International Journal of Business Ethics and Management (IJBEM), ISSN: 3108-2572, Volume 2, Issue 1, **Jan-June** 2026, Available online at: https://www.ijbem.rsrd.org

Exploring Academic Motivation among School-Going Adolescents in Nadia District: An Empirical Study

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Abstract

The present study investigated the academic motivation of school-going adolescents and examined gender differences using the Motivated Strategies for Learning Questionnaire (MSLQ). A descriptive survey design was adopted, and data were collected from 500 secondary school adolescents, comprising 244 males and 256 females. Descriptive statistics and independent-samples *t* tests were employed for data analysis. The findings revealed that the adolescents demonstrated a high level of overall academic motivation (M = 5.11, SD = 0.65), with high levels of self-efficacy, intrinsic value, cognitive strategy use, and self-regulation, whereas test anxiety remained comparatively low. Both male (M = 5.05, SD = 0.69) and female (M = 5.17, SD = 0.59) adolescents exhibited high academic motivation. The independent-samples *t* test indicated statistically significant gender differences in overall academic motivation, cognitive strategy use, and test anxiety, with female adolescents obtaining higher mean scores than their male counterparts. No significant gender differences were observed in self-efficacy, intrinsic value, or self-regulation. The findings suggest that school-going adolescents generally possess positive motivational beliefs and effective learning strategies, while highlighting the importance of addressing gender-specific motivational characteristics in educational planning and classroom practices. The study contributes to the understanding of adolescent academic motivation and provides implications for teachers, school counsellors, curriculum planners, and educational policymakers in fostering effective learning environments.

Keywords: Academic motivation; School-going adolescents; Gender differences; Motivated Strategies for Learning Questionnaire (MSLQ); Self-regulated learning

1. Introduction

Academic motivation has emerged as one of the most extensively investigated constructs in educational psychology because of its significant influence on students' learning behaviour, academic engagement, persistence, and educational achievement. The following sections present the conceptual foundations, theoretical perspectives, empirical evidence, research gap, and rationale for the present investigation.

1.1 Academic Motivation: A Conceptual Perspective

Academic motivation refers to the psychological processes that energise, direct, and sustain students' learning behaviours in educational settings.

Academic motivation is one of the most important psychological determinants of students' learning, academic engagement, persistence, and educational achievement. It refers to the processes that initiate, direct, and sustain students' goal-oriented behaviours in academic settings **(Schunk et al., 2014).** Students with high academic motivation are more likely to invest effort in learning, employ effective cognitive and metacognitive strategies, persist when confronted with academic challenges, and ultimately achieve better educational outcomes (**Pintrich & De Groot, 1990**). Conversely, low academic motivation is associated with poor academic performance, disengagement from learning, absenteeism, and an increased likelihood of dropping out of school **(Ryan & Deci, 2020**).

Academic motivation is now widely recognised as a multidimensional construct comprising motivational beliefs and self-regulated learning strategies. These include self-efficacy, intrinsic value, cognitive strategy use, self-regulation, and test anxiety, each of which contributes significantly to students' academic functioning (**Pintrich & De Groot, 1990**).

1.2 Theoretical Foundations of Academic Motivation

Several theoretical perspectives have been developed to explain why students engage in learning and how motivation influences academic performance.

Among the most influential theories, **Self-Determination Theory (SDT)** proposes that motivation exists along a continuum from intrinsic to extrinsic motivation and depends upon the satisfaction of the psychological needs for autonomy, competence, and relatedness (**Deci & Ryan, 2000; Ryan & Deci, 2020**). Students whose psychological needs are fulfilled generally demonstrate stronger intrinsic motivation, greater persistence, and superior academic achievement.

The **Expectancy-Value Theory** further explains that students' achievement-related behaviours depend upon their expectations of success and the subjective value they assign to academic tasks **(Eccles & Wigfield, 2002**). Students who perceive themselves as academically competent and consider learning meaningful are more likely to engage actively in educational activities.

Similarly, the **Social Cognitive Theory of Self-Regulated Learning** emphasises the reciprocal interaction among personal, behavioural, and environmental factors during learning (**Zimmerman, 2000, 2002**). Within this framework, self-efficacy and self-regulation are regarded as central determinants of successful academic performance.

1.3 Motivated Strategies for Learning Questionnaire (MSLQ)

The assessment of academic motivation requires reliable and theoretically grounded measurement instruments.

The Motivated Strategies for Learning Questionnaire (MSLQ), developed by **Pintrich and De Groot (1990**), is one of the most widely used instruments for measuring students' motivational beliefs and learning strategies. The questionnaire assesses five major dimensions: Self-Efficacy, Intrinsic Value, Test Anxiety, Cognitive Strategy Use, and Self-Regulation. These dimensions collectively explain how students perceive learning, regulate their study behaviour, and respond to academic challenges.

Previous studies have demonstrated that students obtaining higher scores on these dimensions generally exhibit stronger academic engagement, better classroom performance, and improved academic achievement (**Pintrich & De Groot, 1990; Zimmerman, 2002**).

1.4 Academic Motivation during Adolescence

Adolescence is a crucial developmental period during which motivational beliefs become increasingly important for educational success.

During adolescence, students experience rapid cognitive, emotional, and social development accompanied by increasing academic expectations. These developmental changes substantially influence students' motivation, learning strategies, and educational aspirations. Research consistently indicates that highly motivated adolescents participate more actively in classroom learning, demonstrate greater persistence, and achieve better academic outcomes than their less motivated peers (**Schunk et al., 2014**).

Conversely, inadequate academic motivation has been associated with lower academic achievement, behavioural disengagement, reduced classroom participation, and an increased likelihood of educational failure **(Ryan & Deci, 2020**).

1.5 Gender Differences in Academic Motivation

Gender has frequently been examined as an important demographic variable influencing students' academic motivation.

Previous empirical investigations have produced mixed findings regarding gender differences in academic motivation. Several studies have reported that female students demonstrate stronger intrinsic motivation, more effective self-regulated learning strategies, and higher academic engagement than male students (**Meece et al., 2006**). In contrast, other investigations have found only marginal or statistically nonsignificant gender differences in overall academic motivation (**Eccles & Wigfield, 2002**).

These inconsistent findings suggest that motivational characteristics may vary according to educational context, socio-cultural background, and regional factors, thereby warranting further empirical investigation.

1.6 Academic Motivation in the Indian Educational Context

The study of academic motivation has become increasingly relevant within the contemporary Indian educational system.

Recent educational reforms, particularly the National Education Policy (NEP) 2020, emphasise learner-centred education, competency-based learning, critical thinking, and lifelong learning. These reforms highlight the importance of enhancing students' intrinsic motivation and self-regulated learning abilities to improve educational quality.

Despite these policy initiatives, relatively few empirical studies have comprehensively examined multiple dimensions of academic motivation among secondary school adolescents in India using standardised instruments such as the MSLQ. District-level investigations remain particularly limited.

1.7 Research Gap and Rationale

A careful review of the existing literature reveals several gaps that justify the need for the present investigation.

Although academic motivation has been widely investigated internationally, comparatively limited empirical evidence is available regarding school-going adolescents in the Nadia district of West Bengal. Furthermore, previous studies have reported inconsistent findings concerning gender differences in self-efficacy, intrinsic value, cognitive strategy use, self-regulation, and test anxiety.

Considering the educational diversity and socio-cultural characteristics of Nadia district, investigating adolescents' academic motivation is expected to provide valuable evidence for teachers, school counsellors, educational administrators, curriculum planners, and policymakers seeking to enhance students' academic engagement and learning outcomes.

1.8 Broad Objective of the Present Study

The study aims to explore the academic motivation of school-going adolescents in Nadia district using the Motivated Strategies for Learning Questionnaire (MSLQ). Specifically, it seeks to examine the levels of Self-Efficacy, Intrinsic Value, Test Anxiety, Cognitive Strategy Use, Self-Regulation, and Overall Academic Motivation, as well as to

determine whether significant gender differences exist across these motivational dimensions. The findings are expected to provide empirical evidence for improving educational practices and promoting effective learning among adolescents.

1.8.1 Specific Objectives of the Study

The present study was designed to probe the following specific objectives –

- **O_1:** To know the present state of affairs of ***the academic motivation*** of the school-going adolescents, considering both males and females as a whole;
- **O_2:** To know the present state of affairs of ***the academic motivation*** of the **male** school-going adolescents;
- **O_3:** To know the present state of affairs of ***the academic motivation*** of the **female** school-going adolescents;
- **O_4:** To compare the ***academic motivation*** between male and female school-going adolescents;

1.8.2 Research Questions of the Study

The present study was designed to find out the answer to the following research questions–

- **Q_1:** What is the present state of affairs of ***the academic motivation*** of the school-going adolescents, considering both male and female as a whole?
- **Q_2:** What is the present state of affairs of ***the academic motivation*** of the **male** school-going adolescents?
- **Q_3:** What is the present state of affairs of ***the academic motivation*** of the **female** school-going adolescents?
- **Q_4:** Is there any difference between **male** and **female** school-going adolescents in their ***academic motivation***?

1.8.3 Research Hypothesis of the Study

The present study was designed to verify the following research hypotheses –

- **H_1:** The school-going adolescents, considering both male and female as a whole, have high ***Academic Motivation.***
- **H_2:** The **male** school-going adolescents have high ***academic motivation***.
- **H_3:** The **female** school-going adolescents have high ***academic motivation***.
- **H_4:** The **male** and **female** school-going adolescents do not differ with respect to their ***academic motivation.***

2. Academic Motivation: Conceptual and Theoretical Construct

Academic motivation is one of the most extensively studied constructs in educational psychology because it explains why students engage in learning, how much effort they invest, and how persistently they pursue academic goals. Understanding this construct is essential for examining the educational experiences of school-going adolescents, particularly during adolescence when motivational beliefs undergo substantial developmental changes.

2.1 Concept of Academic Motivation

Academic motivation has been conceptualised by educational psychologists as the driving force that initiates, directs, and sustains students' learning behaviour toward the attainment of educational goals.

Academic motivation is a fundamental psychological construct that refers to the internal and external processes responsible for initiating, directing, maintaining, and regulating students' engagement in learning activities. It determines why students participate in academic tasks, how intensely they pursue educational objectives, and how persistently they continue despite challenges. Academic motivation influences not only academic

achievement but also classroom participation, self-regulated learning, persistence, and overall educational development (**Eccles & Wigfield, 2002; Ryan & Deci, 2020**).

Unlike simple academic interest or the desire to obtain good grades, academic motivation encompasses students' beliefs about competence, educational aspirations, goal orientations, task values, and expectations for success. Highly motivated students actively participate in classroom discussions, complete assignments with diligence, seek conceptual understanding, and demonstrate resilience when confronted with academic difficulties. Conversely, low levels of motivation often result in poor classroom engagement, academic procrastination, absenteeism, and lower academic performance (**Schunk et al., 2014**).

Among school-going adolescents, academic motivation becomes particularly important because adolescence is characterised by rapid cognitive, emotional, and social development. During this period, students gradually develop independent learning habits, career aspirations, and educational identities, making motivation a central determinant of academic success and lifelong learning (**Pajares & Urdan, 2002**).

2.2 Nature and Dimensions of Academic Motivation

Academic motivation is not a single, uniform construct but consists of multiple interrelated dimensions that explain different reasons for engaging in learning activities.

Educational psychologists recognise academic motivation as a multidimensional construct that varies in quality as well as intensity. Contemporary motivational theories describe motivation along a continuum ranging from highly autonomous forms of motivation to externally regulated behaviours and finally to amotivation (**Ryan & Deci, 2020**).

Intrinsic motivation refers to students' engagement in academic activities because they genuinely enjoy learning and derive satisfaction from acquiring knowledge. Intrinsically motivated learners exhibit curiosity, creativity, deeper understanding, and long-term persistence.

Extrinsic motivation involves participation in learning activities to obtain external rewards or avoid negative consequences. Such rewards may include good grades, parental appreciation, scholarships, social recognition, or future occupational opportunities. Although externally regulated, many forms of extrinsic motivation become gradually internalised and contribute positively to students' academic engagement.

Amotivation represents the absence of purposeful engagement in learning. Students experiencing amotivation often perceive little relationship between their effort and academic outcomes, resulting in disengagement, helplessness, and declining educational performance (**Vallerand et al., 1992**).

2.3 Self-Determination Theory and Academic Motivation

Self-Determination Theory provides one of the most comprehensive explanations of why students become intrinsically or extrinsically motivated in educational settings.

Self-Determination Theory (SDT), proposed by **Deci and Ryan (1985, 2000, 2020**), suggests that the quality of students' motivation depends upon the satisfaction of three innate psychological needs: autonomy, competence, and relatedness.

2.3.1 Autonomy

Autonomy represents students' perception that their academic behaviours originate from personal choice rather than external pressure.

When students experience autonomy, they perceive themselves as active participants in their own learning process. Autonomy-supportive classrooms encourage independent thinking, decision-making, and self-directed learning, thereby strengthening intrinsic motivation and long-term academic engagement **(Ryan & Deci, 2020).**

2.3.2 Competence

Competence refers to students' beliefs regarding their ability to accomplish academic tasks.

Students who perceive themselves as academically competent display greater confidence, persistence, and willingness to undertake challenging learning activities. Positive feedback, mastery experiences, and appropriate instructional support significantly enhance students' competence beliefs and academic motivation.

2.3.3 Relatedness

Relatedness emphasises the importance of positive interpersonal relationships in promoting students' academic motivation.

Students who feel emotionally connected with teachers, classmates, and family members are more likely to experience a sense of belonging within the school environment. Such supportive relationships foster higher intrinsic motivation, better classroom participation, and greater academic persistence (**Reeve, 2009**).

2.4 Expectancy-Value Theory of Academic Motivation

Expectancy-Value Theory explains academic motivation by emphasising students' beliefs about success and the value they assign to learning tasks.

According to **Eccles and Wigfield (2002**), students' motivation depends primarily upon two cognitive judgments: expectancy for success and subjective task value. Students who believe they can succeed and perceive academic tasks as meaningful are more likely to invest sustained effort in learning.

2.4.1 Expectancy for Success

Expectancy for success refers to students' confidence in their ability to perform academic tasks successfully.

Higher expectations for success promote greater persistence, academic self-confidence, and willingness to engage in challenging learning activities. Students with stronger efficacy beliefs generally achieve higher academic outcomes.

2.4.2 Subjective Task Value

Subjective task value explains why students consider certain academic activities worthwhile.

Eccles and Wigfield (2002) identified four important dimensions of task value: intrinsic value, attainment value, utility value, and perceived cost. Together, these dimensions influence students' educational choices, persistence, and long-term academic achievement.

2.5 Achievement Goal Theory

Achievement Goal Theory explains how different learning goals influence students' motivation and academic behaviour.

According to Ames (1992), students generally adopt either mastery goals or performance goals while engaging in academic activities.

2.5.1 Mastery Goal Orientation

Mastery goals focus on developing competence and improving one's understanding.

Students with mastery orientations emphasise learning, conceptual understanding, and personal improvement. They display higher intrinsic motivation, greater persistence, deeper learning strategies, and stronger academic resilience.

2.5.2 Performance Goal Orientation

Performance goals emphasise demonstrating competence relative to others.

Students adopting performance goals often seek high grades, social recognition, and favourable comparisons with peers. Although such goals may improve short-term achievement, excessive reliance on performance orientation may contribute to anxiety and fear of failure (**Schunk et al., 2014**).

2.6 Academic Motivation among School-Going Adolescents

Academic motivation plays a particularly significant role during adolescence because this developmental stage is marked by major psychological and educational transitions.

Adolescents experience rapid cognitive maturation, emotional development, identity formation, and increasing educational responsibilities. Consequently, their motivation is influenced by parental support, teacher expectations, peer relationships, classroom climate, and future career aspirations (**Wentzel & Miele**, **2016**). Research consistently demonstrates that motivated adolescents exhibit stronger academic engagement, better self-regulation, higher educational aspirations, and superior academic achievement compared with less motivated students (Eccles & Roeser, 2011).

2.7 Academic Motivation in the Indian Educational Context

Understanding academic motivation within the Indian educational system requires consideration of its unique socio-cultural and institutional characteristics.

In India, students' academic motivation is shaped by parental expectations, examination-oriented curricula, competitive educational environments, teacher behaviours, socio-economic conditions, and future employment opportunities. While examination pressure often strengthens extrinsic motivation, supportive classroom environments and learner-centred teaching practices can foster intrinsic interest in learning (Jenaabadi et al., 2015). In districts such as Nadia, where students come from diverse socio-economic and educational backgrounds, studying academic motivation provides valuable insights into factors influencing educational engagement and achievement.

2.8 Operational Definition of Academic Motivation in the Present Study

Every empirical investigation requires a clear operational definition of the principal research variable.

For the present study, **academic motivation** is operationally defined as the degree to which school-going adolescents demonstrate interest, commitment, persistence, educational aspirations, competence beliefs, and willingness to engage in academic activities for achieving educational success. The construct is measured using the **Motivated Strategies for Learning Questionnaire (MSLQ)** developed by Pintrich et al. (1991), which assesses students' motivational beliefs, task value, self-efficacy, and goal orientation. This operational definition provides the conceptual foundation for examining academic motivation among school-going adolescents in Nadia District.

3. Review of Allied Literature

Academic motivation has been extensively investigated as a fundamental psychological construct influencing students' engagement, persistence, learning strategies, and academic achievement. Contemporary research indicates that motivation develops through the interaction of individual, social, and educational factors rather than functioning as a stable personal characteristic (**Eccles & Wigfield, 2002; Wigfield et al., 2021**). The following review synthesises theoretical and empirical studies relevant to the present investigation.

3.1 Conceptual Foundation of Academic Motivation

Academic motivation refers to the psychological processes that initiate, direct, and sustain students' engagement in learning activities. Among the most influential theoretical perspectives explaining academic motivation is **Self-Determination Theory (SDT),** developed by **Deci and Ryan (1985, 2000**). According to SDT, motivation exists along a continuum ranging from intrinsic motivation to extrinsic motivation and amotivation. Students whose needs for autonomy, competence, and relatedness are fulfilled are more likely to demonstrate intrinsic motivation, resulting in greater persistence, deeper learning, and enhanced psychological well-being (**Ryan & Deci, 2020**).

Another widely accepted framework is the **Expectancy–Value Theory (EVT)** proposed by **Eccles and Wigfield (2002**). This theory argues that students' academic motivation depends primarily on their expectations of success and the value they attach to academic tasks. Together, these theoretical perspectives explain how personal beliefs and environmental influences jointly determine students' motivation and educational behaviour.

3.2 Academic Motivation and Academic Achievement

A substantial body of empirical research demonstrates a positive relationship between academic motivation and educational achievement. **Pintrich and De Groot (1990**) reported that motivational beliefs significantly predicted students' cognitive engagement, self-regulated learning strategies, and classroom performance among middle-school students. Their findings established motivation as an important determinant of successful learning beyond cognitive ability alone.

Similarly**, Richardson et al. (2012**), through a comprehensive meta-analysis, identified academic self-efficacy, effort regulation, and intrinsic motivation among the strongest psychological predictors of academic achievement. More recently, **Wigfield et al. (2021**) concluded that motivated students consistently exhibit higher academic engagement, stronger persistence, and greater resilience during academic challenges, and better long-term educational outcomes. Collectively, these studies indicate that academic motivation contributes significantly to students' educational success across different educational contexts.

3.3 Development of Academic Motivation during Adolescence

Adolescence is considered a critical developmental period during which academic motivation undergoes substantial changes. Developmental researchers have observed that motivational beliefs often decline during early and middle adolescence because of increasing academic demands, heightened peer comparison, and changing educational environments.

Wigfield et al. (2015) found that adolescents' competence beliefs, task values, and educational aspirations become increasingly differentiated during secondary schooling. Their review demonstrated that supportive classroom environments, positive teacher–student relationships, and encouraging family environments help maintain students' motivation despite developmental challenges. These findings highlight adolescence as a sensitive period for educational interventions aimed at strengthening academic motivation.

3.4 Family and School Influences on Academic Motivation

Family and school environments represent two of the strongest contextual determinants of adolescents' academic motivation. **Eccles and Wigfield (2002**) argued that motivational beliefs develop through continuous interaction between students and their educational environments. Parents who provide emotional support, educational encouragement, and autonomy generally foster stronger intrinsic motivation among their children.

School-related factors also play a significant role. **Ryan and Deci (2020**) reported that autonomy-supportive teaching, constructive feedback, positive teacher–student relationships, and supportive classroom climates enhance students' intrinsic motivation, classroom engagement, and academic persistence. Conversely, controlling instructional practices and unsupportive learning environments may reduce students' motivation and educational engagement.

3.5 Gender Differences in Academic Motivation

Gender differences in academic motivation have received considerable empirical attention, although research findings remain inconsistent. **Meece et al. (2006**) observed that female students generally exhibit higher academic persistence, stronger intrinsic motivation, and greater educational aspirations than male students, particularly in language-related

subjects. In contrast, male students frequently report greater confidence in mathematics and science despite similar levels of academic achievement.

However, **Wigfield et al. (2015**) emphasised that these differences are largely influenced by sociocultural expectations, classroom experiences, and gender-role socialisation rather than inherent ability differences. Consequently, gender-related motivational patterns should be interpreted within their specific educational and cultural contexts.

3.6 Socioeconomic and Cultural Influences on Academic Motivation

Socioeconomic status (SES) significantly influences students' motivational development by affecting educational opportunities, parental involvement, access to learning resources, and future educational aspirations. Students from disadvantaged socioeconomic backgrounds often experience barriers that reduce academic engagement; however, positive school environments can partially compensate for these disadvantages.

Eccles and Wigfield (2002) emphasised that motivation develops through reciprocal interactions between individual beliefs and broader sociocultural contexts. Consequently, cultural values, parental expectations, educational resources, and community support collectively influence adolescents' motivational beliefs and educational outcomes.

3.7 Academic Motivation in the Indian Context

Research conducted within India consistently demonstrates that academic motivation significantly predicts scholastic achievement, self-regulated learning, educational adjustment, and career aspirations among school-going adolescents. **Areepattamannil (2014**) found that positive school climate and supportive teacher relationships significantly improved students' educational motivation and academic performance.

Similarly, **Jena (2018**) reported that academic motivation and self-regulated learning jointly predicted academic achievement among Indian secondary school students. Other Indian investigations have demonstrated significant differences in academic motivation according to gender, locality, parental education, socioeconomic status, and school type (**Kaur & Singh, 2015; Sharma & Nasa, 2014).** These findings suggest that motivational development among Indian adolescents is shaped by multiple educational and demographic factors.

3.8 Literature Gap

Despite extensive research on academic motivation, several important gaps remain in the existing literature. First, relatively limited empirical evidence is available regarding the motivational characteristics of school-going adolescents in **Nadia District, West Bengal**. Second, many previous studies have primarily focused on academic achievement rather than examining students' overall motivational profiles. Third, existing investigations have often examined demographic variables independently without adequately considering the broader educational context. Finally, district-specific evidence from secondary schools in eastern India remains comparatively scarce.

The present study addresses these gaps by investigating the academic motivation of school-going adolescents in Nadia District. The findings are expected to contribute context-specific evidence to the literature on adolescent educational psychology and provide practical implications for educators, school administrators, and policymakers.

4. Methodology

The present study employed a **descriptive survey method** to investigate academic motivation among school-going adolescents in Nadia district, West Bengal. The target population comprised Bengali-speaking students of Classes IX and X (14–16 years) enrolled in government, government-aided, and government-sponsored secondary and higher secondary schools in Nadia district. A **multiphase stratified random sampling** technique

was adopted to ensure proportional representation of gender and school categories. The final sample consisted of **500 adolescents**, including **244 males and 256 females**.

Academic motivation was assessed using the **Motivated Strategies for Learning Questionnaire (MSLQ)** developed by **Pintrich and De Groot (1990)**. The instrument contains **44 items** rated on a **7-point Likert scale** and measures five dimensions: self-efficacy, intrinsic value, test anxiety, cognitive strategy use, and self-regulation. The MSLQ has demonstrated satisfactory reliability and validity across educational settings (**Pintrich & De Groot, 1990)**. Since the domains have different numbers of items, the mean score for each dimension is normalised to allow for meaningful comparisons.

The process for normalisation is carried out as follows:

Normalised Mean = Mean of the item responses in a dimension (or total scale)/Number of total items of the dimension (or total scale).

Therefore, the maximum score in each domain is 7, the minimum is 1, and the mid value is 4. The mean of the scores of each dimension or total scale was interpreted as –

1.00 to 2.49: Very Low
2.50 to 3.99: Low
4.00 to 5.49: High
5.50 to 7.00: Very high

Prior permission was obtained from the heads of the participating schools before data collection. The questionnaire was administered collectively in classroom settings following standardised instructions, ensuring voluntary participation and confidentiality. Data were analysed using **IBM SPSS Statistics 20**, employing descriptive statistics (mean and standard deviation), independent-samples *t*-tests for gender comparisons, and Pearson's product–moment correlation to examine relationships among the study variables (Field, 2018).

5. Results

The findings of the study are organised into two main parts –

(a) A descriptive presentation, (b) A gender-based comparative analysis.

5.1 Descriptive Presentation of Academic Motivation

The findings of the study are displayed in tables for clarity.

To prove Hypothesis **H_1 [i.e., The school-going adolescents, considering both male and female as a whole, have high Academic Motivation],** the following results are placed in Table 5.1 and Figure 5.1(a) & Figure 5.1 (b).

Table 5.1: Descriptive Statistics of Scores of Different Dimensions of Motivated Strategies for Learning Questionnaire (MSLQ) of the School-Going Adolescents, considering male and female as a whole

Academic Motivation	N	Range	Minimum	Maximum	Mean	Std. Deviation	Remark
Self-Efficacy	500	5.00	2.00	7.00	5.22	0.89	**High**
Intrinsic Value	500	5.33	1.67	7.00	5.48	0.83	**High**
Test Anxiety	500	4.50	1.25	5.75	3.75	1.17	**Low**
Cognitive Strategy Use	500	4.85	2.15	7.00	5.35	0.81	**High**
Self-Regulation	500	4.78	2.22	7.00	4.89	0.79	**High**
Total	500	4.14	2.25	6.39	5.11	0.65	**High**

Table 5.1 presents the descriptive statistics of the scores obtained on the different dimensions of the **Motivated Strategies for Learning Questionnaire (MSLQ)** for the entire

sample of school-going adolescents (N = 500). The findings indicate that the respondents demonstrated a **high overall level of academic motivation** (M = 5.11, SD = 0.65). Among the five dimensions, **Intrinsic Value** recorded the highest mean score (M = 5.48), followed by **Cognitive Strategy Use** (M = 5.35) and **Self-Efficacy** (M = 5.22), suggesting that the adolescents generally valued learning, employed effective learning strategies, and possessed confidence in their academic capabilities. **Self-Regulation** also remained at a high level (M = 4.89). In contrast, **Test Anxiety** obtained the lowest mean score (M = 3.75), indicating comparatively lower levels of anxiety during examinations. The relatively small standard deviations across most dimensions suggest a reasonable degree of homogeneity in the responses. Overall, the findings support **Hypothesis H_1**, indicating that the school-going adolescents, irrespective of gender, possessed a high level of academic motivation.

Figure 5.1 (a) depicts the bar diagram of different facets of the **"Motivated Strategies for Learning Questionnaire" (MSLQ)** Scores of the school-going adolescents, considering males and females as a whole.

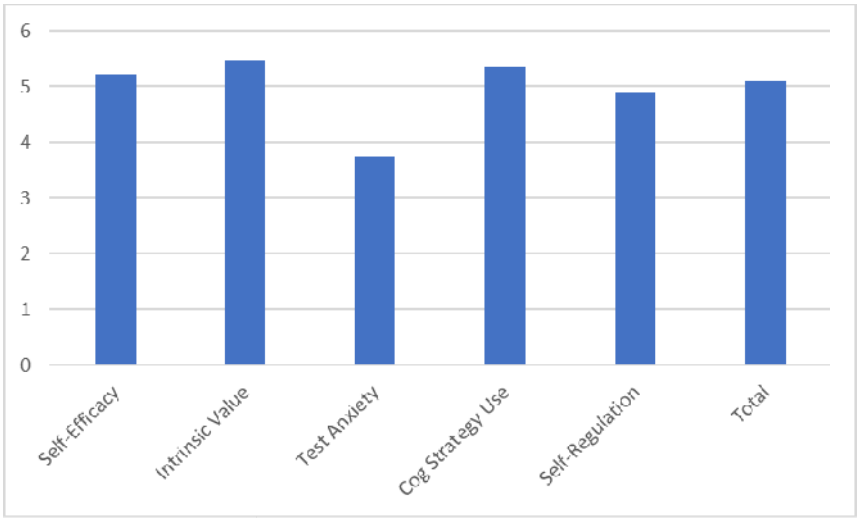

Figure 5.1(a): Bar Diagram of Different Facets of Motivated Strategies for Learning Questionnaire (MSLQ) Scores of the School-Going Adolescents Considering Male and Female as A Whole

Figure 5.1 (b) depicts the histogram with a normal curve of the **"Motivated Strategies for Learning Questionnaire (MSLQ)"** Score of the school-going adolescents, considering males and females as a whole. The distribution appears reasonably symmetrical and closely approximates the normal curve, indicating that the assumption of normality is satisfactorily met. This observation supports the use of parametric statistical procedures in the subsequent analyses (Fein et al., 2022).

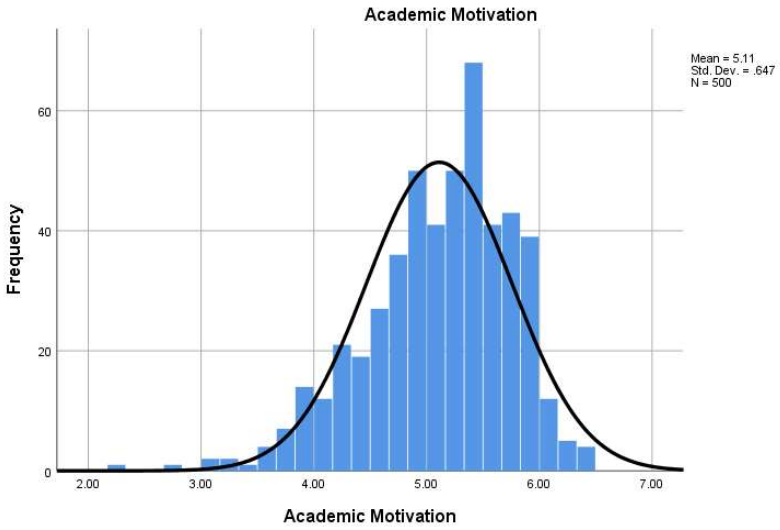

Figure 5.1(b) presents the histogram with a superimposed normal probability curve for the total MSLQ scores of the entire sample.

5.1.1 Academic Motivation: The Male School-Going Adolescents

To prove Hypothesis **H_2 [i.e., the male school-going adolescents have high Academic Motivation],** the following results are placed in Table 5.1.1 and Figure 5.1.1 (a) & Figure 5.1.1 (b).

Table 5.1.1: Descriptive Statistics of Scores of Different Dimensions of Motivated Strategies for Learning Questionnaire (MSLQ) of the Male School-Going Adolescents

Academic Motivation	N	Range	Minimum	Maximum	Mean	Std. Deviation	Remark
Self-Efficacy	244	5.00	2.00	7.00	5.18	0.95	**High**
Intrinsic Value	244	5.33	1.67	7.00	5.46	0.92	**High**
Test Anxiety	244	4.50	1.25	5.75	3.61	1.21	**Low**
Cognitive Strategy Use	244	4.85	2.15	7.00	5.26	0.86	**High**
Self-Regulation	244	4.44	2.56	7.00	4.84	0.80	**High**
Total	244	4.11	2.25	6.36	5.05	0.69	**High**

Table 5.1.1 presents the descriptive statistics of the MSLQ scores of the male school-going adolescents (N = 244). The results reveal that the male adolescents exhibited a **high overall level of academic motivation** (M = 5.05, SD = 0.69). Among the dimensions, **Intrinsic Value** recorded the highest mean score (M = 5.46), followed by **Cognitive Strategy Use** (M = 5.26), **Self-Efficacy** (M = 5.18), and **Self-Regulation** (M = 4.84). **Test Anxiety** obtained the lowest mean score (M = 3.61), reflecting comparatively lower examination-related anxiety. The moderate standard deviations indicate acceptable consistency in the responses. These findings provide empirical support for **Hypothesis H_2**, suggesting that male school-going adolescents possess a high level of academic motivation.

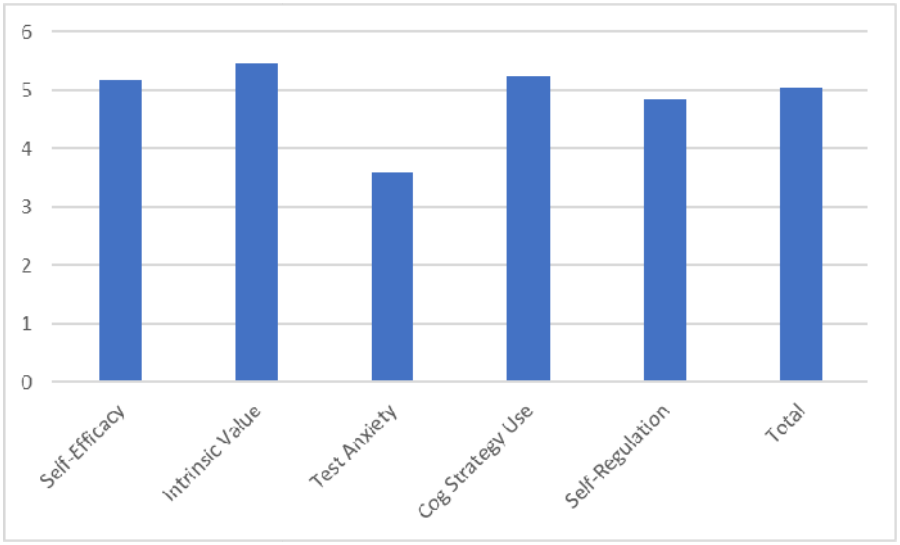

Figure 5.1.1(a) depicts the histogram with a normal curve of the "Motivated Strategies for Learning Questionnaire" (MSLQ) Score of the male school-going adolescents.

Figure 5.1.1(a) displays the mean scores of the five dimensions of academic motivation among the male school-going adolescents. The graphical presentation shows that Intrinsic Value is the most prominent motivational dimension, whereas Test Anxiety has the lowest mean score. The figure visually reinforces the descriptive findings reported in Table 5.1.1.

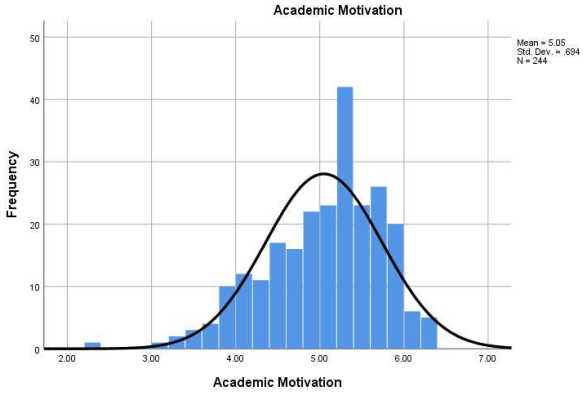

Figure 5.1.1(b): Histogram with Normal Probability Curve of Motivated Strategies for Learning Questionnaire (MSLQ) Score of the Male School-Going Adolescents

Figure 5.1.1(b) illustrates the distribution of the total MSLQ scores of the male adolescents through a histogram with a normal probability curve. The distribution appears approximately normal, suggesting that the assumption of normality is adequately satisfied and supporting the application of parametric statistical analyses (Fein et al., 2022).

5.1.2 Academic Motivation: The Female School-Going Adolescents

To prove Hypothesis **H_3 [i.e., The female school-going adolescents have high Academic Motivation],** the following results are placed in Table 5.1.2 and Figure 5.1.2(a) & Figure 5.1.2(b).

Table 5.1.2: Descriptive Statistics of Scores of Different Dimensions of Motivated Strategies for Learning Questionnaire (MSLQ) of the Female School-Going Adolescents

Academic Motivation	N	Range	Minimum	Maximum	Mean	Std. Deviation	Remark
Self-Efficacy	256	4.11	2.78	6.89	5.27	0.82	**High**
Intrinsic Value	256	4.78	2.11	6.89	5.49	0.74	**High**
Test Anxiety	256	4.50	1.25	5.75	3.89	1.12	**Low**
Cognitive Strategy Use	256	4.54	2.38	6.92	5.44	0.75	**High**
Self-Regulation	256	4.56	2.22	6.78	4.94	0.78	**High**
Total	256	3.62	2.77	6.39	5.17	0.59	**High**

Table 5.1.2 summarises the descriptive statistics of the MSLQ scores of the female school-going adolescents (N = 256). The findings indicate that the female adolescents demonstrated a **high overall level of academic motivation** (M = 5.17, SD = 0.59). Similar to the overall sample, **Intrinsic Value** emerged as the highest-scoring dimension (M = 5.49), followed by **Cognitive Strategy Use** (M = 5.44), **Self-Efficacy** (M = 5.27), and **Self-Regulation** (M = 4.94). **Test Anxiety** showed the lowest mean score (M = 3.89), although it remained slightly higher than that of the male adolescents. The comparatively lower standard deviations indicate greater consistency in the responses of female participants. These findings support **Hypothesis H_3**, indicating that female school-going adolescents also possess a high level of academic motivation.

Figure 5.1.2(a) depicts the bar diagram of different facets of the Motivated Strategies for Learning Questionnaire (MSLQ) Scores of female school-going adolescents.

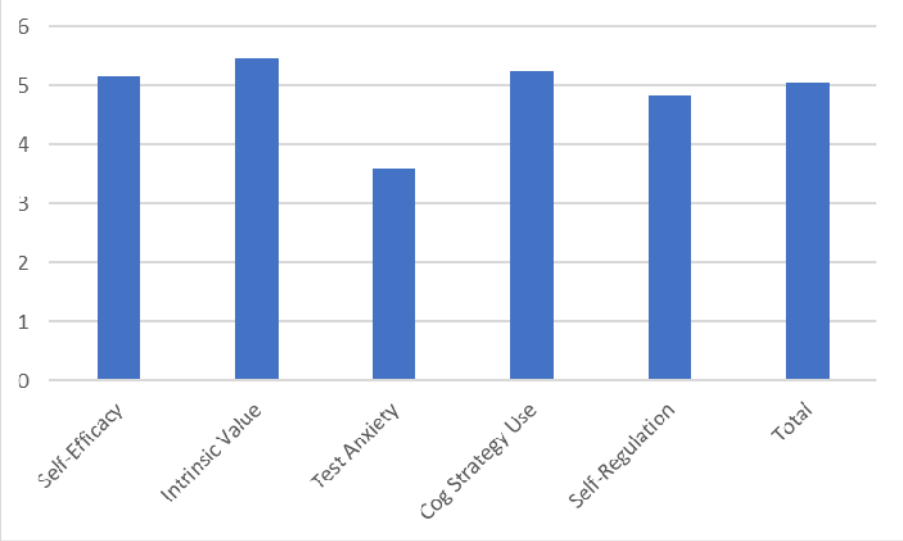

Figure 5.1.2(a): Bar Diagram of Different Facets of Motivated Strategies for Learning Questionnaire (MSLQ) Scores of the Female School-Going Adolescents

Figure 5.1.2.3(b) shows the histogram with a normal probability curve for the total MSLQ scores of the female adolescents. Visual inspection indicates that the distribution closely approximates normality, thereby satisfying the assumption required for subsequent parametric analyses (Fein et al., 2022).

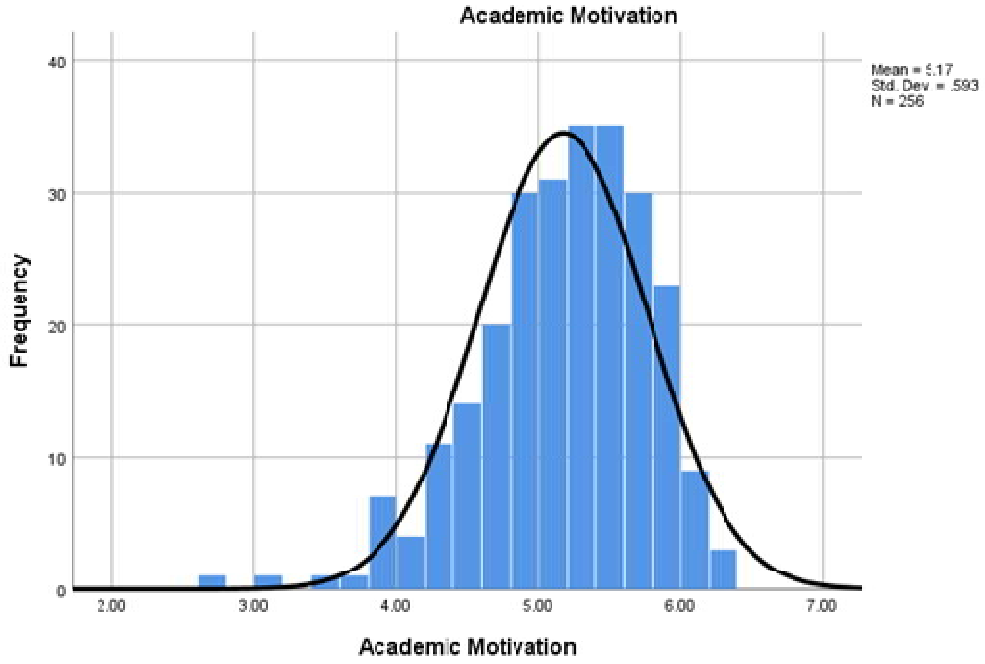

Figure 5.1.2(b): Histogram with Normal Probability Curve of Motivated Strategies for Learning Questionnaire (MSLQ) Score of the Female School-Going Adolescents

5.2 Comparative Analysis of Academic Motivation

A gender-wise comparison was carried out between male and female school-going adolescents. To examine whether the two groups differed significantly, an independent samples t-test was conducted.

To test the hypothesis, **H_4 [i.e., The male and female school-going adolescents do not differ with respect to their Academic Motivation],** results related to the comparison between the **male** school-going adolescents and the **female** school-going adolescents in **"Motivated Strategies for Learning Questionnaire" (MSLQ)** scores are presented herewith in Table 5.2 (a) and 5.2 (b); as well as figure-5.2

Table 5.2 (a): Group Statistics of Scores on Different Dimensions of Motivated Strategies for Learning Questionnaire (MSLQ) of the male and female school-going adolescents

Academic Motivation	Type	N	Mean	Std. Deviation	Remark
Self-Efficacy	Male	244	5.18	0.95	**High**
	Female	256	5.27	0.82	**High**
Intrinsic Value	Male	244	5.46	0.92	**High**
	Female	256	5.49	0.74	**High**
Test Anxiety	Male	244	3.61	1.21	**Low**
	Female	256	3.89	1.12	**Low**
Cog Strategy Use	Male	244	5.26	0.86	**High**
	Female	256	5.44	0.75	**High**
Self-Regulation	Male	244	4.84	0.80	**High**

	Female	256	4.94	0.78	**High**
Total	Male	244	5.05	0.69	**High**
	Female	256	5.17	0.59	**High**

Table 5.2(a) presents the group statistics for the male and female school-going adolescents on the dimensions of the MSLQ. The descriptive findings indicate that female adolescents obtained marginally higher mean scores than their male counterparts across all dimensions as well as on the overall academic motivation score. The differences were particularly noticeable in **Test Anxiety**, **Cognitive Strategy Use**, and the total MSLQ score, whereas the mean differences in **Self-Efficacy**, **Intrinsic Value**, and **Self-Regulation** were comparatively small. The standard deviations suggest a similar degree of variability in the responses of both groups. These descriptive findings provide an initial indication of possible gender differences, which are examined statistically through the independent samples *t*-test presented in Table 5.2(b).

Figure 5.2 compares the mean scores of male and female school-going adolescents across the five dimensions of academic motivation and the total MSLQ score. The bar diagram indicates that female adolescents consistently obtained slightly higher mean scores than male adolescents on all dimensions. The visual comparison suggests that the largest differences occur in Test Anxiety and Cognitive Strategy Use, while differences in Self-Efficacy, Intrinsic Value, and Self-Regulation appear relatively modest.

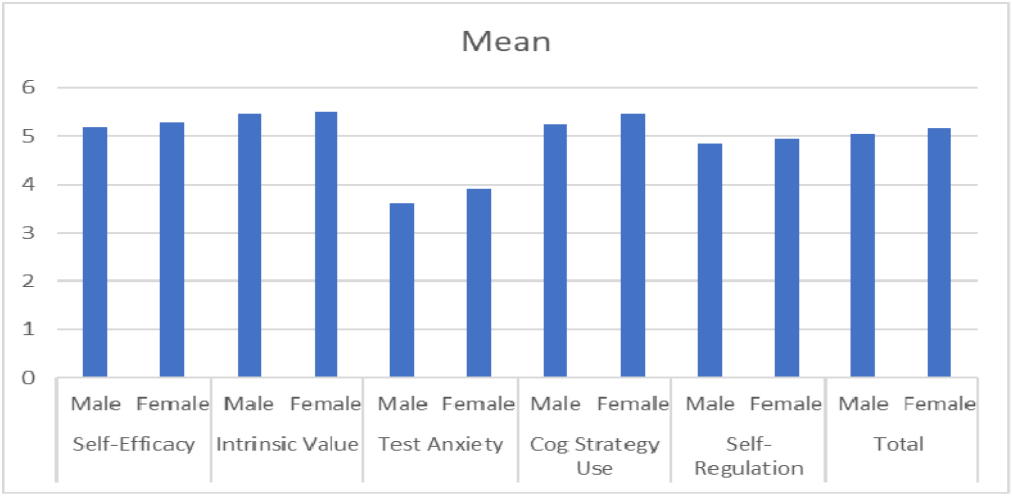

Figure 5.2: Bar Diagram of Mean of the scores in Different Dimensions of Motivated Strategies for Learning Questionnaire (MSLQ) of the male and female school-going adolescents.

Table 5.2 (b): Results of the Independent Samples Test of Type-wise Comparison of Means of Scores of Different Dimensions of Motivated Strategies for Learning Questionnaire (MSLQ) of the male and female school-going adolescents

Academic Motivation		**Levene's Test for Equality of Variances**		**t-test for Equality of Means**		
		F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**
Self-Efficacy	Equal variances assumed	2.24	0.14	-1.14	498	0.26

	Equal variances not assumed.			-1.13	479.65	0.26
Intrinsic Value	Equal variances assumed	6.91	0.01	-0.44	498	0.66
	Equal variances not assumed.			-0.44	464.88	0.66
Test Anxiety	Equal variances assumed	2.69	0.10	-2.69	498	0.01
	Equal variances not assumed.			-2.69	490.42	0.01
Cognitive Strategy Use	Equal variances assumed	9.44	0.00	-2.49	498	0.01
	Equal variances not assumed.			-2.48	480.98	0.01
Self-Regulation	Equal variances assumed	0.06	0.82	-1.43	498	0.15
	Equal variances not assumed.			-1.43	496.01	0.15
Total	Equal variances assumed	6.01	0.02	-2.16	498	0.03
	Equal variances not assumed.			-2.15	478.20	0.03

Table 5.2(b) presents the results of the independent samples *t*-test comparing male and female school-going adolescents on the dimensions of the MSLQ. The findings reveal that **no statistically significant gender differences** were observed in **Self-Efficacy** ($t = -1.14$, $p = 0.26$), **Intrinsic Value** ($t = -0.44$, $p = 0.66$), or **Self-Regulation** ($t = -1.43$, $p = 0.15$). However, **significant gender differences** emerged in **Test Anxiety** ($t = -2.69$, $p = 0.01$), **Cognitive Strategy Use** ($t = -2.49$, $p = 0.01$), and the **overall academic motivation score** ($t = -2.16$, $p = 0.03$), with female adolescents obtaining higher mean scores than males. Thus, **Hypothesis H_4** is partially rejected, as gender differences were evident in selected dimensions and in the overall academic motivation score, but not across all dimensions.

6. Discussion

Let us discuss and interpret the results**.**

6.1 Discussion of Hypothesis H_1

Hypothesis H_1 proposed that school-going adolescents, irrespective of gender, would exhibit a high level of academic motivation. The findings support this hypothesis, indicating that the participants demonstrated high overall academic motivation characterised by strong self-efficacy, intrinsic value, cognitive strategy use, and self-regulation, accompanied by relatively lower levels of test anxiety. Collectively, these findings suggest that the adolescents possessed positive motivational beliefs and employed adaptive learning strategies that facilitate successful academic engagement.

The present findings are consistent with the theoretical framework of **Pintrich and De Groot (1990)**, who conceptualised academic motivation as an integration of motivational beliefs and self-regulated learning strategies. According to their model, students who believe in their academic capabilities and value learning intrinsically are more likely to engage in cognitive and metacognitive learning strategies that enhance academic performance. The high levels of self-efficacy, intrinsic value, and self-regulation observed in the present study provide empirical support for this proposition.

The findings also corroborate **Bandura's (1997) Social Cognitive Theory**, which identifies self-efficacy as one of the strongest predictors of motivated behaviour and academic persistence. Students who perceive themselves as academically competent

generally demonstrate greater perseverance, invest more effort in learning activities, and recover more effectively from academic setbacks. The elevated self-efficacy observed among the participants, therefore, reflects their confidence in accomplishing academic tasks successfully.

Similarly, the findings support the Self-Determination Theory proposed by **Deci and Ryan (2000**), which emphasises that intrinsic motivation develops when learners experience autonomy, competence, and relatedness within their educational environment. The high intrinsic value demonstrated by the participants indicates that learning was perceived as personally meaningful rather than solely as a means of obtaining external rewards. Such internally regulated motivation is generally associated with sustained academic engagement and deeper learning.

The present findings are further consistent with the work of **Zimmerman (2008**), who argued that academically successful learners actively regulate their cognition, motivation, and behaviour throughout the learning process. The high level of self-regulation observed among the participants suggests that they effectively monitored and managed their learning activities, thereby promoting academic success.

Empirical evidence also supports the present findings. **Richardson et al. (2012**), in their meta-analysis, identified self-efficacy and self-regulated learning as two of the strongest psychological predictors of academic achievement. **Likewise, Mega et al. (2014)** demonstrated that motivational beliefs influence academic achievement indirectly through effective self-regulated learning strategies. Taken together, these studies reinforce the conclusion that adolescents with stronger motivational beliefs are more likely to employ adaptive learning behaviours that contribute to academic success.

Accordingly, **the findings provide substantial empirical support for Hypothesis H_1**.

6.2 Discussion of Hypothesis H_2

Hypothesis H_2 proposed that male school-going adolescents would demonstrate a high level of academic motivation. The findings support this hypothesis by indicating that male students exhibited favourable levels of self-efficacy, intrinsic value, cognitive strategy use, and self-regulation while maintaining comparatively lower levels of test anxiety.

These findings are consistent with **Bandura's (1997**) assertion that students' beliefs regarding their academic competence significantly influence their motivation, persistence, and learning behaviour. Male adolescents who perceive themselves as capable learners are more likely to engage actively in challenging academic tasks and demonstrate greater perseverance in achieving educational goals.

The findings also align with **Pintrich and De Groot's (1990**) motivational model, which suggests that motivational beliefs and cognitive learning strategies operate together to facilitate academic achievement. The high levels of motivational beliefs observed among male adolescents indicate that they not only valued academic learning but also adopted effective cognitive strategies to support their educational performance.

Furthermore, **Zimmerman (2008**) emphasised that successful learners employ self-regulatory processes to plan, monitor, and evaluate their own learning activities. The present findings suggest that male adolescents possess these adaptive self-regulatory characteristics, thereby contributing to their favourable academic motivation.

Similar conclusions have been reported by **Richardson et al. (2012**), whose meta-analysis established that self-efficacy and self-regulated learning consistently predict academic success across diverse educational contexts. Therefore, **the findings of the present study provide empirical support for Hypothesis H_2.**

6.3 Discussion of Hypothesis H_3

Hypothesis H_3 proposed that female school-going adolescents would exhibit a high level of academic motivation. The findings support this hypothesis, indicating that female students demonstrated high motivational beliefs and effective learning strategies across the major dimensions of academic motivation.

These findings correspond closely with **Self-Determination Theory (Deci & Ryan, 2000**), which argues that intrinsically motivated learners engage in academic activities because they find learning meaningful and personally valuable. The high intrinsic value observed among female students suggests that they perceived learning as inherently rewarding, thereby promoting sustained academic engagement.

The findings also support **Zimmerman's (2008)** model of self-regulated learning, according to which academically motivated students actively regulate their cognition and behaviour throughout the learning process. Female adolescents demonstrated strong self-regulatory characteristics, indicating effective management of their learning activities.

Although female students reported comparatively higher levels of test anxiety, previous research suggests that such anxiety does not necessarily impair academic motivation. Rather, moderate levels of anxiety may reflect greater concern for academic success and stronger achievement orientation (**Putwain, 2007**; Zeidner, 1998). Consequently, the elevated test anxiety observed among female students should be interpreted alongside their stronger cognitive strategy use and higher overall academic motivation.

The findings further agree with **Mega et al. (2014**), who demonstrated that emotionally engaged students generally employ more effective self-regulated learning strategies, resulting in superior academic achievement. Likewise**, Richardson et al. (2012**) reported that students possessing stronger motivational beliefs consistently demonstrate better academic outcomes. Hence, **the present findings provide empirical support for Hypothesis H_3.**

6.4 Discussion of Hypothesis H_4

Hypothesis H_4 proposed that male and female school-going adolescents would not differ significantly in academic motivation. The findings partially support this hypothesis. Although no statistically significant gender differences were observed in self-efficacy, intrinsic value, or self-regulation, significant differences emerged in test anxiety, cognitive strategy use, and overall academic motivation. Female students demonstrated significantly higher cognitive strategy use and overall academic motivation while also reporting higher levels of test anxiety.

The absence of significant gender differences in self-efficacy and intrinsic value supports **Bandura's (1997**) contention that motivational beliefs are primarily shaped by mastery experiences and environmental influences rather than by gender. Similarly, **Deci and Ryan (2000)** argued that intrinsic motivation develops when educational environments satisfy learners' psychological needs, irrespective of gender.

The significantly higher cognitive strategy use among female adolescents is consistent with **Zimmerman's (2008)** view that effective learners actively employ cognitive and metacognitive strategies to regulate their learning. Female students may therefore demonstrate greater strategic engagement in learning tasks, contributing to their higher overall academic motivation.

The higher level of test anxiety observed among female students corroborates previous findings reported by **Zeidner (1998) and Putwain (2007**), who concluded that female students frequently experience greater examination-related anxiety than male students. Nevertheless, this elevated anxiety does not necessarily indicate poorer academic functioning because it often coexists with stronger achievement motivation and greater academic diligence.

The present findings are also consistent with **Mega et al. (2014**), who reported that motivational beliefs and self-regulated learning jointly influence academic achievement. Similarly**, Richardson et al. (2012**) concluded that self-efficacy and learning strategies contribute more substantially to academic performance than demographic variables such as gender. Thus, although statistically significant gender differences were observed in selected dimensions, the overall pattern suggests that both male and female adolescents possessed favourable motivational characteristics.

Therefore, **Hypothesis H_4 received partial empirical support.**

7. Hypothesis-wise Conclusions

In this section, conclusions were drawn.

7.1 Conclusion with Respect to Hypothesis H_1

The findings of the present study revealed that the school-going adolescents, irrespective of gender, demonstrated a high level of overall academic motivation (M = 5.11, SD = 0.65). High mean scores were observed in the dimensions of Self-Efficacy, Intrinsic Value, Cognitive Strategy Use, and Self-Regulation, whereas Test Anxiety was comparatively low. These findings indicate that the participants generally possessed positive motivational beliefs, valued academic learning, and employed effective cognitive and self-regulatory learning strategies.

The findings are consistent with the Motivated Strategies for Learning framework proposed by **Pintrich and De Groot (1990**), which posits that self-efficacy, intrinsic value, cognitive strategy use, and self-regulation are central components of students' academic motivation and are positively associated with academic achievement. **Similarly, Zimmerman's (2000, 2002)** social cognitive theory of self-regulated learning emphasises that motivated learners actively regulate their cognitive, motivational, and behavioural processes to achieve academic goals. The present findings also support the expectancy-value theory advanced by **Eccles and Wigfield (2002**), which suggests that students who perceive themselves as competent and attach greater value to academic tasks exhibit higher levels of motivation and persistence. Furthermore, the findings are congruent with ***Self-Determination Theory (Deci & Ryan, 2000)***, which emphasises that intrinsic motivation promotes greater engagement, persistence, and effective learning. Therefore, **Hypothesis H_1 was supported.**

7.2 Conclusion with Respect to Hypothesis H_2

The findings indicated that the male school-going adolescents demonstrated a high level of academic motivation (M = 5.05, SD = 0.69). High mean scores were obtained for Self-Efficacy, Intrinsic Value, Cognitive Strategy Use, and Self-Regulation, while Test Anxiety remained comparatively low. These results suggest that male adolescents generally possessed favourable motivational beliefs and adopted effective learning strategies.

The findings are consistent with those of **Pintrich and De Groot (1990**), who reported that motivational beliefs and self-regulated learning strategies significantly predict academic achievement. Likewise, Zimmerman (2002) emphasised that students who effectively regulate their learning demonstrate higher academic motivation and persistence. The findings are also supported by **Eccles and Wigfield (2002**), who concluded that students' expectancy beliefs and subjective task values are important determinants of academic motivation. Accordingly, **Hypothesis H_2 was supported.**

7.3 Conclusion with Respect to Hypothesis H_3

The findings revealed that the female school-going adolescents also demonstrated a high level of academic motivation (M = 5.17, SD = 0.59). High mean scores were observed across Self-Efficacy, Intrinsic Value, Cognitive Strategy Use, and Self-Regulation. Although

female adolescents reported slightly higher Test Anxiety than male adolescents, their overall level of academic motivation remained high.

These findings are consistent with **Self-Determination Theory (Deci & Ryan, 2000**), which suggests that intrinsic motivation facilitates sustained engagement and effective learning. The findings also support Zimmerman's (2002) model of self-regulated learning, which highlights the importance of strategic learning behaviours in maintaining academic motivation. Furthermore, the results are in agreement with Eccles and Wigfield (2002), who argued that students possessing stronger competence beliefs and higher task value demonstrate greater academic motivation and persistence. Therefore, **Hypothesis H_3 was supported.**

7.4 Conclusion with Respect to Hypothesis H_4

The independent-samples *t* test revealed a statistically significant gender difference in overall academic motivation, $t\ (498) = -2.16$, $p = 0.03$. Significant gender differences were also observed in Test Anxiety, $t\ (498) = -2.69$, $p = 0.01$, and Cognitive Strategy Use, $t(498) = -2.49$, $p = 0.01$. Female adolescents obtained significantly higher mean scores than male adolescents in overall academic motivation and cognitive strategy use, whereas no statistically significant gender differences were observed in Self-Efficacy, Intrinsic Value, or Self-Regulation.

These findings are partially consistent with the literature on academic motivation. Pintrich and De Groot (1990) reported that motivational beliefs and self-regulated learning strategies are significant predictors of academic achievement and that variations may occur across learner characteristics. Similarly, Zimmerman (2002) argued that differences in self-regulatory strategy use contribute to differences in academic motivation and performance. Eccles and Wigfield (2002) further suggested that motivational beliefs are shaped by developmental and contextual influences, including gender-related socialisation experiences. The higher level of cognitive strategy use among female adolescents observed in the present study is also consistent with **Wolters (2004**), who reported that students employing more effective learning strategies generally demonstrate higher academic motivation and achievement. However, the absence of statistically significant gender differences in Self-Efficacy, Intrinsic Value, and Self-Regulation suggests that the motivational beliefs of male and female adolescents are largely comparable.

Therefore, **Hypothesis H_4 was not supported**. The findings indicate that male and female school-going adolescents differ significantly in overall academic motivation, particularly with respect to Cognitive Strategy Use and Test Anxiety.

7.5 Overall Conclusion

The present study investigated the academic motivation of school-going adolescents in Nadia District by examining the dimensions of Self-Efficacy, Intrinsic Value, Test Anxiety, Cognitive Strategy Use, Self-Regulation, and Overall Academic Motivation using the Motivated Strategies for Learning Questionnaire (MSLQ). The findings indicate that the adolescents, irrespective of gender, demonstrated a high level of overall academic motivation. High levels of self-efficacy, intrinsic value, cognitive strategy use, and self-regulation suggest that the participants generally possessed positive motivational beliefs and employed effective learning strategies to support their academic engagement. Although test anxiety was relatively lower than the other motivational dimensions, it remained within an acceptable range, indicating that anxiety did not substantially hinder students' academic motivation.

The study further revealed that both male and female adolescents exhibited high levels of academic motivation. However, statistically significant gender differences were observed

in overall academic motivation, cognitive strategy use, and test anxiety, with female adolescents obtaining slightly higher mean scores than their male counterparts. No significant gender differences were found in self-efficacy, intrinsic value, or self-regulation, suggesting that the motivational beliefs of male and female adolescents are largely comparable across these dimensions.

These findings are consistent with contemporary theories of academic motivation, particularly the **Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2020), the Expectancy-Value Theory (Eccles & Wigfield, 2002**), and the Social Cognitive Theory of Self-Regulated Learning (**Zimmerman, 2000, 2002**). Collectively, these theoretical perspectives emphasise that students who possess strong self-efficacy beliefs, perceive academic tasks as valuable, and effectively regulate their learning are more likely to demonstrate higher levels of motivation and academic engagement. The findings also support the conceptual framework proposed by **Pintrich and De Groot (1990**), which identifies motivational beliefs and self-regulated learning strategies as fundamental predictors of academic success.

From an educational perspective, the findings underscore the importance of creating classroom environments that strengthen students' intrinsic motivation, enhance self-efficacy, promote effective learning strategies, and foster self-regulated learning. Teachers should adopt learner-centred instructional practices that encourage active participation, collaborative learning, constructive feedback, and reflective thinking. School counsellors may design interventions to reduce excessive test anxiety and develop adaptive coping strategies, while curriculum planners and educational administrators should integrate motivational components into instructional planning and assessment practices. Such initiatives may contribute to improved academic engagement, learning outcomes, and overall educational development among adolescents.

Although the present study provides valuable insights into the academic motivation of school-going adolescents in Nadia District, its findings should be interpreted in light of certain limitations, including its cross-sectional design and geographical restriction to a single district. Future research may adopt longitudinal or mixed-method approaches, include students from different educational boards and socio-cultural backgrounds, and examine additional psychological and contextual variables, such as parental involvement, socio-economic status, school climate, academic achievement, teacher support, and peer influence. Such investigations would provide a more comprehensive understanding of the factors influencing academic motivation among adolescents.

In conclusion, the present study contributes to the growing body of literature on adolescent academic motivation by providing empirical evidence from the Indian educational context. It highlights the multidimensional nature of academic motivation and demonstrates that school-going adolescents generally possess favourable motivational characteristics that support effective learning. The findings offer useful implications for educational researchers, teachers, school counsellors, policymakers, and other stakeholders seeking to promote motivation, engagement, and academic excellence among secondary school students.

References

Areepattamannil, S. (2014). What factors are associated with reading and mathematics achievement among Emirati children? *Educational Assessment, Evaluation and Accountability, 26*(1), 89–105. https://doi.org/10.1007/s11092-013-9182-2

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

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. Plenum Press.

the self-determination of behaviour. *Psychological Inquiry, 11*(4), 227–268. Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and **https://doi.org/10.1207/S15327965PLI1104_01**

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53*(1), 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153

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

Jena, P. C. (2018). Academic motivation of secondary school students in relation to self-regulated learning. *International Journal of Research in Social Sciences, 8*(3), 324–335.

Kaur, G., & Singh, K. (2015). Academic motivation among adolescents in relation to gender and locality. *International Journal of Applied Research, 1*(11), 662–665.

Meece, J. L., Glienke, B. B., & Burg, S. (2006). Gender and motivation. *Journal of School Psychology, 44*(5), 351–373. https://doi.org/10.1016/j.jsp.2006.04.004

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

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

Putwain, D. W. (2007). Test anxiety in UK schoolchildren: Prevalence and demographic patterns. *British Journal of Educational Psychology, 77*(3), 579–593. https://doi.org/10.1348/000709906X161704

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

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

Schunk, D. H., DiBenedetto, M. K., & Mullen, C. A. (2016). Motivation. In K. R. Wentzel & D. B. Miele (Eds.), *Handbook of motivation at school* (2nd ed., pp. 11–26). Routledge.

Schunk, D. H., Meece, J. L., & Pintrich, P. R. (2014). *Motivation in education: Theory, research, and applications* (4th ed.). Pearson.

Sharma, H. L., & Nasa, G. (2014). Academic motivation among secondary school students in relation to gender and academic achievement. *Educational Quest: An International Journal of Education and Applied Social Sciences, 5*(2), 87–91.

Wigfield, A., & Eccles, J. S. (Eds.). (2002). *Development of achievement motivation*. Academic Press.

Wigfield, A., Eccles, J. S., Fredricks, J. A., Simpkins, S. D., Roeser, R. W., & Schiefele, U. (2015). Development of achievement motivation and engagement. In R. M. Lerner (Ed.), *Handbook of child psychology and developmental science* (7th ed., Vol. 3, pp. 657–700). John Wiley & Sons.

Wigfield, A., Muenks, K., & Eccles, J. S. (2021). Achievement motivation: What we know and where we are going. *Annual Review of Developmental Psychology, 3*, 87–111. https://doi.org/10.1146/annurev-devpsych-050720-103500

Wolters, C. A. (2004). Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology, 96*(2), 236–250. https://doi.org/10.1037/0022-0663.96.2.236

Zeidner, M. (1998). *Test anxiety: The state of the art*. Plenum Press.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64–70. https://doi.org/10.1207/S15430421TIP4102_2

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and prospects. *American Educational Research Journal, 45*(1), 166–183. https://doi.org/10.3102/0002831207312909