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Academic Motivation and Engagement: A Correlational Study of Students' Perspective at Secondary School Level

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Abstract: The purpose of the quantitative correlational study was to investigate the association between students' academic motivation and academic engagement. This study included 600 10th-grade students who were selected at random from 20 secondary schools in the district Lahore. The data from selected students were gathered using two research instruments. The independent sample t-test, Pearson r , and linear regression were used to analyze the data. As $r = .781$ ($p > 0.01$), the findings demonstrated a strong and significant correlation between academic motivation and students' academic engagement. As a result, students' academic engagement was positively impacted by academic motivation. Academic motivation and academic engagement of students differed significantly by gender. Policy makers, teachers, and scholars are advised to pay particular consideration to each learner's level of academic engagement since it affects students' engagement with schoolwork.

Introduction

Students' motivation is a significant concern, and multiple studies have sought to address it since it leads to positive consequences. Recently, student motivation experts have proposed that motivation leads to student engagement. This association needs further research because there is not much information available (Dincer et al., 2017, 2019; Montenegro, 2017; Noels et al., 2019). This research investigates the relationship between student engagement and motivation, a topic of considerable interest to academics (Hsieh & Yu, 2022).

Success in school is influenced by pupil engagement and motivation, two examples of

good academic behavior (Martin et al., 2017). As consequently, one of the main aims of all effective instructors has been to increase pupils' academic interest and involvement. According to Irvin et al. (2007), academic interest and engagement are crucial for students' increased performance, advancement, and educational achievement. Froiland and Oros (2014) hypothesized that the extrinsic as well as intrinsic drive among learners might favorably enhance their academic performance in instructional-learning environments. Similarly, Martin (2013) claimed that highly motivated students are inspired to pursue various stages of

learning passionately when they experience a sense of satisfaction in classroom environments. In turn, this results in positive outcomes for learning. Howard et al. (2021) emphasized the significance of motivation by highlighting the positive impact it has on learners' persistence in this manner. They emphasized that academic objectives might assist students to confront problems that they may encounter during their educational experience.

There are numerous definitions and operationalizations of student engagement (Skinner, 2016; Wigfield, 2015). Attendance at school and participation in a variety of school activities fall under the umbrella of "student engagement." On the other hand, when observing how engaged students are in lessons, a more situational focus is placed on how engaged students are in a particular lesson. By and large, three parts of commitment are recognized: emotional; behavioural; and a commitment to thinking.

Students' affective responses to classroom activities, such as the display of positive affect (i.e., they are enjoying the teachings), are referred to as emotional engagement. When students exhibit observable behavior that is directly relevant to the learning process, they are said to be behaviorally engaged (Skinner, 2016). According to Nguyen et al. (2018), there are two types of behavioral engagement: passive behavior (such as paying attention in class) and active behavior (such as asking questions and working hard on tasks). Students that are cognitively engaged notice the value of schooling and set goals for their own learning. However, separating these various facets of student interaction does not imply that they are separate or mutually incompatible (Van Uden et al., 2014). Students must be attentive (behavioral engagement) in addition to enjoying the instruction (emotional engagement). Despite the fact that pupil engagement is a complex notion, aggregated measures have typically been used as indicators of student engagement in

observational studies to date (Jang et al., 2010; Van den Berghe and others 2016). In any case, lumping various signs of understudy commitment together overlooks the way that understudy commitment is a complex idea and may disregard significant qualifications in the various marks of understudy commitment (for example dynamic versus detached)

Research Objectives

The following research objectives were to study to:

1. Investigate the relationship between academic motivation and students' academic engagement at the primary school level.
2. Examine the effect of academic motivation on students' academic engagement at the primary school level.
3. Compare the difference in academic motivation and students' academic engagement at the primary school level with regard to gender.

Research Questions

The following research questions were studied:

1. What is the correlation between academic motivation and students' academic engagement at the primary school level?
2. What is the effect of academic motivation on students' academic engagement at the primary school level?
3. What is the difference in academic motivation and students' academic engagement at primary school level with regard to gender?

Literature Review

According to Deci and Ryan (2012), motivation, which assists individuals in focusing their attention and energy, plays a crucial role in individual behavior and cognition. Extensive hypothetical and experimental examinations have laid out the positive relationship between motivation and student engagement. Cerasoli

(2012) found that intrinsic motivation has moderate to strong predictive power for academic performance. Cerasoli et al. (2014a) found that while incentives predict more quantity of performance, intrinsic motivation predicts more variance in performance quality. According to Deci and Ryan (2012), extrinsic motivation is regarded as external regulation. However, intrinsic motivation can internalize extrinsic motivation under the influence of influential people in one's environment (Deci & Ryan, 2012).

According to Brophy (1983), motivation is commonly regarded as a factor that drives human behavior. Understudy drive to review, otherwise called scholarly inspiration, alludes to a student's craving "to settle on unambiguous instructive choices, take part in exercises in the study hall, and persevere in seeking after the requesting system of learning" (Dörnyei and Ushioda, 2009, p. 2). Brophy (1983) arranged unmistakable kinds of understudy inspiration for learning into two essential orders: "trait motivation" and "state motivation" State motivation is defined as "student's attitude toward a particular course" (Guilloteaux & Dörnyei, 2008, p. 56). On the other hand, trait motivation is concerned with students' general propensity to study (Csizér & Dörnyei, 2005). While students' state motivation may vary greatly, their trait motivation typically remains constant throughout their studies (Trad et al., 2014). As indicated by Hiver and Al-Hoorie (2020), understudies' inspiration might be enormously impacted by their perspectives and mentalities toward their teachers, educational substance, and learning climate. According to Dörnyei (2020), students' academic motivation is influenced by how they perceive their instructors' interpersonal and personal conduct. It suggests that responsible teachers have a positive effect on the state motivation of their students (Cheng & Dörnyei, 2007; 2008, Bernaus and Gardner; 2012 (Papi & Abdollahzadeh).

Student motivation is a key aspect of student learning, engagement, and academic success. It influences motivation independent thinking,

ambition to attain targets, and commitment to study (Bruinsma, 2004; 2000, Ryan & Deci; 2008, Schuetz; 2005). Social and mental difficulties can bring about low inspiration, which might prompt unfortunate scholastic execution (Kahu & Nelson, 2018). While inspiration is urgent for scholastic achievement, the quality and amount of inspiration might fluctuate in view of time and person. Faculty employs techniques for extrinsic motivation to encourage and stimulate learning, such as free time, punishment, and so on (Krause et al., 2006). Notwithstanding, the significance and manageability of higher-request inspiration through inborn inspiration have only sometimes been disputed. According to studies, students who are naturally motivated report feeling less anxious. According to Wigfield and Wagner (2005), they are more interested in learning, focus on achievement, and welcome competition. While sorts of inspiration impact understudy learning and scholarly inclusion (Saeed & Zyngier, 2012), inherent inspiration prompts commitment (Wigfield & Wagner, 2005).

Martin (2001, 2003, 2007) divides motivation into "boosters," which are adapted mental and behavioral processes, and "guzzlers," which are maladaptive cognition and action. Boosters are triggered by self-confidence, preparation, task management, mastery orientation, consideration, and perseverance. The definition of self-efficacy is "the student's conviction and trust regarding their own capacity to comprehend or accomplish effectively in the academic activity." It is the capacity to prevail over obstacles and perform to one's full potential. Esteeming is defined as "the extent to which pupils consider what they do and realize at school is beneficial, essential, and applicable to them." "Having vigilant about comprehending, acquiring knowledge, Solutions to problems and enhancement of skills" is a component of mastery orientation (Ouweneel et al., 2011; Salanova & team, 2010; Wiegand & Geller, 2005). As a result, the conception of inspiration (in terms of promoters and chuggers) is an appropriate paradigm for focusing on inspiration

since it captures both its advantageous and adverse drives.

Engagement can be characterized as “the time and exertion students give to exercises that are experimentally connected to wanted results of school and how establishments actuate understudies to take part in these exercises” (Groccia, 2018, p. 12). Engagement is ordinarily connected with fruitful study hall guidance and is a sign of institutional greatness (Groccia, 2018). Motivation and student engagement have been linked by some authors. According to Groccia (2018), engaged students are more likely to choose challenging assignments, take initiative in their education, put in a lot of effort and focus, and exhibit positive emotions like enthusiasm, curiosity, and interest.

The learner's intellectual, mental, behavioral and psychological engagement is all incorporated into the student engagement process (Dismore et al., 2019). In terms of academia, engagement among students is a scenario whereby a learner gives their all and proactively participates in the course of study. Trowler (2010) defines student engagement as "the relationship involving the period of time, exertion, and additional necessary assets contributed by a learner and school with the goal of improving one's educational environment" (p. 3). Through enhanced student participation, educational organizations enhance pupil learning consequences, achievement, and prestige. Multiple research investigations have found a substantial link between academic student participation and excellent outcomes. In addition, there is clear evidence that engagement is interrelated to levels of information acquisition and mental processing, collaboration to acquire information, self-association in learning, esteem in acquiring knowledge, the responsibility of the subject (Kuh, 2009), collaborating with others as well, transferring information, innovative thinking (Tight, 2020), and scholarly achievement (Alvarez, 2002; Shah & Cheng, 2019; Zyngier, 2008).

According to Siu et al. (2014), students' engagement is a positive, satisfying condition containing enthusiasm, commitment, and involvement in learning. Vigor is defined as a person's ability to exert effort in studies voluntarily. In accordance with the definition, dedication is a feeling of importance, passion, motivation, enthusiasm, and difficulty associated with scholarly endeavor. According to Schaufeli and Bakker (2010), absorption is defined as being completely engaged and enthusiastically engaged in acquiring knowledge, whereby time passes quickly and the student feels carried away by one's work.

The JD-R model, according to Bakker et al. (2004), has two distinct processes. First, there is an energy-based process (job demands, fatigue, and subpar output). Academic resources-engagement good performance, the second technique, is driven. According to research on student engagement, one should also consider the negative aspects of involvement, such as task tiredness, because exhaustion is a significant contributor to low engagement (Salmela-Aro et al., 2016). Internal drives act as a mediator between burnout and engagement (Cho et al., 2022). The JD-R model is thought to be useful for studying this connection (Jagodics & Szabo, 2022).

Academic achievement depends on student desire to engage in the learning process (Hu Woolfolk & Margetts, 2012; Fton et al., 2002). The discussion contends that motivation and engagement are interrelated or at least positively affect a variety of performance-enhancing factors. On the other hand, it is unclear how motivation and engagement are related. In light of this, Ford and Smith (2009) and Pintrich (2003) proposed combining motivation and engagement research. Such research, according to Skinner et al. (2016), may help in the creation of better treatments. Researchers assert that students' involvement and active, enthusiastic, engaged, and focused engagement in their

studies are caused by motivation (Reeve, 2012; Skinner et al., 2009).

According to research, student engagement is an essential need for optimal and substantial level learning (Barkoukis et al., 2014; Skinner et al., 2016; Skinner et al., 1998). Furthermore, student desire to study is connected to student involvement and commitment to complete school (Archambault et al. 2009; Rumberger & Lim 2008; Wang & Fredricks 2014). Furthermore, according to Abbott-Chapman et al. (2014), engaged students had superior long-term job prospects. Students' engagement changes dramatically through drawings, as many educators will see (Wang & Peck 2013). Biggs (2012) claims that although some learners are very active (the one who pays attention or focus diligently on schoolwork), others have become entirely disengaged. Fostering student engagement is critical given its importance for students' present and future achievement (Quin, 2017), and instructors' day-to-day contact with learners could possess an effect (Jang et al., 2016). To put it gently, engaging pupils while simultaneously educating a topic as well as overseeing the classroom environment is challenging and complicated.

Li et al. (2022) investigated the connection between motivations for teaching and student engagement. The findings demonstrated a positive correlation between student engagement and autonomy-supportive teaching motivations and intrinsic motivations for students in online learning environments. Besides, the interceding impacts of understudy characteristic inspiration including apparent independence, skill, and relatedness offered a more profound comprehension of the relationship between independence strong showing motivations and student engagement.

A student's experiences and the support they receive from peers and teachers have an impact on their motivation and engagement. These factors affect an individual's learning objectives, driving forces, moral principles, and sense of

self-efficacy, all of which have an impact on how engaged they are in their studies (Patrick et al., 2007). Positive relationships, good academic conduct, interaction with their instructor, and an atmosphere that encourages learning excite students. Academic progress and student involvement improve as a result (Wentzel, 2003). Earlier research appears to have focused heavily on the link between student participation and enthusiasm for success in school (Anderman & Kaplan, 2008). However, there is no concrete proof of a relationship. In accordance with Luthans et al. (2007), individuals who feel driven, have a feeling of self-worth, are positive, and are optimistic regarding the future exhibits the highest levels of involvement. Despite the fact that experts usually concur that motivation and engagement are connected, this shows that motivation is a prerequisite for engagement.

Methodology

Research Design

In this descriptive study, the researcher used a correlational research design based on the positivist paradigm. The current study was non-experimental and quantitative.

Sampling Procedure

All respondents who were selected at random from the population made up the study's sample (Siddique et al., 2021; Siddique et al., 2023). The population consisted of all 10th-grade students enrolled in a public high school in the Lahore district for the academic years 2021-2022. According to the School Education Department's (2020) report, there are 336 high schools in district Lahore, with 36847 students enrolled in the 10th grade (179 for girls and 157 for boys). 600 members (300 boys and 300 girls) were chosen utilizing a two-stage sampling technique. Equal numbers of high school students (10 girls and 10 boys) were selected through disproportionate stratified random sampling prior to selecting 30 participants at random from each school.

Research Instruments

To evaluate students' motivation, Martin (2001) developed a 10-item student motivation scale (SMS). Items measuring behavioral motivation and adaptive cognitions were added. The results showed sufficient reliability (.7). The Utrecht Work Participation Scale-Student (UWES-S), a survey created by Schaufeli et al. (2002), has nine items that were used for assessing the engagement of students. Using a five-point Likert scale, the three aspects of engagement

vigor, dedication, and absorption were assessed. The results showed sufficient reliability (.8). Through personal visits to schools, the researcher collected the data.

Analysis of Data

Inferential statistics techniques including Pearson r , one-way analysis of variance, independent sample t -test, and linear regression were used for analyzing the collected data.

Results

Table 1

Correlation between Academic Motivation and Academic Engagement

Variables	n	r -value	Sig.
Academic Motivation and Academic Engagement	600	.781**	.000

** $p < .001$ (2-tailed)

The relationship between academic engagement and motivation was shown in Table 1. There was a significant positive correlation between

academic engagement and motivation ($r = .781^{**}$, $n = 600$, and $p.001$)

Table 2

Effect of Academic Motivation on Academic Engagement

Variables	B	t -value	Sig.	Model R Square
Academic Motivation and Academic Engagement	.781	30.59	.000	.610

Table 2 showed that the R^2 value of the findings of the linear regression (.610) explained the variation in the criteria associated with the predictor. Academic motivation thus accounts for .61.0% of the variation in students' academic

engagement. A p -value of .001 indicates that the beta value (.781) is significant. The results showed that students' academic engagement was significantly impacted by academic motivation, with a β value of .781 at $p = .001$.

Table 3

Gender Wise Comparison in Academic Motivation and Academic Engagement

Variables	Gender	N	Mean	SD	t	df	P
Academic Motivation	Male	300	139.54	16.64	2.05	576.08	.001
	Female	300	136.43	20.27			
Academic Engagement	Male	300	72.22	9.20	2.24	586.79	.001
	Female	300	70.40	10.58			

According to Table 3, gender-based mean scores for academic motivation and academic engagement were compared using an

"independent sample t -test." It was found that academic motivation and students' academic engagement were significantly different at $p = .05$.

Discussion

This study examined the relationship between student motivation and work engagement in primary education. The primary finding of this study is that motivation is necessary for engagement. This clarifies the connection between work engagement and student motivation. Consequently, the study asserts that motivation plays a significant role in employee engagement at work. These outcomes support the cases made in a concentrate by Luthans and Youssef-Morgan (2017), who estimated that inspiration is the most pivotal indicator of contribution.

The discoveries of this study support the connection between motivation and engagement in the educational setting. Therefore, in accordance with previous research on engagement and motivation (Bryson & Hand, 2007; Hufton et al., 2002), the study includes education-related work engagement. Despite the fact that Skinner et al. (2016) found a link between motivation and engagement, this study found that primary school students' work engagement is influenced by their level of motivation. Through individualized intervention, educators can use motivation to encourage student task engagement.

Conclusion

This structured study sought to identify the relationship between academic engagement and motivation. After the data was analyzed, many inferences were drawn in light of the findings. It has been determined that academic engagement and motivation are positively correlated. Both male and female students exhibit significant gender variations in their levels of academic drive. Male and female students vary on average in terms of academic engagement because men are more academically motivated and engaged than women. It is clear from the data that academic motivation accounts for (.610%) of the variance in academic engagement. The results also showed that academic motivation has a

highly significant impact on academic engagement, with a β value of 0.781 at $p=.01$.

Limitations and Concerns for Future Research

There are benefits, drawbacks, and limitations to everything. In this review, the researcher gathered the data from students based on a two-stage random sampling technique. Only male and female students from public schools in district Lahore, Tehsil City, were used to collect the data. For this purpose, adopted tools were used. The future researcher can select individuals using a variety of sampling methods, such as stratified sampling or simple random sampling, in their studies of research. The researcher can also select private male and female schools from other Lahore tehsils because research is a broader field; Other Punjab-Pakistan districts can also be used for research. This research is carried out at the primary level and serves as a model for the subsequent researcher, who may then conduct research at the elementary, secondary and higher educational levels. Utilizing self-structured questionnaires also entails determining their validity and reliability. Other quantitative studies, such as experiments, Future studies employing the same variables may benefit from qualitative and mixed-method studies.

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