

# Gender Differences in Intrinsic Motivation among Government and Private High School Students in Nawabshah

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## ABSTRACT

**Aim of the Study:** The current study was investigated gender differences in intrinsic motivation among government and private high school students of Nawabshah, specifically those in grades 9 and 10; participant age range was 14 to 16 years.

**Method:** A cross-sectional design with a random sampling technique was used to collect data from (N= 220) high school students. The Urdu translated version of the intrinsic motivation inventory (IMI) was used as the data collection instrument. It was back translated and adapted by Malik and Parveen (2015). The alpha reliability of the adapted scale is measure at 0.82 (Malik & Parveen (2015).

**Result:** Female students were found to have significantly higher intrinsic motivation than their male students. This study will help educators, parents, and teachers in Sindhi, especially in Nawabshah, understand students' challenges and the impact of the learning environment of government and private schools, highlighting the need for self-discipline awareness and training.

**Conclusion:** Female students showed greater intrinsic motivation compared to male students. Private schools frequently employ teachers with uncertain educational or teaching credentials, at times even employing someone with just intermediate education at minimum salaries. This serves the interests of the schools, not the students, and could be the reason for lower student motivation and performance.

**Keywords:** High School Students, Gender Differences, Government and Private Schools, Intrinsic Motivation, Nawabshah.

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## 1. INTRODUCTION

Motivation is one of the essential psychological processes that energize and direct goal-oriented behavior. Intrinsic motivation, in particular, is created by the individual and stimulated by personal interest, pleasure, or intrinsic satisfaction and not the external reward (Pincus, 2025). It is one of the noticeable determinants of academic engagement, creativity, and persistence. During the period of adolescence, which is a period of great cognitive, affective and social development, students develop individual

routines of motivation that can influence their academic careers and further-on choices (Sweet, 2025). According to Sarwar et al. (2025), in educational ways, the intrinsic motivation has a direct connection with the academic results, engagement in classes, and emotional regulation. Studies show that gender has the possibility of influencing students' experiences and expressions of motivation. It is usually said that girls are more intrinsically motivated; maybe due to socialization, parental influences, and school experiences (Masjutina et al., 2025; Fayokemi, & Olorunda, 2020; Ezebube, & Emeka, 2023). Furthermore, the type of school system (governmental or private) may also have played its role in identifying the motivational patterns (Adinew, 2024). The government schools in Pakistan are especially poor in resources in comparison with private schools, which may affect students' learning and their motivation levels (Rashid et al., 2025).

### ***1.1 Intrinsic Motivation***

Intrinsic motivation is engaging in any activity because of the inbuilt satisfaction, enjoyment or interest involved, as conflicting to an external reward or pressure. Intrinsic motivators do tasks because they are interested, or they need to find something out or as a personal achievement of challenge and reward. According to Deci and Ryan (1985) Self-Determination Theory, cases of intrinsic motivation occur when needs for competence, autonomy and relatedness are appropriately fulfilled. When such are met, it is likely that the person will participate willingly and show a constant level of participation in the long run. While in the learning environments, intrinsic motivation is one of the major drivers that promote deep learning, creativity, resilience and long-term academic attainment (Bhardwaj, 2025). Intrinsically motivated students have a higher tendency to assume more efficient approaches to learning, develop greater goals and demonstrate increased persistence in the face of challenges compared to the extrinsically motivated students (Maemunah, 2025). Apart from education, intrinsic motivation is another aspect of job satisfaction, individual development, and mental well-being. It has been found to be connected with an improved psychological condition, better life satisfaction, and better interpersonal relationships.

The studies reveal that independence supportive climate, beneficial feedback, meaningful relationships have an effect to highly enhance intrinsic form of motivation (Nili et al, 2022). On the contrary, according to Wahyudi (2024), over controlling, forcing, or neglecting people's needs and interests in environments can weaken one's intrinsic motivation, cause disengagement and lower performance.

### ***1.2 Problem Statement***

Students do well in school is quite dependent on their ability to be motivated and regulate their learning at schools. However, we still do not know enough about the impact of these factors, and particularly that of intrinsic motivation, on gender and the type of school the students attend. In places such as Nawabshah where research is limited, one need to determine whether there are any differences between boys and girls in dealing with their academic responsibilities, and whether there are differences in the levels of motivation between students attending government schools and students of private schools. Understanding the differences could enable teachers, parents, and school managers support students better and provide them with learning environments that will encourage both motivation and academic progress.

### ***1.3 Significance of the Study***

School education is very important in preparing the stage for the entire academic life of each student. The skills increased during this period influence their future success, flexibility and performance in higher learning greatly. Despite the complications that may be encountered by young students in school in the process of learning, they are part of the process of creating learning capabilities for young students. The learning environment in government and private schools is dynamic, resulting in variation in students' behaviour and learning competencies. There has not been much research done on the problems of school students in Pakistan, and to the best of our understanding, there is no such study that has been conducted in Nawabshah to deal with this variable among government and private school students. Therefore, the current study was critical in comparing the high school students from both types of schools on intrinsic

motivation skills, which are critical for academic performance and future coping. This study will help parents, teachers, and educational managers during the creation of a proper environment that will ensure the development and growth of students. Also, the outcomes will provide insights into the students' dominant levels of skill and indicate the spheres where certain determinations are to be made to enhance the schooling rates at schools.

#### ***1.4 Study Gap***

In 2018, Memon and others published a study of medical students in Nawabshah, exploring the impact of motivation on improving their sports performance. While that study provided insightful information on how motivation affects physical skill, it was limited to a particular population of university-level medical students and a particular area of sports. Despite the increasing significance attributed to the knowledge of motivational forces in education, particularly at the determinative levels, there is a huge gap in the literature when it comes to analyzing the impact of intrinsic motivation on the educational performance and study routines of school-going students, especially in Nawabshah. Many studies at varying global settings had always consistently reported that intrinsically motivated students have shown enhanced academic outcomes, enhanced self-regulation levels, and enhanced flexibility in adapting school challenges. So far, the limited studies are necessary because cultural, social, and institutional contexts may impact the way intrinsic motivation is known and affect the learning of high school students. No detailed study has, to date, been carried out in Nawabshah on how intrinsic motivation influences students' educational progress at the high secondary level, especially concerning the type of schools, like government and private schools. This represents a serious research gap, for the most part, considering the exclusive differences typically present within educational settings among these groups. Closing this gap is vital not only for forwarding academic knowledge but also for policy and practice in the local schooling system.

## **2. LITERATURE REVIEW**

Motivation is an important determinant of academic success. There are two types of motivation namely; intrinsic motivation and extrinsic motivation. Extrinsic motivation is related to awards, scholarships, certificates means external rewards on having certain level of academic success or on a good performance in class. While intrinsic motivation is an inner force which energizes students to remain engaged in academic tasks to gain success. According to latest researches intrinsic motivation is actual motivation (Deci & Ryan, 1985, Zimmermann, 2012). Self-efficacy is the belief that one can successfully execute a behavior required to produce an outcome. Higher the level of self-efficacy, the more an individual believes he or she can execute the behavior necessary to obtain a particular outcome (Bandura, 1977). It represents the determination of individual to accomplish tasks successfully (Bandura, 1997). Academic self-efficacy refers to believe of students on his or her ability to be successful in academics (Bandura, 1986). A research of Hsiao and associates (2017) indicated that creative self-efficacy and intrinsic motivation generates personalized resources such as Positive Psychological Capital (PPC). These findings are aligned with the conclusions drawn from the study. Lunenburg (2011) posited that self-efficacy (beliefs about one's ability to accomplish specific tasks) influences the tasks employees choose to learn and the goals they set for themselves.

The purpose of this study was to explore these scopes within the particular cultural and educational context of Nawabshah and offer localized understanding regarding how gender and school type influence motivation.

### ***2.1 Theoretical Framework***

The theory of intrinsic motivation was proposed by Deci and Ryan in 1985. Intrinsic motivation is an individual's goal-directed behaviour. Self-efficacy and intrinsic motivation are positively related to each other (Bartimote-Aufflick et al. 2016). Zimmerman (2000) conducted studies and found a positive relationship between students' motivation and academic self-regulation. Students with high motivation

for learning tend to apply appropriate strategies to learn effectively. A study was conducted on the relationship between motivation, metacognition, and self-regulation as predictors of long-term academic success. The results revealed that motivated students who used metacognition strategies and self-regulated in their academic course made better progress (Kuyper, Van der Werf, & Lubbers, 2000). Attitudinal components, motivation and self-regulation are important as they have a great influence on the engagement of students in the learning process (Aldridge & Fraser, 2001; Zimmeron, 2012). The main advantage of intrinsic motivation, the engagement and proactive attitude of the student do not depend on the presence of another person, for example, the teacher, as there is satisfaction in performing the activity itself (Bzuneck, 2005; Zimmerman, 2012). Several studies show that both learning strategies and intrinsic motivation may be valuable resources for academic self-regulation because they enable students to avoid wasting time and acquire goals successfully (Boruchovitch, 2008; Dembo, 1994; Zimmerman, 2008). Aldridge and Fraser's (2012) indicated that the motivation component strongly predicts students' self-regulation in learning. The theory of self-regulation was given by R. F. Baumeister (1994). Self-regulation is a part of the self-determination quality of individuals. It is an ongoing process where we keep a check on our behaviour, the factors that affect our behaviour and the effects of our behaviour. We measure our behaviour according to our standards and larger, more contextual standards. React to our behaviour (i.e., what we think and how we feel about our behaviour. A study conducted by Fredrickson (2004) suggested that self-efficacy and intrinsic motivation generate positive emotions among frontline employees. Gong and associates (2009) indicated that self-efficacy and intrinsic motivation are the key cognitive mechanisms towards creativity. From the several researches the evidence shows that both self-efficacy and motivation beliefs contribute significantly to the level of performance (Perkins et al., 2008). There is a direct relationship between self-efficacy and performance (Gully et al., 2002). Self-efficacy and motivation both are needed for academic success; only self-efficacy of students alone will not ensure success. Students' motivational beliefs, their use of self-regulated learning strategies, and their achievement is an important goal of students' classroom learning (Corn, 1993). Students' motivational beliefs and self-regulation ability in senior high school may directly affect their performance and adaptation in college (Nota & Zimmerman, 2004; Lynch & Trujillo, 2011).

## ***2.2 Objectives of the Study***

- To measure gender differences in the academic self-regulation of participants.
- To assess the impact of intrinsic motivation among government and private schools.

## ***2.3 Hypotheses of the Study***

- The students of private schools would have higher intrinsic motivation than government school students.
- There would be significant gender differences in the intrinsic motivation of male and female school students.

## ***2.4 Operational Definition***

*Intrinsic motivation:* It is defined as the internal factor that ambitions an individual to comprehensive the allocated tasks deprived of the intervention of any other external factors (Deci & Ryan, 1985).

# **3. METHODOLOGY**

## ***3.1 Research Design***

It was qualitative study and a cross-sectional research design was used.

## ***3.2 Sample and Sampling Technique***

The sample for the study was 220 students, divided equally into male and female respondents (110 each), from government and private schools. Students were randomly selected from the 9th and 10th

grades of different schools in Nawabshah. Information was gathered from a total of six schools, two government and four private schools. The sample size was calculated through the Raosoft sample size calculator. The participants' age range was between 14 and 16 years, and the mean age was 15.22 years.

### ***3.3 Inclusion Criteria***

To be part of the study, participants needed to be students in either 9th or 10th grade, between the ages of 14 and 16. They also had to be enrolled in a government or private school in Nawabshah. These criteria have guided the researcher to a certain category of secondary school students at a point in their academic life, as well as concerning their growth, which is a vital period. This attention made it easier for me to understand their understanding and learning habits in a significant manner.

### ***3.4 Exclusion Criteria***

Students who were not in 9th or 10th grade, those younger than 14, and those with learning disabilities were not included in the study. This was done to keep the focus on a specific group of students who are going through similar academic and developmental stages. Narrowing down the group, the researcher tried to get a clearer and more accurate picture of how motivation function for the regular secondary school student of this age group.

### ***3.5 Measurement Instruments***

The following scale was used with the demographic information form in current study.

#### **a) Intrinsic Motivation:**

This scale was used and it was developed by Ryan et al., (1983), it is a multidimensional self-report measure designed to assess participants' subjective experiences. It includes six subscales: (a) interest/enjoyment, (b) perceived skill and effort, (c) value/usefulness, (d) pressure/tension, (e) stress, and (f) cognitive choice. The original scale comprises 29 items and has a high reliability, with a Cronbach's alpha of  $r = 0.91$ . For this study, the Urdu version translated and adapted by Malik and Parveen (2015) was used. The reliability of the translated version is  $r = 0.84$ .

#### **b) Demographic Information:**

As part of the study, some basic background information was collected from each participant to better understand their personal and family context. This was their age, the gender, the name and type of school they belong to (government or private) and the grade they were in as per the school they were attending. The researcher also gathered information about the participants' parents, such as their education levels, jobs, where the family lives, and their general socioeconomic status. This demographic data also helped to create a clearer image of every student's surrounding and the study could venture to examine the possible connection between these elements and their motivation as well as learning habits.

### ***3.6 Procedure***

After receiving approval from the Department of Psychology and the Board of Advanced Studies at the University of Sindh, Jamshoro, Pakistan, a data collection permission letter was issued to MSB by the Department of Psychology, University of Sindh, Jamshoro. The letter also helped to identify the researcher and state the reasons for conducting the study. Moreover, an authorization letter was also forwarded to the relevant school administration by requesting the same to support and facilitate the completion of the study.

Initially, MSB approached a total of seven schools (both government and private) for data collection. Out of seven schools contacted, 2 government and 4 private schools granted permission for data collection. MSB reached out to each school and selected participants with the help of teachers from classroom groups. All the participants were briefed about the objective of the study, and they gave consent in writing. The written consent was also sought from the authorities of the school.

MSB identified participants who met the inclusion criteria and were willing to participate. Each participant was required to sign a consent form before taking part in the study. After providing consent, students completed questionnaires and demographic forms during class sessions held in their regular classrooms and the data was collected with the help of school teachers. The whole exercise had taken about 45-60 minutes for each participant to fill the surveys.

### 3.7 Ethical Considerations

The research was carried out following the scholarly ethics after adhering to given guidelines to ensure that the highest level of conduct is compromised. The researcher had communicated with the original authors of the scales through e mail prior to the beginning of the research so as to acquire their permission for use. Apart from approval from the relevant school authorities, an approval to collect data had also been sought. After all the permissions were obtained, the process of data collection began. Students were given information regarding the purpose of the study in plain words and consent forms in Urdu language were provided so it can be understood fully. It was only students who had given informed consent, which took part in the study.

## 4. RESULTS

Descriptive statistics identified gender balance in representation (N= 220). The mean age was 15.28 years. Inferential statistics (t-test) indicated that females had a higher score on intrinsic motivation.

**Demographic Characteristics of the Sample:** The sample comprised an equal number of males and females aged 14–16 years (mean age = 15.28), all belonging to 9th and 10th grades. Most of the fathers were of intermediate education (22.7%), whereas 45% of mothers were illiterate. Nearly the vast majority of the mothers were housewives (95.9%). Participants predominantly belonged to the low-to-middle socioeconomic strata, with family incomes ranging from PKR 25,000 to 70,000 or more.

**Table 1:** *Demographic characteristics of the participants*

Demographic characteristics	N = 220	%
<b>Gender</b>		
Male	110	50.0
Female	110	50.0
<b>School System</b>		
Government	110	50.0
Private	110	50.0
<b>Education (Class)</b>		
Ninth	90	40.9
Tenth	130	59.1
<b>Father's Education</b>		
No Education	30	13.6
Primary	18	08.2
Middle	14	06.4
Matric	34	15.5
Intermediate	50	22.7
Bachelor	25	11.4
Master	45	20.5
Other	04	01.8
<b>Mother's Education</b>		
No Education	99	45.0
Primary	28	12.7
Middle	07	03.2
Matric	31	14.1

Intermediate	31	14.1
Bachelor	13	05.9
Master	11	05.0
<b>Profession (Mother)</b>		
Working	09	04.1
Housewives	211	95.9
<b>Socio-Economics Status</b>		
Lower (Below Rs.25,000)	20	09.1
Middle (> Rs.25,000 up to Rs.80,000)	181	82.3
Upper (>Rs.80,000)	19	08.6

#### 4.1 Government and private school students on IMI

Table 2 presents descriptive statistics of the study variables on the level of education of government and private students. The result shows significant differences in intrinsic motivation among students of government and private schools. The mean value of the motivation of government school students (IMI M = 167.04) is higher than the students of private schools (IMI M = 162.70), respectively. The mean differences suggest that students of government schools are more motivated.

**Table 2:** *t-test of the scores of government and private school students on IMI*

Scale	Govt. school students		Private school students		t-test	P
	Mean	S.D.	Mean	S.D.		
IMI	167.04	14.75	162.70	12.47	4.33**	0.01

Note: df= 118, \*\* p < .01

#### 4.2 Gender Differences in Intrinsic Motivation

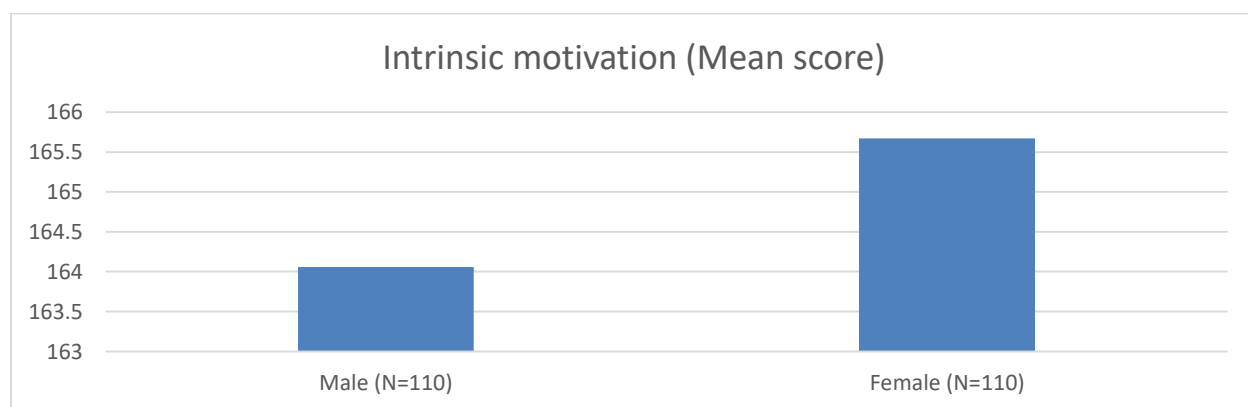
The results of the t-test for gender differences in intrinsic motivation among students are shown in the results are significant that female students had a significantly higher mean score in intrinsic motivation (M = 165.6, SD = 10.81) than male students (M = 163.06, SD = 10.81).

**Table 3:** *Comparison of IMI with reference to gender*

Scale	Male (N=110)		Female (N=110)		t-test
	Mean	S.D	Mean	S.D	
IMI	162.06	16.26	165.67	10.81	2.98**

Note: df = 218, \*\* p < .01

(IMI= Intrinsic Motivation Inventory Questionnaire)



**Figure 3.1:** Simple Bar Chart depicting mean differences between males and females intrinsic motivation

## 5. DISCUSSION

The current research focused on building a comparative study of intrinsic motivation among private and government secondary school students in Nawabshah. More specifically, it was intended to explore the difference in intrinsic motivation between male and female students in government and private schools. The results revealed a significant difference among the groups whereby the female students were more intrinsically motivated than their male students. These findings are in agreement with the previous research conducted by Li et al. (2024).

Further to that, the literature highlights the role of self-regulation as a critical mechanism that enables youth to cope in an environment of difficulty and individual challenges. Resistant students, when facing academic pressures or extrinsic pressure, apply a self-regulation mechanism that helps them control emotions, solve problems, and stick to their cause; they come out better and stronger (Sheehan, 2024).

Similarly, one other study conducted by Cheng (2011), their result shows that the impact of self-regulated learning on the performance of students in Hong Kong. The results indicated that action control has greatly influenced students' performance through affecting academic motivation, learning strategy, and goal regulation behaviours.

## 6. CONCLUSION

The findings of this study found that female students managed to create higher levels of intrinsic motivation as opposed to male students. This implies that girls could be self-motivated, self-directed, and internally oriented towards their academic pursuits, maybe because of the social expectations or prescribed environments or individual desire. The gender based difference in motivation is critical to consider by educators as well as policymakers when developing methods of support and intervention of students' engagement and academic performance.

As well, the issue of the quality of education in private schools was of concern. Although many tend to believe that private schools provide superior education, much to the reality in most cases especially in the likes of Nawabshah. Most of the private schools have teachers who are not well educated or even lack proper learning with sometimes accepting teachers hardly at an intermediate level of education paying them very low salaries. This way of hiring may be useful for the school's management to get the profit, but it can have a negative influence over the quality of provided teaching, and consequently over the motivation and results of the students.

These results emphasize that more robust protocols and supervision in the recruitment processes of private educational institutions should be necessary, and there is the need for teacher professional development. Promotion of quality of teachers may directly affect students' motivation. The results also suggest further research of the social and institutional factors that modify gender difference in motivation. Finally, if we are looking to have the students succeed, then the quality of the teaching and the environment for learning must be in order. This research provides useful information that could be used to guide better policies and practices in education of all pupils regardless of the school type.

### 6.1 *Implications of the Study*

The research reveals the gender differences as female students show an increased intrinsic motivation compared to that of male students and so there is probability of specialized measures that can be taken in order to increase motivation for both the males and females. It also highlights the concern that private schools hire teachers who are poorly paid and under qualified who could influence students negatively in regards to their motivation and performance. The results indicate that advancing teacher qualifications and the dissolution of gender disparities in motivation would contribute to greater academic achievement.



## 6.2 Recommendations for Future Research

The future research should involve a larger and representative sample from all major cities in Pakistan in order to increase the generalizability of the results. Qualitative research is also needed to have a better understanding of the learning difficulties among school students that may not be well captured with the help of quantitative procedures alone.

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## Conflict of Interest

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