independently associated with both psychological outcomes, while motivation and self-concept remained positively associated with current achievement when analyzed together. Prior achievement also maintained a substantial

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association with current performance. Collectively, these results indicate that students' academic outcomes should be interpreted through the combined lens of previous attainment, household circumstances, perceived classroom experiences, and psychological characteristics.

The achievement model accounted for 72.8% of the variance within the analyzed sample. However, this explanatory fit does not establish predictive accuracy beyond the sample or demonstrate that altering teacher expectations would necessarily improve achievement. Likewise, the smaller adjusted association between perceived expectations and achievement does not confirm mediation through motivation or self-concept. The study measured perceived negative expectations rather than independently observed teacher bias, and its conclusions are specific to this measurement distinction.

For educational practice, these findings support increased attention to how students interpret teachers' feedback, learning opportunities, and responses to academic challenges. Teacher development initiatives could focus on communicating appropriately challenging expectations, providing constructive feedback, and expressing confidence in students' capacity for improvement. Schools might also create opportunities for students to discuss experiences of underestimation and access academic support. These approaches require systematic evaluation before conclusions can be drawn regarding their effectiveness in enhancing motivation, self-concept, or achievement.

Future research should establish temporal ordering through longitudinal assessments and integrate student perceptions with teacher reports, classroom observations, and comparable achievement records. Multilevel analyses are needed to account for students sharing teachers, classrooms, and schools. Enhanced documentation of sampling procedures and measurement quality would further support interpretation and generalizability. Intervention studies could investigate whether changes in classroom communication precede improvements in students' beliefs and performance. The central contribution of this study is the identification of adjusted relationships linking perceived negative teacher expectations with multiple dimensions of students' academic experience, while acknowledging that causal mechanisms, reciprocal relationships, and the effectiveness of practical interventions require further empirical investigation.

REFERENCES

de Boer, H., Bosker, R. J., & van der Werf, M. P. C. (2010). Sustainability of teacher expectation bias effects on long-term student performance. *Journal of Educational Psychology, 102*(1), 168–179. https://doi.org/10.1037/a0017289

de Boer, H., Timmermans, A. C., & van der Werf, M. P. C. (2018). The effects of teacher expectation interventions on teachers' expectations and student achievement: Narrative review and meta-analysis. *Educational Research and Evaluation, 24*(3–5), 180–200. https://doi.org/10.1080/13803611.2018.1550834

Eccles, J. S., & Wigfield, A. (2020). From expectancy-value theory to situated expectancy-value theory: A developmental, social cognitive, and sociocultural perspective on motivation. *Contemporary Educational Psychology, 61*, Article 101859. https://doi.org/10.1016/j.cedpsych.2020.101859

Gentrup, S., Lorenz, G., Kristen, C., & Kogan, I. (2020). Self-fulfilling prophecies in the classroom: Teacher expectations, teacher feedback and student achievement. *Learning and Instruction, 66*, Article 101296. https://doi.org/10.1016/j.learninstruc.2019.101296

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 6 • October 2026

Hornstra, L., Stroet, K., Rubie-Davies, C., & Flint, A. (2023). Teacher expectations and self-determination theory: Considering convergence and divergence of theories. *Educational Psychology Review, 35*, Article 76. https://doi.org/10.1007/s10648-023-09788-4

Hornstra, L., Stroet, K., van Eijden, E., Goudsblom, J., & Roskamp, C. (2018). Teacher expectation effects on need-supportive teaching, student motivation, and engagement: A self-determination perspective. *Educational Research and Evaluation, 24*(3–5), 324–345. https://doi.org/10.1080/13803611.2018.1550841

Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science, 16*(6), 1300–1323. https://doi.org/10.1177/1745691620966789

Huang, C. (2011). Self-concept and academic achievement: A meta-analysis of longitudinal relations. *Journal of School Psychology, 49*(5), 505–528. https://doi.org/10.1016/j.jsp.2011.07.001

Jussim, L., & Harber, K. D. (2005). Teacher expectations and self-fulfilling prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality and Social Psychology Review, 9*(2), 131–155. https://doi.org/10.1207/s15327957pspr0902_3

Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on Psychological Science, 1*(2), 133–163. https://doi.org/10.1111/j.1745-6916.2006.00010.x

Rubie-Davies, C. M. (2006). Teacher expectations and student self-perceptions: Exploring relationships. *Psychology in the Schools, 43*(5), 537–552. https://doi.org/10.1002/pits.20169

Rubie-Davies, C. M., Peterson, E. R., Sibley, C. G., & Rosenthal, R. (2015). A teacher expectation intervention: Modelling the practices of high expectation teachers. *Contemporary Educational Psychology, 40*, 72–85. https://doi.org/10.1016/j.cedpsych.2014.03.003

Rubie-Davies, C., Hattie, J., & Hamilton, R. (2006). Expecting the best for students: Teacher expectations and academic outcomes. *British Journal of Educational Psychology, 76*(3), 429–444. https://doi.org/10.1348/000709905X53589

Rubie-Davies, C., Meissel, K., Alansari, M., Watson, P., Flint, A., & McDonald, L. (2020). Achievement and beliefs outcomes of students with high and low expectation teachers. *Social Psychology of Education, 23*, 1173–1201. https://doi.org/10.1007/s11218-020-09574-y

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61*, Article 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Wang, S., Rubie-Davies, C. M., & Meissel, K. (2018). A systematic review of the teacher expectation literature over the past 30 years. *Educational Research and Evaluation, 24*(3–5), 124–179. https://doi.org/10.1080/13803611.2018.1548798

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 6 • October 2026

Ahmad, S. (2026). Navigating Polycontextual Global Virtual Work in the AI Era: When Leadership Is the Hub A Resource Caravan Model of Institutional Navigation, AI-Mediated Communication, and Global Leadership: Associations with Trust, Performance, and Well-Being. *Journal of Intelligent Decision Making and Information Science,* 3(11s), 1942-1969.

Ahmad, S., Smerat, A., Wong, D. W.-K., & Bilal, D. M. (2025). A Comparative Statistical Study on Social Media Usage and Its Impact on the Mental Well-Being of Young Employees. *Sigmae*, 14(4).

Ahmad, S. (2025). Entrepreneurship and Sustainable Leadership Practices: How entrepreneurial leaders incorporate sustainability. *Journal of Entrepreneurship and Business Venturing,* 5(1).

Ahmad, S. (2025). Statistical Analysis of Leadership Styles and Their Impact on Hierarchical Effectiveness in Organizations. *Global Journal of Sciences*.

Choudhry Shahid, N. T. D. A. khan, S. A. Prof. Dr. M. B. O. A. S. A. (2026). Designing An Ai Governance Framework For Generative Ai In Higher Education: Integrating Large Language Models, Academic Integrity, Employability, And National Ai Policies. *Journal of Intelligent Decision Making and Information Science*, 3(12s).

Inam, M. (2026). Extreme Heat Exposure and Acute Cardiovascular Events in Pakistan: Clinical Risk, Multisystem Complications and Health-System Resilience. *Natural Resources for Human Health*, 6(12s), 1212-1228.

Kamboh, M. A., Ullah, I., Zeb, S. S., Saleemi, M. W., Athar, F., Ahmad, S., & Bayram, M. (2026). Climate shocks and unequal educational opportunity in Pakistan: household economic strain and the political-institutional context. *Aposta: Revista De Ciencias Sociales* , *24*(112), e2202. https://doi.org/10.23900/ra.v24i112.2202

Ahmad, S. (2025). Entrepreneurship and Sustainable Leadership Practices: How entrepreneurial leaders incorporate sustainability. *Journal of Entrepreneurship and Business Venturing,* 5(1).

Ahmad, S. (2024). The Impact of Decision-making by Charismatic Leadership in Conflicted and Tangled Circumstances. *KASBIT Journal*, 17(1).

Ahmad, S., Wong, W. K., Riaz, S., & Iqbal, A. (2024). The role of employee motivation and its impact on productivity in modern workplaces. *Arabian Journal of Business and Management Review*, 13(2).

Ahmad, S. (2025). Statistical Analysis of Leadership Styles and Their Impact on Hierarchical Effectiveness in Organizations. *Global Journal of Sciences*.

Ahmad, S., & Museera, S. (2024). The Strategic Influence of Cloud Computing on Contemporary Marketing and Management Practices. *Journal of Engineering and Computational Intelligence Review*, 2(2).

Ahmad, S., Nisa, G., Shah, S. H. I., & Manzoor, H. (2025). Exploring the Interplay of Creativity and Proactive Personality: Mediating Role of Self-Efficacy. *Research Journal for Social Affairs*, 3(4).

Ahmad, S., et al. (2025). An Investigation into the Relationship between Emotional Intelligence and Academic Success among University Students. *Pegem Journal of Education and Instruction, 15(1).*