



Perceived Teachers' Conscious Discipline and Academic Achievement: Academic Motivation as a Potential Mediator

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Abstract

Research has examined the impact of teachers' classroom management on students' academic achievement. However, the links between Conscious Discipline—a social-emotional learning program emphasizing empathy, composure, encouragement, and positive intent—and achievement remain underexplored, particularly the mediating role of academic motivation. This study investigated direct and indirect relationships between teachers' use of Conscious Discipline and students' academic motivation and achievement. A correlational design was used with data from 546 ninth- and tenth-grade students in four public secondary schools collected through validated questionnaires. Stratified random sampling ensured representativeness, and structural equation modeling (SEM) tested the proposed model. Findings indicated that academic motivation significantly predicted achievement ($\beta = 0.392$). It fully mediated the relationships between empathy ($\beta = 0.304$), encouragement ($\beta = 0.288$), and composure ($\beta = 0.270$) and achievement. Positive intent had both direct ($\beta = 0.300$) and indirect effects. The model explained 78% of variance in achievement. These findings highlight academic motivation's pivotal role in linking Conscious Discipline strategies to achievement, aligning with self-determination theory and social-emotional learning frameworks. Integrating these approaches may enhance secondary students' educational experiences. Although the correlational design and the context-specific sample restrict causal conclusions and limit the generalizability of the findings, this study contributes to the scarce empirical literature examining these relationships and indicates that Conscious Discipline may be a promising strategy for enhancing students' academic motivation and achievement in secondary education.

Keywords: Academic achievement, Academic motivation, Composure, Conscious discipline, Structural equation Modeling.

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Introduction

Education is fundamental to human development, fostering skills and opportunities that enhance well-being and reduce poverty (Hanushek & Woessmann, 2023; United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2017). Academic achievement, a key indicator of student success, is shaped by factors such as motivation, self-efficacy, socioeconomic background, prior performance, and attendance (Gottfried, 1990; Kpolovie et al., 2014; Schunk & DiBenedetto, 2020; Sirin, 2005). Grasping these elements is essential for overcoming obstacles to educational advancement (Steinmayr et al., 2014). Teachers significantly contribute to students' academic achievement by encouraging critical thinking, student engagement, and nurturing supportive connections (Darling-Hammond, 2020; Roorda et al., 2011).

Teachers' socio-emotional behaviors, particularly conscious discipline—defined by empathy, encouragement, positive intent, and composure—enhance student motivation and self-regulation (Bailey, 2014; Hamre & Pianta, 2006). Conscious Discipline, developed by Bailey (2014), is a social-emotional and classroom management framework that emphasizes building safe, connected, and emotionally supportive learning environments (Hamre & Pianta, 2006; Jennings & Greenberg, 2009; Zins et al., 2004). Unlike traditional discipline models that focus on external control and punishment, conscious discipline prioritizes internal self-regulation, emotional awareness, and relational safety. The framework is grounded in neuroscience, attachment theory, and social-emotional learning, proposing that students learn best when they feel emotionally secure and respected (Gross, 2015; Jennings et al., 2013; Schonert-Reichl, 2017).

The core components of Conscious Discipline empathy, encouragement, positive intent, and composure—represent teachers' capacity to regulate their own emotions while supporting students' emotional and academic needs (Bailey, 2015; McCarty et al., 2021). Empathy enables teachers to understand students' perspectives and build trusting relationships (Aldrup et al., 2022; McAllister & Irvine, 2002); encouragement fosters resilience, autonomy, and engagement (Reeve & Cheon, 2021; Wentzel, 2012); positive intent reflects teachers' belief in students' potential and emotional investment in learning (Hamre & Pianta, 2020); and

composure models emotional regulation and stress management during challenging classroom situations (Jennings & Greenberg, 2009; Schonert-Reichl & Lawlor, 2010).

Conscious Discipline integrates social-emotional learning and classroom management to promote lasting behavioral changes (Bailey, 2015). Empathetic and encouraging teaching styles foster intrinsic motivation, resilience, and school belonging, leading to improved academic achievement (Reeve & Cheon, 2021; Wentzel, 2012). For instance, empathy enables teachers to understand students' emotions and needs, nurturing positive teacher-student relationships that boost motivation and achievement (Aldrup et al., 2022; Zins et al., 2004). Similarly, encouragement through positive feedback and acknowledgment of effort enhances students' autonomy, confidence, and achievement (Hattie & Yates, 2014; Martin & Dowson, 2009).

Academic motivation, encompassing intrinsic, extrinsic, and a motivated behaviors, is a key driver of achievement, with intrinsic motivation showing a strong link to higher academic achievement (Niehaus et al., 2012; Richardson et al., 2012). Teachers' Conscious Discipline supports students' autonomy and competence, reducing disengagement and improving grades and test scores (Tschannen-Moran & Hoy, 2017). While global research emphasizes teacher-student relationships and motivation (Jennings & Greenberg, 2009; Roorda et al., 2011), the role of teachers' conscious discipline in secondary schools, particularly in Ethiopia, remains underexplored. In Ethiopia, teaching often prioritizes subject mastery and traditional discipline, neglecting socio-emotional factors like empathy and encouragement (Herut et al., 2024; Hiluf & Alemu, 2024). Local studies suggest emotional intelligence enhances student motivation and achievement, but classroom practices rarely foster these traits, limiting students' self-regulation and engagement.

Prior research often examines teacher behaviors and motivation separately, overlooking their combined influence through mediation. To the researchers' knowledge, no studies in Ethiopia have explored teachers' conscious discipline, particularly at the secondary school level. In contrast to research focused on conscious discipline in elementary settings (Bailey, 2014; McCarty et al., 2021), this study explores how teachers' conscious discipline including empathy, encouragement, positive intent, and composure—affects academic achievement through academic motivation in Ethiopian secondary schools. By filling this research gap, the

study seeks to offer valuable insights into enhancing teacher-student interactions and improving academic achievement in this setting.

Theoretical Framework

Self-Determination Theory (SDT; Deci & Ryan, 2012; Ryan & Deci, 2020) guides this study. It shows how social and instructional environments affect students' motivation and achievement. SDT says that optimal motivation and psychological functioning occur when three basic psychological needs are satisfied: autonomy, competence, and relatedness. Autonomy means feeling free and in control of your actions. Competence is about feeling capable and effective when learning. Relatedness is the feeling of being emotionally connected and valued by important people in your life.

SDT shows that when schools meet students' needs, they tend to feel more motivated. This includes intrinsic motivation and identified regulation. Both are linked to better engagement, persistence, and academic achievement (Reeve, 2009; Ryan & Deci, 2020). If these needs aren't met, students may lean toward controlled motivation or a motivation. This can hurt their learning and success. Thus, SDT provides a clear psychological mechanism linking classroom environments to students' motivational quality and achievement.

In this framework, teachers use Conscious Discipline practices to create supportive conditions. These practices have a direct influence on students' motivation. Empathy and positive intent help students feel connected. They create safe and respectful relationships based on trust and understanding (Reeve, 2009; Roorda et al., 2017). Encouragement boosts how students see their skills. It focuses on effort, mastery, and self-belief instead of outside judgment (Ryan & Deci, 2020). Composure helps students be more independent. It shows them how to manage their emotions, communicate without control, and solve problems thoughtfully. This approach boosts their sense of agency and ownership in learning (Niemiec & Ryan, 2009).

Taken together, these socio-emotional teaching behaviors align closely with SDT's core principles and are expected to satisfy students' psychological needs, strengthen academic motivation, and indirectly contribute to improved academic achievement. This theoretical

alignment justifies the inclusion of Conscious Discipline as a key environmental predictor and academic motivation as a central mediating mechanism within the proposed model.

Moreover, teachers' use of Conscious Discipline, a framework that incorporates empathy, encouragement, positive intent, and composure, functions as an environmental factor that supports students' basic psychological needs for relatedness and autonomy. Through empathetic interactions and emotionally supportive communication, teachers create a sense of relational safety, which strengthens students' feelings of belonging and acceptance. Simultaneously, encouragement and positive intent promote students' perceptions of choice, competence, and personal agency in learning activities. According to SDT, the satisfaction of these psychological needs reduces controlled forms of motivation and a motivation while fostering more autonomous and intrinsic forms of academic motivation (Reeve & Cheon, 2021; Roorda et al., 2017). These processes require strong academic motivation and are reflected in Teachers' Conscious Discipline (TCD) practices, such as maintaining composure and demonstrating positive intent (Bailey, 2015). From the SDT perspective, such socio-emotional teaching behaviors function as need-supportive conditions that enhance students' feelings of autonomy, competence, and relatedness, thereby promoting more autonomous forms of academic motivation. In the Ethiopian context, where traditional disciplinary practices often place limited emphasis on socio-emotional support, TCD becomes particularly important for fostering students' academic motivation and, in turn, improving academic achievement. This theoretical relationship between components of TCD, academic motivation, and achievement is illustrated in the hypothetical model presented in Figure 1.

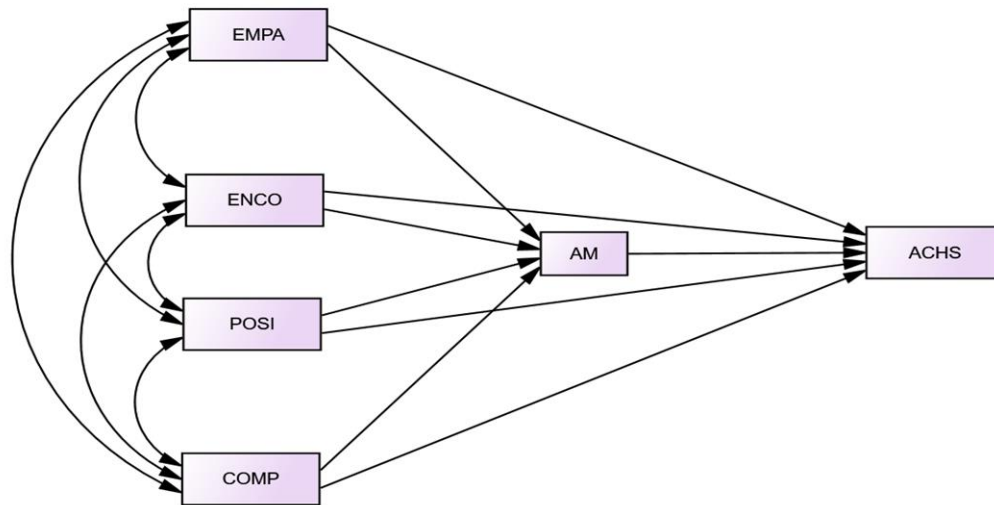


Fig.1 Hypothesized Model of Relationships Among Teachers' Conscious Discipline (Empathy (EMPA), Encouragement (ENCO), Positive Intent (POSI), Composure (COMP)), Academic Motivation (AM), and Achievement Scores (ACHS).

This study was designed to address two key research questions: (1) How do Teachers' Conscious Discipline (TCD) dimensions—empathy, encouragement, positive intent, and composure—relate to students' Academic Motivation (AM) and Achievement Scores (ACHS)?(2) Does Academic Motivation (AM) serve as a mediating factor between Teachers' Conscious Discipline (TCD) and students' Achievement Scores (ACHS)?

Methods

Design and Participants

This study employed a correlational research design, a non-experimental method that looks at the relationships between two or more variables. This approach checks the strength and direction of how these variables are related. Researchers often use statistical techniques, such as Pearson's correlation coefficient, to analyze these relationships (Creswell & Creswell, 2023; Gravetter & Forzano, 2021).

The study was conducted in Debre Markos Town, located in the Amhara Region of Ethiopia, where the educational structure follows the Ethiopian school system, consisting of primary (Grades 1–8) and secondary (Grades 9–12) levels. The target population included all students in Grades 9 and 10 at four public secondary schools in Debre Markos Town for the 2024 academic year. Data from the schools' administrative offices show that the total number of Grade 9 and Grade 10 students across the four schools is 3,542.

The required sample size was determined using the Krejcie and Morgan (1970) sample size determination formula for a known population. Based on the total population ($N = 3542$), the recommended sample size was $n = 546$ students, which was used for this study.

A proportional stratified random sampling technique was used to ensure adequate representation across key subgroups. Three of the four public secondary schools in Debre Markos Town were chosen. They are Debeza, Tekle Haimanot, and Menkoror. This selection was done using simple random sampling. The population was then stratified by school, grade level (Grades 9 and 10), gender, and class sections. The total sample size ($n = 546$) was proportionally allocated to each stratum based on the actual student distribution. Simple random sampling was used in each stratum with a random-number table. This method ensured that every participant had an equal chance of being selected, while also keeping proportional representation.

The sample initially included 546 participants; however, 41 incomplete questionnaires were omitted. From the remaining 505 questionnaires, 9 cases were identified as multivariate outliers during the univariate and multivariate assumption checks and were subsequently excluded. Thus, the final analysis included data from 496 students, with 50.6% female and 49.4% male, and an almost even distribution between grades nine (50.2%) and ten (49.8%). Regarding grade level, the distribution is nearly equal: approximately 50.2% of the participants are in grade nine, and the remaining 49.8% are in grade ten.

Measures

The researchers adapted instruments from existing literature to ensure accuracy through a rigorous two-step translation process. The first stage involved independent forward translation of the original English instruments into Amharic by two bilingual translators whose mother tongue was Amharic and who had high proficiency in both languages. Both translators were university-level English instructors with extensive teaching experience and formal training in educational psychology, enabling them to consider both linguistic and

conceptual equivalence. The two translated versions were then compared and synthesized into a single reconciled version through item-by-item discussion, facilitated by the researchers. Discrepancies were resolved through consensus, with particular attention to semantic, idiomatic, experiential, and conceptual equivalence (Beaton et al., 2000).

In the final stage, the synthesized Amharic version was back-translated into English by two independent bilingual translators who had no prior involvement in the translation process and were blinded to the original instruments. The backward-translated versions were compared with the original English instruments to identify potential deviations in meaning. This comparison served as a quality control mechanism to verify translation accuracy and ensure cross-cultural validity. After expert review and refinement, the finalized Amharic version was deemed appropriate for use in the main data collection (Arafat et al., 2016; Lenderink et al., 2012).

Measures of achievement scores

In this study, academic achievement was measured using students' average percentage across all subjects from their most recent semester. This method was selected for its practicality and established validity in high school educational research (Kuncel et al., 2005). Furthermore, semester-based scores are a standard measure of student performance in Ethiopian secondary schools, making this approach highly relevant to the study's context.

Measure of Students' Motivation

The Academic Motivation Scale (AMS), originally developed by Vallerand et al. (1992), was adapted for use in the present study and subjected to a pilot test involving 235 students. The adaptation process was examined using Principal Components Analysis (PCA) to evaluate the underlying factor structure. In line with established methodological recommendations, items with factor loadings of 0.50 or higher were retained, as this threshold indicates practical significance and a strong association with the latent construct (Hair et al., 2019; Tabachnick & Fidell, 2019). Although lower cutoffs such as 0.30 or 0.33 are sometimes suggested for exploratory purposes (Field, 2018), the higher threshold was adopted in this study to ensure stronger construct clarity and measurement rigor. Based on these criteria, five items were retained, all of which demonstrated communalities above 0.45 and factor loadings of at least 0.50 on a single factor. The revised instrument exhibited satisfactory internal consistency, with a Cronbach's alpha coefficient of 0.81.

To evaluate the structure of the revised Academic Motivation Scale (AMS), a Confirmatory Factor Analysis (CFA) was carried out. The analysis produced the following fit indices: Goodness of Fit Index (GFI) = 0.94, Comparative Fit Index (CFI) = 0.93, Tucker–Lewis Index (TLI) = 0.92, CMIN/DF = 2.57, and Root Mean Square Error of Approximation (RMSEA) = 0.048. These statistics demonstrate a strong model fit, confirming the validity of the instrument. Respondents expressed their agreement on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) for items such as: “*I don’t know; I feel I am wasting my time in education*” and “*For the pleasure I experience when surpassing myself in personal accomplishments.*”

Teachers’ Conscious Discipline Scale

The Teachers’ Conscious Discipline (TCD) scale was developed by the researchers based on an extensive review of theoretical and empirical literature on socio-emotional teaching and conscious discipline. The TCD framework, originally proposed by Bailey (2014), comprises four core dimensions: empathy, encouragement, positive intent, and composure. These four dimensions are subscales of the overarching TCD construct, meaning that while each subscale assesses a distinct aspect of teachers’ socio-emotional practices, together they provide a comprehensive evaluation of the overall TCD construct in classroom contexts.

An initial pool of 30 items was generated to measure these four subscales: 8 items for empathy, 7 for encouragement, 5 for positive intent, and 10 for composure. All items were rated on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Given that the instrument was newly developed and adapted for the Ethiopian context, its psychometric properties were examined through Principal Component Analysis (PCA) to explore the underlying factor structure, followed by Confirmatory Factor Analysis (CFA) to test the adequacy of the hypothesized four-factor measurement model. Items with standardized factor loadings ≥ 0.50 were retained, consistent with recommended thresholds in applied social science research (Brown, 2015; Hair et al., 2019; Tabachnick & Fidell, 2019). Lower loadings (e.g., 0.30–0.33) are sometimes accepted in exploratory studies (Field, 2018), but the higher cutoff was adopted to ensure construct clarity and measurement rigor.

The final TCD scale consisted of 17 items: 4 for empathy, 4 for encouragement, 3 for positive intent, and 6 for composure. Reliability analysis demonstrated satisfactory internal consistency for each subscale, with Cronbach’s alpha coefficients of $\alpha = .82$ for empathy, $\alpha = .85$ for encouragement, $\alpha = .76$ for positive intent, and $\alpha = .86$ for composure. This structure

confirms that the four subscales collectively form a robust, multidimensional measure of teachers' Conscious Discipline while preserving the theoretical integrity of each component.

Empathy: Empathy was assessed using a four-item scale, with responses recorded on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included: “*My teacher understands the difficulties students encounter in their learning*” and “*My teacher shows genuine concern for each student's well-being.*” Confirmatory factor analysis (CFA) results indicated an adequate model fit, with a Comparative Fit Index (CFI) of .96, a Tucker-Lewis Index (TLI) of .92, a Chi-Square Minimum Discrepancy divided by Degrees of Freedom (CMIN/DF) of 2.48, and a Root Mean Square Error of Approximation (RMSEA) of .041.

Encouragement: Encouragement was evaluated with a four-item measure, using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Sample items included: “*My teacher encourages me to overcome challenges and persevere in my studies,*” and “*My teacher promotes a sense of belonging, making learning enjoyable.*” CFA supported an adequate model fit, with a CFI of .97, TLI of .94, χ^2/df of 1.29, and RMSEA of .047.

Positive Intent: Positive intent was assessed using a three-item scale, rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Sample items included: “*My teacher offers support when I encounter academic difficulties*” and “*I feel that my teacher is genuinely invested in my academic success.*” CFA results indicated a satisfactory model fit, with CFI of .90, TLI of .93, χ^2/df of 3.46, and RMSEA of .052.

Composure: Composure was measured with a six-item scale, employing a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Example items included: “*My teacher responds calmly to students' errors*” and “*My teacher serves as a model of composure in the classroom.*” CFA results confirmed an acceptable model fit, with a CFI of .91, TLI of .93, χ^2/df of 3.44, and RMSEA of .038.

Instrument Validation

The measurement constructs were validated by evaluating content, construct, convergent, and discriminant validity, along with factor loadings. Six PhD candidates in Educational Psychology from Bahir Dar University thoroughly reviewed the instruments to ensure alignment with the intended constructs. Factor loadings verified that the retained items substantially contributed to their respective constructs. Convergent validity was confirmed through average variance extracted (AVE) values exceeding .50. Discriminant validity was

established by demonstrating that the shared variance between constructs was lower than their respective AVE values, enhancing the reliability of the findings (Collier, 2020). Each instrument exhibited adequate internal consistency, greater than 0.70.

Data Analysis Methodology

Descriptive analyses were performed in SPSS (v.27), and AMOS (v.23) was used for CFA and SEM to examine the relationships among perceived teachers' conscious discipline, student achievement, and academic motivation as a mediator. Model fit was evaluated using RMSEA (<0.06), SRMR (<0.08), TLI, GFI, AGFI, CFI (≥ 0.90), and CMIN/DF (<5.0) (Collier, 2020). Indirect effects were tested with 5,000 bootstrap samples and 95% bias-corrected confidence intervals, with significance indicated when zero was not included. Results were considered statistically significant when the two-tailed p-value was under 0.05. The analysis ultimately assessed teachers' conscious discipline (four constructs) as exogenous variables and students' achievement as the endogenous variable, with academic motivation functioning as a mediator. SEM for mediation analysis requires several assumptions, including multivariate normality, continuous dependent variables, linear relationships, compatibility with maximum likelihood estimation, complete data, and absence of multi collinearity, adequate sample size, reliable and valid measures, and absence of extreme outliers (Collier, 2020). These assumptions were carefully checked and met using appropriate statistical diagnostics.

Data Collection Procedures and Ethical Considerations

The study received approval from the Institutional Research Review Committee (IRRC) of Bahir Dar University's College of Education (protocol number 001953, 23/08/2024). Official collaboration letters were obtained, and students were fully informed about the study's purpose, procedures, potential benefits, and their rights, including the option to withdraw at any time. Written informed consent was obtained, with verbal consent provided in cases of limited parental/guardian literacy. Participants were selected fairly, treated with respect, and assured confidentiality through password-protected data storage and anonymized analysis, with ongoing monitoring to ensure ethical compliance.

Results

Relationship among components of perceived teachers’ conscious discipline, students’ academic motivation, and academic achievement

The key study variables and their descriptive statistics are summarized in Table 1 below.

Table 1: Overview of descriptive statistics and relationships among study variables

Variables	M	SD	(1)	(2)	(3)	(4)	(5)	(6)
Independent variables								
(1) Empathy	13.4	3.72	1					
(2) Encouragement	12.55	3.95	.538**	1				
(3) Positive Intent	9.35	2.84	.393**	.508**	1			
(4) Composure	17.55	5.03	.526**	.687**	.458**	1		
Mediator Variable								
(5) Academic motivation	16.44	3.29	.525**	.685**	.516**	.701**	1	
Dependent Variable								
(6) Average achievement scores	69.54	13.41	.576**	.714**	.639**	.716**	.738**	1

Note: ***p* is significant at $p < .01$ (two-tailed); *M* is mean, and *SD* is standard deviation

Teachers’ Conscious Discipline (comprising empathy, encouragement, positive intent, and composure), academic motivation, and achievement. The means and standard deviations are as follows: empathy (M = 13.4, SD = 3.72), encouragement (M = 12.55, SD = 3.95), positive intent (M = 9.35, SD = 2.84), composure (M = 17.55, SD = 5.03), academic motivation (M = 16.44, SD = 3.29), and achievement (M = 69.54, SD = 13.41).

Table 1 also shows significant positive correlations among the variables, all of which were significant at the 0.01 level. The correlation results indicate a consistent and theoretically

meaningful pattern of relationships among teachers' conscious discipline practices, students' academic motivation, and achievement. Empathy showed moderate to strong positive associations with encouragement ($r = .538$), positive intent ($r = .393$), and composure ($r = .526$), suggesting that emotionally sensitive teachers also tend to show supportive, trusting, and emotionally regulated classroom behaviors. These interconnected practices appear to form a coherent socio-emotional teaching profile.

Furthermore, empathy was positively related to academic motivation ($r = .525$) and achievement ($r = .576$), indicating that students who perceive their teachers as understanding and emotionally responsive are more likely to feel motivated and perform better academically. This finding supports motivational and relational theories, which emphasize the role of emotional connection in fostering student motivation and persistence.

Encouragement demonstrated particularly strong relationships with composure ($r = .687$), academic motivation ($r = .685$), and achievement ($r = .714$), implying that motivational support and positive reinforcement are closely linked with teachers' emotional stability and students' academic achievement. This suggests that encouragement may serve as a vital mechanism through which socio-emotional teaching translates into improved learning outcomes.

Positive intent was also significantly associated with composure ($r = .458$), academic motivation ($r = .516$), and achievement ($r = .639$), reflecting that students' perceptions of teachers' genuine concern and supportive intentions are related not only to higher motivation but also to better academic achievement.

Composure revealed strong positive correlations with academic motivation ($r = .701$) and achievement ($r = .716$), indicating that teachers' ability to remain calm and emotionally regulated during classroom challenges may play a crucial role in promoting a motivating learning environment and enhancing students' academic achievement.

Finally, academic motivation was strongly associated with academic achievement ($r = .738$), confirming its essential role as a proximal predictor of academic achievement and supporting its conceptualization as a key psychological mechanism linking teachers' socio-emotional behaviors with students' academic achievement.

Structural Equation Modeling

The SEM examined teachers’ conscious discipline as an exogenous construct, academic achievement as an endogenous construct, and academic motivation as a mediating variable. The model demonstrated a good fit across all indices. The relative chi-square (CMIN/DF) was 2.64, below the cutoff of 5. The Goodness of Fit Index (GFI) was 0.91, the Adjusted Goodness of Fit Index (AGFI) was 0.90, and the Comparative Fit Index (CFI) was 0.93, all exceeding the recommended threshold of 0.90. Additionally, the Standardized Root Mean Square Residual (SRMR) was 0.042, and the Root Mean Square Error of Approximation (RMSEA) was 0.058, both below their respective thresholds of 0.08 and 0.06 (Hu & Bentler, 1999; O’Rourke et al.,2016). These results indicate that the SEM adequately fits the observed data.

Direct effects of students’ perceptions of teachers’ conscious discipline and students’ motivation on students’ academic achievement

Table 2 displays the path coefficients for the hypothesized relationships. The findings indicate that the elements of teachers’ conscious discipline—empathy, encouragement, positive intent, and composure—show significant and positive predictive relationships with academic motivation.

Table 2:Direct effects of students’ perceptions of teachers’ conscious discipline components and students’ motivation on students’ academic achievement

Dependent variables		Predictors	β	B	S.E.	C.R.	P
AM	<---	EMPA	.304	.250	.098	2.542	**
AM	<---	ENCO	.288	.260	.092	2.828	**
AM	<---	POSI	.170	.156	.059	2.630	**
AM	<---	COMP	.270	.219	.079	2.760	**
ACHS	<---	AM	.392	6.198	2.444	2.536	**
ACHS	<---	EMPA	.142	1.837	1.353	1.358	ns
ACHS	<---	ENCO	.099	1.411	1.274	1.108	ns

Dependent variables	Predictors	β	B	S.E.	C.R.	P
ACHS	<--- POSI	.300	4.354	.861	5.056	***
ACHS	<--- COMP	.037	.476	1.073	.444	ns

Note: Significance levels: $p < .01$ denoted by **; $p < .001$ denoted by ***; non-significant (ns) indicates $p > .05$; EMPA (empathy), ENCO (encouragement), POSI (positive intent), COMP (composure), AM (academic motivation), ACHS (average achievement score)

Figure 2 illustrates the structural relationships among conscious discipline, academic motivation, and achievement, with path coefficients and R² values indicating the predictive strength of the independent variables.

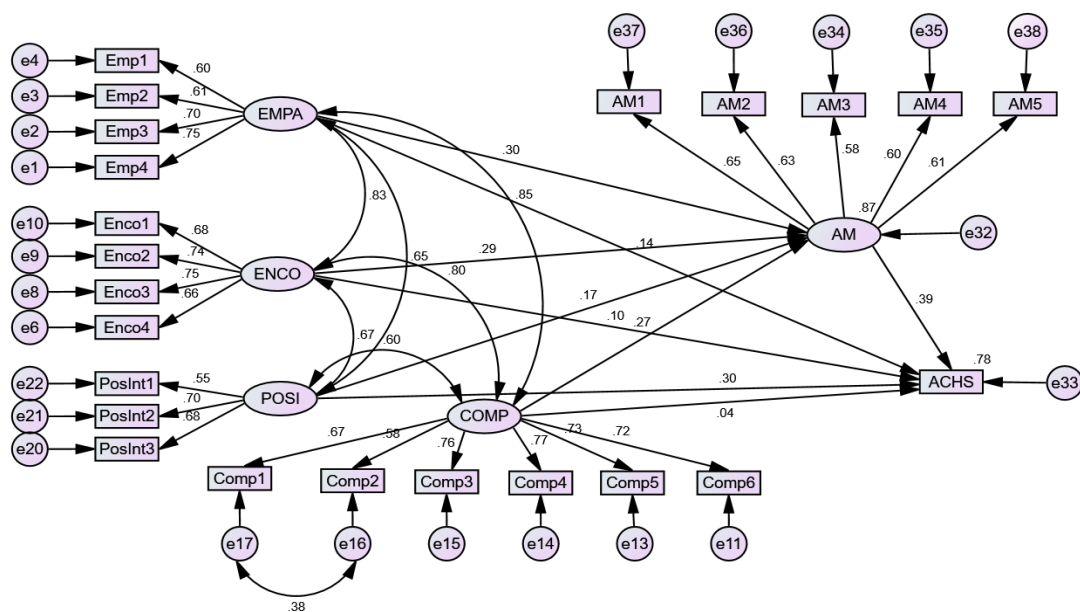


Fig. 2 Full Structural Model linking teachers’ discipline, motivation, and students’ achievement.

Note. EMPA (empathy), ENCO (encouragement), POSI (positive intent), COMP (composure), AM (academic motivation), ACHS (average achievement score)

Notably, the R² value of 0.87 for academic motivation indicates that 87% of its variance is explained by the four conscious discipline components. These components strongly influence

students’ academic motivation. Overall, the model explained 78% of the variation in students’ academic achievement.

Table 3 summarizes how components of teachers’ conscious discipline indirectly influence academic motivation and students’ achievement.

Table 3: Indirect and total effects of perceived teachers’ conscious discipline on students’ academic achievement

Parameter		Estimate	Lower	Upper	P
Indirect effect	Mediator				
Empathy	Via academic motivation	.119	.004	.443	.042
Encouragement	Via academic motivation	.113	.006	.438	.033
Positive intent	Via academic motivation	.067	.007	.246	.023
Composure	Via academic motivation	.106	.003	.427	.037
Total effect					
Empathy	(Direct + Indirect)	.261	.071	.483	.011
Encouragement	(Direct + Indirect)	.212	.013	.413	.037
Positive intent	(Direct + Indirect)	.367	.248	.490	.001
Composure	(Direct + Indirect)	.143	-.048	.308	.127

Note: Bootstrap sample = 5,000 with replacement.

The results indicate that all four components of teachers’ conscious discipline—empathy ($\beta = 0.304$, $B = 0.250$, $t(215) = 2.542$, $p < .01$), encouragement ($\beta = 0.288$, $B = 0.260$, $t(215) = 2.828$, $p < .01$), positive intent ($\beta = 0.170$, $B = 0.156$, $t(215) = 2.630$, $p < .01$), and composure ($\beta = 0.270$, $B = 0.219$, $t(215) = 2.760$, $p < .01$)—employ significant and positive influences on students’ academic motivation. This pattern suggests that students who perceive their teachers as emotionally supportive, encouraging, calm, and well-intentioned are more likely to develop higher levels of motivation toward learning. Collectively, these

findings highlight teachers' socio-emotional behaviors as important psychological resources that shape students' motivational orientations.

Among the components, positive intent emerged as the only factor that directly and significantly predicted academic achievement ($\beta = 0.300$, $B = 4.354$, $t(215) = 5.05$, $p < .001$), indicating that students' perceptions of teachers' genuine care, trust, and high expectations may translate into improved academic achievement even beyond motivational processes.

In contrast, empathy ($\beta = 0.142$, $B = 1.837$, $t(215) = 1.358$, $p > .05$), encouragement ($\beta = 0.099$, $B = 1.411$, $t(215) = 1.108$, $p > .05$), and composure ($\beta = 0.037$, $B = 0.476$, $t(215) = 0.444$, $p > .05$) did not show statistically significant direct effects on students' achievement. This suggests that, although these socio-emotional qualities are useful, their influence on academic achievement operates primarily through motivational mechanisms rather than through immediate direct pathways.

Furthermore, academic motivation strongly predicted achievement ($\beta = 0.392$, $B = 6.198$, $t(215) = 2.536$, $p < .01$), confirming its central role as a proximal determinant of academic achievement. This finding supports the conceptualization of motivation as a key mediating process through which teachers' conscious discipline contributes to students' academic achievement.

Analysis of how perceived teachers' conscious discipline indirectly influences academic achievement

The mediation analysis presented in Table 3 above indicates that academic motivation functions as a significant pathway linking teachers' conscious discipline to students' academic achievement. Specifically, the indirect effects of empathy (0.119, CI [.004, .443], $p = .042$), encouragement (0.113, CI [.006, .438], $p = .033$), positive intent (0.067, CI [.007, .246], $p = .023$), and composure (0.106, CI [.003, .427], $p = .037$) were all statistically significant based on 5,000 bootstrap resamples. These findings suggest that teachers' socio-emotional behaviors enhance students' academic achievement primarily by strengthening their motivation toward learning.

In practice, this pattern implies that when students perceive their teachers as empathetic, encouraging, calm, and genuinely supportive, they are more likely to develop higher levels of academic motivation, which in turn contributes to improved achievement. Thus, motivation operates as a key mediating mechanism through which teachers' conscious discipline exerts its influence on academic achievement.

Overall, the significant indirect effects across all components highlight that the impact of conscious discipline on achievement is largely indirect, emphasizing the central role of motivational processes rather than immediate direct instructional effects.

As shown in the results, teachers' conscious discipline components contributed differently to students' achievement. Empathy, encouragement, and positive intent revealed significant total effects ($p < .05$ to $p < .01$), with estimates of 0.261, 0.212, and 0.367, respectively. In contrast, composure had a positive estimate (0.143) but did not reach statistical significance ($p > .05$).

The findings show that academic motivation mediates the relationships between the components of Teacher Conscious Discipline and students' achievement. Accordingly, the indirect effect reached significance, whereas the direct effect did not.

For empathy, encouragement, and composure, the indirect effects on achievement through academic motivation were significant. However, their direct effects on achievement scores, after including motivation, were non-significant. These results indicate full mediation, as academic motivation fully accounted for the relationships between empathy, encouragement, composure, and achievement.

Discussion

This study examined how academic motivation mediates the relationship between teachers' Conscious Discipline—such as empathy, encouragement, positive intent, and composure—and student achievement in Ethiopian secondary schools. The study shows that Conscious Discipline boosts motivation. This increase can lead to better achievement. It is based on self-determination theory (Ryan & Deci, 2020) and self-regulated learning principles (Zimmerman & Schunk, 2011). These findings support SDT's idea that autonomy-supportive

practices help meet students' psychological needs. This, in turn, boosts intrinsic motivation and leads to positive outcomes (Reeve & Cheon, 2021; Roorda et al., 2011).

The correlation results showed strong positive links between teachers' Conscious Discipline components, academic motivation, and achievement. This supports earlier studies that highlight the importance of empathy and encouragement for boosting engagement (Aldrup et al., 2022; Gehlbach et al., 2012; McAllister & Irvine, 2002). The results showed that each component of teachers' Conscious Discipline influenced students' motivation, with motivation further driving achievement. While empathy, encouragement, and composure acted only indirectly, positive intent influenced achievement both directly and via motivation.

Thus, empathy, encouragement, and composure mainly enhance achievement by fostering autonomy and competence (Martin & Dowson, 2009; Tschannen-Moran & Hoy, 2017), whereas positive intent also influences outcomes directly through high expectations and emotional support (Hamre & Pianta, 2006; Hattie & Yates, 2014). These findings align with prior evidence that teacher support strengthens motivation and engagement (Hamre & Pianta, 2006; Reeve & Cheon, 2021).

The observed mediating role of motivation aligns with global studies emphasizing its central role in academic achievement (Niehaus et al., 2012). Teachers who show empathy help students feel connected and motivated. This support leads to better academic results (Aldrup et al., 2022; Gehlbach et al., 2012). Similarly, encouragement provides feedback that strengthens self-efficacy and persistence (Hattie & Yates, 2014; Martin & Dowson, 2009). Composure helps reduce stress and shows how to regulate emotions (Jennings & Greenberg, 2009). Positive intent partially mediates the relationship between teacher expectations and student achievement. Supportive teacher expectations boost trust and motivation, which helps students succeed (Wentzel, 2012).

These mediation patterns align with Ethiopian studies on emotional intelligence, motivation, and achievement (Herut et al., 2024; Hiluf & Alemu, 2024), extending them by specifying Conscious Discipline as a key antecedent. Recent research further supports these findings: for instance, a 2022 study in secondary schools using SDT found that autonomy-supportive teacher behaviors—such as facilitating intrinsic motivation—significantly predict student engagement and outcomes (Yang et al., 2022). In addition, a quasi-experimental study on Conscious Discipline showed reductions in externalizing behaviors and improvements in executive function, mediating enhanced self-regulation and achievement (Anderson et al., 2022). The full mediation for most components emphasizes how Conscious Discipline satisfies psychological needs, promoting self-motivated learning (Reeve & Cheon, 2021; Zimmerman & Schunk, 2011). The partial mediation of positive intent highlights dual pathways, potentially through direct boosts in self-efficacy and indirect enhancements in motivation (Morosanova et al., 2022; Wentzel, 2012).

These findings align with SDT, indicating that addressing students' essential needs for choice, skill development, and social connectedness fosters internally guided motivation and academic achievement. Within SRL frameworks, the results show that teachers' socio-emotional practices foster students' ability to regulate learning behaviors through heightened motivation (Zimmerman & Schunk, 2011). The analysis showed that 78% of the variation in academic achievement was due to using Conscious Discipline in teaching. This highlights the importance of

adding it to classroom practices. Professional development programs should focus on empathetic and supportive interactions. They need to promote positive intent in communication. This approach can boost motivation and enhance academic achievement.

Conclusion & Implications

This study shows that teachers' Conscious Discipline—empathy, encouragement, composure, and positive intent—improves secondary school students' academic achievement. Motivation plays a key role in this process. SEM results showed full mediation for empathy, encouragement, and composure. It also indicated partial mediation for positive intent. Together, these factors explained 78% of the variance in achievement. Training teachers in these skills can strengthen motivation and achievement. Implications include: (1) prioritizing professional development in empathy, feedback, and emotional regulation; (2) using classroom strategies like goal-setting and reflective journaling to build motivation and safe learning environments; (3) embedding positive intent in curricula through high expectations and project-based learning; (4) adopting supportive school policies, such as smaller classes or the School Family model; and (5) integrating conscious discipline into teacher evaluations and ongoing training. Overall, fostering Conscious Discipline is essential to enhance motivation and achievement in secondary schools.

Limitations and recommendations

This study's design can't prove cause and effect. So, we need more long-term or experimental research. Relying on semester scores might lower accuracy. Future studies should use standardized tests or observational methods. Limiting research to high school students limits its reach. So, studies should include university students or other settings for a fuller understanding. The quantitative design ignored contextual factors. Mixed methods could better show student–teacher dynamics. Classroom climate matters. It can show how teachers' conscious discipline impacts motivation and achievement. These recommendations stress the need to improve methods and expand focus. This will strengthen the evidence that motivation connects teacher practices to student achievement.

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