



**EXAMINING THE INFLUENCE OF ACADEMIC LOCUS OF CONTROL
ON THE ACADEMIC MOTIVATION AMONG UNDERGRADUATE
UNIVERSITY STUDENTS**

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BS Psychology**

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We certify that the research work presented in this research project, to the best of my knowledge, is our own. All the sources used, and any help received in the preparation of this thesis have been acknowledged. We hereby declare that we have not submitted this material, either in whole or in part, for any other degree at this or any institution.

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Candidate 2 Name _____

Candidate 3 Name _____

DEDICATION

We dedicate our research project to our parents and siblings. They have supported us in every phase of our lives. This degree and thesis would have been impossible without their prayers and support. They have supported us unconditionally throughout our journey.

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ABSTRACT

As Pakistan is going through a rough phase and a lot of people are unemployed, students start working along with their studies to support their families. Some students start working to manage their expenses on their own. While working they may encounter low motivation and weak emotional control. Thus, this quantitative study aims to study about the relationship between academic locus of control and academic motivation. To study about this relationship, 400 students, 200 working and 200 non-working students were taken as a sample. Data was collected using a demographic sheet which was self-designed, and the tools AMS-C and ALOC-R for academic motivation and academic locus of control. After collecting the data, it was analyzed by using SPSS version 20. Correlation analysis was conducted which shows that internal locus of control has strong and negative correlation with intrinsic and extrinsic motivation. External locus of control exhibits similar results with intrinsic motivation while, it depicted significant but strong and negative correlation with extrinsic motivation. Internal and external locus of control has a positive weak correlation with Amotivation. Regression analysis depicted that academic locus of control is predicting academic motivation. The result of T-test indicated no gender differences and no differences in the Academic motivation and Academic locus of control in working and non-working students.

Keywords: academic motivation, academic locus of control, undergraduate working and non-working students

INTRODUCTION

Education plays an important role in the formation of human capital. It boosts individual productivity and efficiency, producing skilled workers capable of steering the economy toward long-term economic growth. It is the process of transferring habits, views, values, skills, and information. It is the most capable and compelling approach to procuring crucial and profoundly created information and abilities. One of the worst curses on any country is unemployment, which is reduced as education is promoted. This lowers the illiteracy rate, which in turn lowers unemployment (Ahmad, Arshad, & Ahmad, 1991).

The importance of higher education for social and economic growth is acknowledged as a capital investment. Higher education includes all classes, textbooks, curricula, institutions, and instructors who work with students beyond the intermediate level. The benefits to society and the economy can be used to justify higher education spending (Batool, Sajid, & Shaheen, 2013).

Dakin, Stephen, and Armstrong (1989) defined employment as "the association between two parties, usually based on a declaration and effort is rewarded for, where one party is the employee and the other may be a cooperative or other unit". According to Oxford (2008), a job is any work for which you earn regular compensation. Finding work is crucial for people to purchase and pay for all of their daily requirements. There are abundant sorts of work and numerous ways of acquiring it.

Academics are recognized by the World Bank and the United Nations as an essential component of human social and economic development (Jibril, 2004). Academic, administrative, and interpersonal relationships are all part of university life, which is very diverse. The student is the primary contributor to the academic aspects of these fields. One of the most significant ambitions for young people nowadays is admission to a university. When they enroll in college, students want to graduate with honors and achieve their professional objectives while excelling in their field. The degree to which pupils live up to their aspirations is directly related to their drive and professional aptitude. Students should maintain high standards for themselves in terms of their professional aspirations. Their goals will therefore be easier to achieve as well. (Koyuncuoglu, 2021).

Students at universities significantly influence how education, research, and society as a whole will develop in the future. Students at universities are exposed to a broad range of academic

fields, intellectual difficulties, and chances for personal development as people seeking higher education.

Universities are thriving learning and information centers, offering a setting that encourages epistemic curiosity, conceptualizing, and personal growth. University students are exposed to many viewpoints, participating in multidisciplinary conversations, and solving complicated challenges. (Johnson & Smith, 2018). Students get the knowledge and skills they need to become educated and active citizens as a result of this exposure, which fosters a wide awareness of the world.

Additionally, university students are essential to furthering innovation and research. They advance knowledge in their particular professions since they actively participate in research efforts. University students who participate in research have a deeper comprehension of their academic fields, are better able to apply theoretical ideas to real-world situations, and are more likely to exhibit critical thinking abilities. University students contribute to the creation of novel theories, approaches, and discoveries through their contributions (Smith et al., 2020).

University students also enrich the academic community with their own viewpoints and thoughts. They enable the interchange of ideas and improve the learning atmosphere with their different origins, experiences, and cultural viewpoints. University students' varied opinions push the envelope on conventions, spark thought-provoking discussions, and encourage innovation. Universities maximize the potential of their student population collectively by promoting a comprehensive and cooperative atmosphere (Brown & Lee, 2019).

Many college students work while they are enrolled in university (Bennet, McCarty, and Carter, 2015; Darolia, 2014). Their university experiences and academic studies are in some way impacted by their employment. Due to rising tuition costs, declining scholarship funding, and poor family finances, students often decide to pursue part-time jobs in addition to their studies (MetCalf, 2003; Watt & Pickering, 2000).

To pay for their education, some students may need to work multiple jobs in addition to full-time study (Goldrick-Rab, 2016). According to Curtis (2007) and Hakkinen (2006) between 50-60% of university student work part-time.

According to research by Ahmed and Raza (2019), a significant number of Pakistani undergraduate students work in some capacity while obtaining their university degrees. Many undergraduate students in Pakistan work to pay for their education as well as to take care of their personal as well as familial duties.

This problem is caused by several things, such as a lack of funding, the need to reduce the cost of education, and the desire to achieve professional advancement. As reported by Khan and Shafique (2020) the rising number of undergraduate students who are employed demonstrates Pakistani society's importance put on education

Another reason college student's work is to make money. Students who participated in Holmes' (2008) study stated that money was the main motivator for working, including helping to cover living expenses and giving additional spending money. Participants said that having to work made it harder to advance in their degrees and keep up in class.

In Pakistan, working while getting an undergraduate degree offers both advantages and disadvantages. On the plus side, work may bring about financial security, enabling students to cover their tuition costs and reducing their dependency on other financing sources. Additionally, it can improve students' work ethic, time management abilities, and feelings of responsibility. Working undergraduate students acquire an intense work ethic and are more inclined to demonstrate self-discipline, persistence, and preservice (Ahmed & Raza, 2019).

Working students may experience less financial stress but they could have issues with time management and study time allocation. Additional obligations for family and personal situations might lead to stress and mental health problems (Matheus, 2018).

But it's important to remember the difficulties Pakistani undergraduate students who are also working confront. The strain and exhaustion that might result from juggling employment and school obligations can affect pupils' general academic performance. Long work hours may also reduce the amount of time that is available for studying, participating in extracurricular pursuits, and socializing__ all of which are essential components of the overall university life. Therefore, the use of efficient time management techniques as well as institutional assistance should be recommended (Khan & Shafique, 2020).

The impact of student work on their academics has been examined in several types of research. Working students' negative effects are mostly linked to anxiety, despair, and poor academic performance (Mounsey, Vandhey, and Deikhoff, 2013). Although there is no evidence that working students do much worse academically than their peers, it has been discovered that they exhibit higher levels of worry and sadness.

When researching community college students, Tannock and Flocks (2003) discovered difficulties faced by those who had jobs. Poor working circumstances that interfered with academic work, the need for extra time to finish school, low-paying employment, rising dropout rates, and rising debt were significant obstacles (Tannock & Flocks, 2003). When compared to full-time students in Ireland who attended lessons for fewer than 15 hours per week, those who attended sessions for more than 30 hours per week were twice as likely to be unsatisfied with their total workloads (Darmody & Smyth, 2008).

The link between working students' mental health and their work-study schedules is mostly caused by the financial pressure that forces them to work both jobs. According to studies, financial stress lowers health and academic performance (Bennet et al., 2015; Britt et al., 2016). Employment has been identified by Vaughn et al. (2016) as a factor that may cause students to neglect their academic accomplishments.

Motivation is one of the most significant sources of power that controls student behavior's direction, intensity, and determination. Motivation is stimulation with physiological, cognitive, and emotional components that energizes people to engage in specific activities (Abu Karsh 2018; Akinbadea & Sofowora, 2020; Al-Husban, 2020; Basarmak & Hamutoglu, 2020; Benek & Akcey, 2019; Dweck, 1986; Hami, Salleh & Laxman, 2020; Kim et al., 2019; Rogayan Jr, 2019; Suren & Kandemir, 2019; Turunen, 2019). Motivation is one of the most significant sources of power that controls student behavior's direction, intensity, and determination (Gottfried, 1990).

Two concepts known as "learning motivation" and "academic motivation" can be used to explain the factors that allow students to participate in their studies with interest and enthusiasm (Anderman & Midgley, 1997; Eccles & Roeser, 2009).

Academic motivation is the term used to describe the intrinsic drive, interest, and zeal that people have for their academic endeavors. It includes the natural fulfillment and happiness that come from studying, as well as the desire to become proficient and proficient in academic work (Ryan & Deci, 2000). People are motivated or moved to act for a variety of reasons, even though motivation is typically thought of as a single component (Ryan & Deci, 2000b). People differ in terms of orientation and forms of motivation in this regard (Ryan & Deci, 2000a; Smith & Karaman, 2019).

According to Hulleman et al. (2016), academic motivation refers to a student's desire or interest in participating in their academic experience. When a student's performance is evaluated against a standard of performance or excellence, academic motivation is described as their desire to learn about academic topics as indicated by their approach, perseverance, and degree of interest (McClelland, et al., 1953; Omiles et al., 2019; Olowo et al., 2020; Serhan, 2019). Self-efficacy, determination, resilience, and other ideas that researchers have researched are all included in the wide concept of academic motivation (Alharthi, 2020; Altakhneh & Abumusa, 2020; Cayvaz, Akcey, & Kapici, 2020; Finogenow, 2017).

Academic motivation is described by Johnmarshall Reeve (2010) as the psychological mechanisms that animate, guide, and maintain students' involvement and persistence in their studies. It combines extrinsic motivation—driven by incentives or penalties from outside sources—with intrinsic motivation, which is motivated by a person's own interests and satisfaction. Academic motivation has a significant impact on students' decisions, efforts, and performance and is essential to their academic success.

Academic motivation is the driving force behind behaviors that are somehow connected to academic functioning and success, such as the level of effort students put forth, their capacity for time management, the activities they choose to engage in, and their tenacity in the face of challenges (Schunk et al. 2008).

Carol Dweck (2006) defined academic motivation as the notion that people possess, the adaptability of their knowledge and talents, according to Carol Dweck (2006). According to Dweck' there are two types: a fixed mentality in which people think their talents are inherent, and a growth mindset in which people think their abilities can be improved through work and

education. According to Dweck, an individual's perspective determines how they handle obstacles, how persistent they are, and ultimately how successful they are in school.

Academic motivation includes students' attitudes, ideals, and objectives that affect their participation in, commitment to, and performance on academic assignments. It comprises how competent students believe themselves to be in a specific academic field, how interested they are in the topic, and how useful or relevant they believe their academic activities to be. Academic motivation essentially captures the inner drive and environmental influences that influence students' decisions, perseverance, and academic success. It acknowledges the significance of students' subjective viewpoints, such as their perceptions of their aptitudes and the priority they accord to academic objectives, in determining their motivation to excel in school (Wigfield & Eccles, 2002).

Academic motivation, as described by Pintrich and Schunk (2002), includes the ideas, emotions, and actions that influence students' decision-making, effort, and perseverance in academic assignments. It encompasses students' expectations of achievement, the importance placed on academic aspirations, and their ideas about their aptitude. Students' internal motivation and environmental elements that influence their involvement and academic success are reflected in their academic motivation.

Academic motivation can most simply be defined as the factors that influence a person to attend school and obtain a degree. Several conceptual perspectives have been proposed in order to better understand academic motivation. While there have been many theories of motivation (Marsh, Craven, Hinkley, & Debus, 2003; Middleton & Toluk, 1999), one of the best-known theories of motivation is Deci and Ryan's Self-determination theory in which the behavior can be intrinsically motivated, extrinsically motivated, or amotivated (Deci and Ryan, 1985, 1991).

Given the increased requirement for self-control and independence at university, it is predicted that one's overall feeling of control over actions and results will have a significant influence on adjustment. A key aspect of human psychology is the locus of control, which Julian Rotter first proposed in 1966. It is one's broad view of the underlying causes of many events in one's life. Locus of control, the degree to which a person believes they have control over the events and results in their lives has been linked to a number of outcomes, and it appears to be crucial in academic settings (Atibuni, Ssenyonga, Kani Olema, & Kemeza, 2017; Goyal, 2000; Stoeber,

2001). Students' perceptions of their power over academic conditions are expressed by their academic locus of control.

Academic locus of control is defined by Abbas (2018) as the learner attributing the cause of his or her academic success, i.e., whether the learner performs with efforts from within or whether the learner's performance is attributable to and controlled by factors outside the learner that the learner is unable to control.

According to research by Razmerfar (2017), Locus of Control is a psychological concept that relates to people's views about how to manage the behaviors that have the potential to affect their life. It is also connected to the outcomes, such as successes, rewards, failures, and penalties; all of which are referred to as reinforcements. Additionally, it emphasizes the personality trait of how people see their ability to deal with events in life (April et al., 2012).

According to Abid et al. (2016), locus of control is a person's positive or negative assessment that depends on change and human capacity; it deals with individual behavior; some people have a high tolerance for accepting change readily, while others have a low tolerance for it. Individual reactions are thus identified by the locus of control.

There are two types of locus of control: internal and external. Those with an internal locus of control have the propensity to believe that the events and results in their lives primarily depend on their own behavior and are under their control. While people who have an external locus of control prefer to blame other forces for life's occurrences since they feel they have little influence over them (Rat et al., 2017; Rotter, 1966).

According to Hill (2016), people might be very internal or external. Locus of Control is essentially a characteristic; internally controlled individuals either have faith in their aptitude or strive for success reinforcement. In contrast, those who are subject to external influence put their faith in opportunities, luck, and other powerful forces rather than attributing success to their efforts.

Students who have an internal locus of control in their academic work assume that professors do not offer certain students free passes and that attendance, regular study habits, and grades reflect one's effort. On the other hand, students who have an external academic belief system think that instructors offer students free rides, that going to courses is not worth the money, and that they are unable to control their academic circumstances. Students who have an internal

academic locus of control are in charge of their academic futures, whereas those who have an external academic locus of control are at the whim of outside factors (Trice, 1985).

According to Rotter (1954), a factor including a person's life history, which includes learning experiences and the environment, may be used to explain the locus of control. People have different ideas about where the locus of control came from. Others consider it as a human feature that is developed by one's experiences in the environment and interactions that a kid has with other people, such as parents, while some see it as an inborn quality that makes up a component of one's personality. A person's orientation might change at any time. It may be modified by making changes to a person's surroundings or style of thinking.

The term "locus of control" really relates to a personality attribute called "self-reflection," which involves evaluating one's "self-efficacy," which is described as "the most distinctive core property of the human agency" (McAdams & Pals, 2006, p.165). Locus of control refers to people's conceptions of the causes of happenings and interpretations that may be linked to successes or failures (Njus & Brockway, 1999).

Academic motivation is a result of self-efficiency since that term refers to the evaluation of a person's attitude towards the outcomes of their studies and the actions they do to attain academic success. Emotional support and a pro-social outlook may boost academic success directly or indirectly. The study discovered that academic accomplishment is connected to the locus of control and that academic achievement is caused by academic drive. The association between academic motivation and accomplishment is favorable and depends on the locus of control (Abel Olufemi Ogunmakin, 2013).

Locus of control also affects motivation since it defines how much of an individual is responsible for particular outcomes and how much pleasure they will derive from achievement. A person who has an internal locus of control will feel responsible for the outcomes and happenings in their life, work harder and more tenaciously to make them happen, and ultimately enjoy success more than a person who does not believe that their actions have an influence on outcomes and happenings. (Rotter, 1966).

The locus of control emerges in infancy and stabilizes in adolescence, and it is shaped by a variety of experiences, including sociocultural influences, age, gender, and education, as well as

culture, religion, and socialization (Gaa and Shores, 1979; Krampen and Weiberg, 1981; Türker and İnel, 2012).

From a variety of theoretical stances, including behavioral, social, cognitive, and humanistic ones, researchers have investigated motivation. There are several motivational levels (from low to high) as well as kinds (intrinsic, extrinsic, and amotivation). Intrinsic motivation refers to the desire to engage in an activity that arises from an individual's interest or pure enjoyment. Extrinsic motivation, on the other hand, refers to when people perform things to receive reinforcements or rewards from outside sources, such as fame, power, money, or popularity (Alan, 2019; Trevino & DeFreitas, 2014). Amotivation, which refers to a lack of intention to accomplish anything, is the antithesis of intrinsic motivation (Ryan & Deci, 2000a; Pisarik, 2009).

According to Self Determination Theory, academic engagement is a sign of academic motivation when students participate in learning activities or academic assignments. This perception of how well academic activities satisfy students' psychological requirements influences academic engagement. Intrinsically motivated students participate in activities that meet their needs (Sünbül, Kesici & Bozgeyokili, 2003a).

While many theories of motivation have been proposed (Marsh, Craven, Hinkley, & Debus, 2003; Middleton & Toluk, 1999), one of the most well-known is Deci and Ryan's Self-determination theory, which states that behavior can be intrinsic, extrinsic, or amotivated (Deci and Ryan, 1985, 1991). This theoretical approach has generated a substantial quantity of study and looks to be quite relevant in the field of education. According to SDT, motivated behavior may be further subdivided into two motivating components, inner motivation, and extrinsic motivation, as well as an amotivation element (Deci & Ryan, 1985).

Vallerand and colleagues have expanded on Deci and Ryan's (1985) model by recognizing that the attitudes, values, and goals that cause a learner to become intrinsically motivated can differ when a learner enters college or university and voluntarily chooses a study. There are three higher-order components and six second-order elements in this hierarchical structure (Vallerand et al., 1992). The three higher-order components are intrinsic motivation, extrinsic motivation, and amotivation.

Extrinsic motivation is composed of three sub factors: identifiable, introjected, and external regulation. Intrinsic motivation has three sub factors: intrinsic motivation to know, intrinsic motivation towards accomplishments, and intrinsic motivation to experience stimulation (Deci, 1975; Deci and Ryan, 1985, 1991).

Given the mounting evidence that extrinsic incentives and pressures can undermine motivation to engage in even intrinsically interesting activities, Deci and Ryan (1985) proposed self-determination theory, which integrated two perspectives on human motivation: (a) humans are motivated to maintain an optimal level of stimulation (Hebb 1955), and (b) humans have basic needs for competence (White 1959) and personal causation or self-determination (deCharms 1968). They said that individuals seek optimal stimulation and challenging tasks that are inherently motivated because they have a basic desire for competence.

It incorporates both needs and social-cognitive conceptions (Deci & Ryan, 1985; R. M. Ryan & Deci, 2000). The three fundamental requirements in this approach are relatedness, autonomy, and competence. The drive to master and be skilled in interactions with the environment is referred to as the urge for competence. The demand for autonomy reflects the need to feel in control, independent, or self-determining with regard to one's own behavior. According to Baumeister and Leary (1995), the urge for relatedness displays a desire to be a part of or linked to a group. These requirements are thought to be inborn in all people, regardless of culture, and they apply in all circumstances. If these needs aren't met, people's motivation will decline, along with a variety of other cognitive, emotional, and behavioral signs of adaptive functioning. Self-determination theory contends that although these requirements are fundamental to human functioning, social-cognitive categories including perceived competence, control beliefs, and regulatory styles act as mediators between the impacts of these needs on behavior or other outcomes.

Csikszentmihalyi (1988), presented Flow theory. According to this theory behavior that is organically driven refers to the direct subjective experience that people have when participating in an activity. Only when a person believes that the chances for action in a particular scenario equal his or her capacity to overcome the hurdles is flow conceivable. The sensation of flow is a reward that guarantees people will try to improve their competence. Only when people actively seek out

increasingly difficult jobs and develop their skills to tackle these difficulties can they repeatedly experience flow. The sensation of flow should thus support the development of these behaviors.

A needs-based explanation of motivation has also been put out by Covington (1998), however, unlike the self-determination theory, it only takes into account one fundamental need, namely the desire for one's own sense of worth. Students approach and avoid various academic assignments in an effort to build and preserve their sense of self-worth. Additionally, social-cognitive categories like competence evaluations and attributions are crucial in regulating the relationship between the demand for self-worth and behavior. Last but not least, this model contains more emotional elements like emotions and accomplishment reasons like the drive for success and the fear of failure given the concern with personal self-worth and self-esteem.

A model of the relationships between motivation and cognition was developed by Pintrich and his colleagues (Pintrich 2000a, b). The social aspects of the learning environment, such as the social aspects of the tasks and interactions between students and teachers during instruction, several motivational constructs derived from expectancy-value and goal theories (expectancies, values, and affect), and various cognitive constructs (such as background knowledge, learning strategies, and so on) are all included in this model. They proposed that in addition to being impacted by the social setting, the cognitive and motivational dimensions also interact with one another. The cognitive and motivational characteristics are therefore thought to have an impact on how involved students are in their learning and, ultimately, how successful they are. In support, Pintrich & De Groot (1990) discovered that students' accomplishment values dictated early engagement decisions and that their self-efficacy, when combined with cognitive and self-regulation skills, promoted both engagement and performance.

An expectancy-value model of achievement-related decisions has been developed and tested by Eccles and her colleagues (e.g. Eccles et al. 1983, 1984; Meece et al. 1990). In this model, decisions are supposed to be impacted by both positive and negative task qualities. All decisions are also thought to have costs because making one decision frequently rules out other possibilities. As a result, the relative worth and likelihood of success of diverse options are important factors in decision-making.

Heckhausen's (1991) model of expectancy-value aimed to blend a variety of motivational theories. The resultant model differentiated between four distinct categories of expectancies:

situation-outcome (subjective probability of obtaining an outcome in a certain circumstance without acting), action-outcome (subjective likelihood of attaining an outcome by one's actions), and action-by-situation. Outcome-consequence (the subjective likelihood that an outcome will be linked to a certain consequence) and outcome-outcome (subjective probability that situational elements promote or hinder one's action result anticipation). Results are the immediate effects of one's activities. Numerous ramifications either follow or don't follow these initial effects. On their own, they don't offer any incentive value. Only the results of one's activities are given incentive value. As a result, the importance associated with the repercussions of one's behavior determines how motivated someone is to behave.

According to Julian B. Rotter's locus of control theory, people either have an internal or an external locus of control. People who have an internal locus of control think that their choices and behaviors have a direct impact on their results, including their achievement in school. They credit their talents and efforts for their successes. Those having an external locus of control, on the other hand, believe they have little influence over their results and ascribe their academic success to outside factors like chance or influential others. According to Rotter's hypothesis, ideas about the locus of control can affect motivation, behavior, and well-being.

In 1954, Rotter put up a social learning theory. This theory states that the people's explanations for what leads to their success or failure in an activity constitute the locus of control. Some individuals think their success results from their own initiatives and hard work, while others think their success or failure is influenced by other forces that are out of their control. This theory's central thesis is that a person's personality develops as a result of their interactions with their environment and that environment and personality are interdependent.

Bernard Weiner's attribution theory examines how people justify their achievements and mistakes. It implies that people either credit internal (personal) or external (situational) elements for their outcomes. Key aspects are locus of control, stability, and controllability. The term "locus of control" describes how control is assigned as either external or internal. While controllability represents the idea of controllability of the causes, stability pertains to the observed stability of the causes. For instance, someone can say that their academic achievement is due to their intellect (internal, stable, controlled), or they might say that it is due to fate (external, unstable, uncontrollable). These attributions may affect one's drive, feelings, and subsequent actions.

Albert Bandura's self-efficacy theory focuses on a person's confidence in their capacity to carry out particular activities and produce desired results. Self-efficacy is the conviction that one has the abilities, resources, and knowledge necessary to deal with a certain circumstance. Self-efficacy affects motivation, effort, perseverance, and perseverance in the face of difficulties, in accordance with Bandura. Greater levels of self-efficacy are linked to greater drive, establishing difficult objectives, and using successful ways to get over challenges. On the other hand, poor self-efficacy might result in avoidance, diminished effort, and self-doubt.

According to the socio-cognitive approach, a person's behavior is influenced by how their characteristics interact with their social environment. Loci of control is important in the context of the social-cognitive view because they can either focus an interaction on a more personal, internal level or define it by making a person believe that their fate is determined by external forces as a result of the interaction between their traits and the outside world (Bandura, n.d.).

Academic motivation has been linked to several desirable outcomes in previous research such as academic achievement (Bozgeyikli et al., 2003; Paulsen & Feldman, 1999), academic engagement (Panitz, 1999; Sunbul, Kesici & Bozgeyikli, 2003b), greater success deal with stress (Strthers, Perry & Menec, 2000), etc. Grit is a corollary to academic motivation that has been discovered in the literature (Duckworth et al., 2007). Grit is an internal drive and perseverance to reach long-term objectives, and it entails “working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress” (Duckworth et al., 2007).

Fereidooni-Moghadam et al. (2017) conducted a study to assess the relationship between academic performance and achievement motivation. The results of the study showed a significant correlation between performance and motivation for academic accomplishment. Furthermore, a significant inverse association between age, education, and accomplishment motivation was found.

According to a study of the relevant literature, career expectations, decisiveness, motivation, and accomplishment among university students were significantly correlated. Academic success, motivation, and aspirations for the future of the career were found to be significantly correlated by Lent, Brown, and Larkin (1984) and Peterson and Delmas (2001). The

authors Ulaş-Klç (2018), Nauta (2007), Jenkins (2004), and Hawkins (2004) also discovered strong connections between academic motivation and career determination.

The influence of student involvement, academic self-efficacy, and academic drive on academic performance was assessed in research by Dogan (2017). The findings revealed that, in contrast to emotional and behavioral involvement, cognitive engagement predicts academic achievement. Additionally, there is a positive and significant relationship between academic motivation and self-efficacy.

The impact of student work on their academics has been examined in several research. Working students' negative effects are mostly linked to anxiety, despair, and poor academic performance (Mounsey, Vandhey, and Deikhoff, 2013). There is no proof that working students perform academically significantly worse than their peers, but it has been found that they display greater levels of anxiety and sadness.

Datu (2017) scrutinized the relationship between academic success and peace of mind (PoM). According to the study's findings, mental well-being was linked favorably to academic achievement, independent motivation, and regulated motivation. Furthermore, it bears a bad relationship to motivation. Academic success was positively interrelated with independent motivation. The outcomes discovered that autonomous motivation's mediation effects on peace of mind had an indirect impact on academic accomplishment.

Additionally, working while in school has an impact on student's mental health. According to several research, the most negative impact of student employment is on mental health, which has a significant influence on academic achievement (Hovdhaugen, 2015; Creed, French & Hood, 2015; Darolia, 2014). Robotham (2009) discovered other detrimental effects of employment, such as trouble focusing, less social activities, and less work and reading. Working while attending school, according to students, led to higher stress levels and a decreased capacity for coping (Robotham, 2009).

A part-time job is becoming more prevalent among university students enrolled full-time. A growing number of students are juggling part-time jobs with their full-time academic obligations (Broadbridge and Swanson 2005; Ford, Bosworth, and Wilson, 1995; James et al., 2007; McCartan, 1998).

Due to rising university costs, a decline in the amount and worth of scholarships, and other reductions in student assistance, there has been an increase in part-time employment. This increase has been ascribed to the growing monetary load that students must tolerate. At Northumbria University, part-time work increased from 37.6% of full-time undergraduate students in 1999 to 48.7% in 2001 (Hunt, Lincoln, and Walker 2004).

Studies conducted in Australia have revealed substantially greater rates of part-time employment among full-time students than those conducted in the UK. According to James et al. (2007), 70.5% of full-time students reported working part-time in 2006. According to a study by James et al. (2007), just 24.4% of full-time undergraduate students said they worked to further their professions, while 59.1% of them said their financial position was a cause of stress.

He also discovered that 40% of full-time students who worked said that their jobs had a negative impact on their academic motivation and performance but did not link this to the number of hours worked.

Students who work throughout the academic year in England are likely to have inferior academic results as evaluated by grades and the likelihood of graduating, according to surveys conducted by Humphrey (2006) and Metcalf (2003).

Working while studying has a significant impact, particularly on students' drive to learn. Having a job is connected to students' drive to learn, especially if the employment is related to their major. This will encourage the students and help them do well in their courses. Weiss et al. (2014) showed that, only if students worked in jobs related to their field of study, their work experiences had a beneficial impact on their salaries and social class status five years after graduation.

According to Li-Chen & Wooster's study in Kurniawati and Nurjannah (1979), college students who have jobs that are related to the majors they have selected, tend to have higher GPAs (Grade Point Averages) than those who do not.

Students who work more than 10 hours a week while enrolled full-time are more likely to struggle to balance work and university (Curtis and Shani 2002; Ford, Bosworth, and Wilson 1995; King and Bannon 2002 Metcalfe 2001). According to research by James et al. (2007), 40% of full-

time students who worked said their jobs had a negative impact on their academic performance but did not link this to the number of hours they put in at work.

Students who are employed are less likely to complete their degrees and are more likely to switch from full-time to part-time study when they work more hours. However, the evidence is contradictory. According to several research, working on-campus and for a short time each week (under 10 or 15 hours) may help students advance and finish their degrees (Horn and Berkhold 1998; King 2002; Pascarella and Terenzini 2005).

According to several studies, having a job has a positive impact on learning and academic motivation for full-time students, particularly if the job is connected to the field of study being pursued. However, the bulk of research highlights adverse outcomes (Curtis and Shani 2002; Winn and Stevenson 1997).

Although students may wish to do better academically and attend classes more frequently, their busy schedules make this impossible (Curtis & Shani, 2002). So for the sake of student's academic achievement and improve their employability (Watts & Pickering, 2000), institutions should be accommodative of such students (Curtis, 2007). Perna (2010) examined the work practices and academic demands of college students, pointing out that recent studies indicate a trend toward rising student employment. By creating curricular linkages between job and academic abilities and formally recognizing students' employment experiences in their programs, colleges, and universities need to step up their support for working students to keep up with the trend (Perna, 2010).

Studies like those by Heckman et al. (2006) have demonstrated that locus of control is just as important a factor in predicting future outcomes as cognitive capacity. According to Stillman and Velamuri (2020) life events can have an impact on locus of control, and entering and working at a university may be substantial life events.

In order to determine how self-efficacy connects to the academic locus of control, Maizam et al. (2016) conducted a study. It was discovered that, in contrast to male engineering students who are innately motivated, female engineering students exhibit high levels of self-efficacy and extrinsic locus of control.

In a research published in 2014, Onkundi explored the connections between students' locus of control, self-efficacy, and academic accomplishment. The results showed a strong correlation between locus of control and self-efficacy.

Kutanis et al. (2011) studied the impact of locus of control on students' learning processes while working in the field of education. They came to the conclusion that the method, ability, and noticing components of the learning dimensions are significantly influenced by the locus of control. The results of the study by Kutanis et al. (2011) are comparable to those of Chen and Silverthorne (2008) and Basim and Sesen (2006).

According to Razmefar (2017) and Ghasemzadeh (2011), pupils who had an internal locus of control outperformed those who had an external locus of control in terms of academic success. According to the study of Zaidi and Mohsin (2013) male students have a locus of control is internal while female students have an external locus of control.

The direct link between employment and locus of control is not well supported by the available data. Gottschalk's (2005) study of welfare users' internal locus of control tendencies increased with an external rise in work hours, particularly for those who were 30 years old or younger. His research is only focused on single parents that get assistance.

According to Cunnien et al. (2009), student employment was linked to higher economic and non-economic self-efficacy or the conviction that one can accomplish a task. The authors also discovered that students who worked steadily for a longer length of time, defined as 20 hours or less per week or more, had higher self-efficacy than those who worked sporadically.

Emotional stability known as neuroticism and conscientiousness has a strong positive relationship with an internal locus of control. If someone has the desire and believes their actions have a direct impact on how something turns out, it will inevitably lead to hard labor. It has been demonstrated that those with an external locus of control experience greater levels of stress and even sadness. It seems to sense that someone would experience anxiety and learned helplessness if they believe they are at the whim of external factors and their life is not in their control. (Benassi, Sweeney, & Dufour, 1988).

Additionally, others contend that motivation and motivated behavior, such as task completion, involvement, and engagement, moderate the relationship between academic accomplishment and locus of control (Finn & Rock, 1997; Stipek & Weisz, 1981).

Academic achievement and locus of control are positively correlated, with the relationship being considerably stronger in male students than in female ones. According to a study, an internal locus of control is associated with greater academic accomplishment than an external academic locus of control (Findley & Cooper, 1983). Those with an internal locus of control, because they believe they can affect outcomes, in academics exert more effort than those with an external locus of control (Hans, 2000; Mearns, 2006). Additionally, those who have an internal locus of control in their academic performance are both proud of their successes and embarrassed of their failures. In both scenarios, individuals with an external locus of control in academics don't go through much emotional shift (Hans, 2000; Mearns, 2006).

During the semester, some students labor for money to help with some of their financial requirements (Csikszentmihalyi and Schneider, 2000). This runs the risk of undervaluing studies in favor of jobs and other non-academic concerns. As a result, it becomes extremely harder to do academic tasks. Students typically evaluate their personality qualities, such as locus of control, in order to better prepare for academic assignments and cope with stress. When students feel in charge of the results of their studies, they develop optimistic academic attitudes. Or else, poor academic attitudes are prevalent, which leads to failures, retakes, and errors (Csikszentmihalyi and Schneider, 2000).

1.1.Operational Definitions

Academic Motivation

People's motivation to engage in academic activities and assignments, as well as the core reason for their determination (Vallerand, 1993).

Academic Locus of Control

Academic locus of control is a person's perception of control over academic accomplishments (Trice, 2013)

1.2.Rationale

Understanding the relationship between academic locus of control and academic motivation has important practical implications for educators, counselors, and policymakers. Identifying the impacts of academic locus of control on academic motivation among undergraduate students can help us understand the psychological process that derives students' persistence, engagement, and success in their academic endeavors. This understanding can be used to inform educational practices and interventions aimed at increasing students' motivation and achievement. Furthermore, this research contributes to the existing literature on academic locus on control and academic motivation. It adds an understanding of how psychological factors such as academic locus of control impact student motivation which will further help in educational settings in designing curriculum. Since most researches analyzes both factors independently therefore, there are fewer indigenous studies available.

1.3.Objectives

- To investigate the relationship between academic locus of control and academic motivation
- To explore the influence of different factors on academic motivation and academic locus of control
- To explore the various factors of academic locus of control and their impact on academic motivation
- To study the level of motivation with respect to gender.

1.4.Research Questions:

- What is the relationship between academic locus of control and academic motivation?
- How does the internal dimensions of academic locus of control relate to academic motivation among working and non-working students.

1.5.Hypothesis

H1: There will be relationship between internal locus of control, external locus of control and intrinsic motivation, extrinsic motivation, and amotivation

H2: There will be a difference in internal locus of control, external locus of control and intrinsic motivation, extrinsic motivation and amotivation among working and non-working undergraduate students

H3: There will be a gender difference in the variable internal locus of control, external locus of control and intrinsic motivation, extrinsic motivation and Amotivation

H4: Internal Locus of control and External Locus of control will predict academic intrinsic motivation, extrinsic motivation and Amotivation among undergraduate students

METHOD

2.1. Research design

The study was carried out using a cross-sectional design. The data was gathered using a snowballing technique.

2.2. Sample

400 undergraduate university students were used as a sample. Participants were further divided into two groups i.e., 200 were working undergraduate university students and 200 non-working undergraduate students.

2.2.1. Inclusion criteria

Full-time university students are included in our study. Students that meet our requirements are working and non-working. Both working and nonworking students fall under the 18-26 age bracket. Students from private, public, and semi-government universities were chosen.

2.2.2. Exclusion criteria

Those who are part-time students are excluded. Part-time students who are working full-time are also excluded from our study. Students with physical and psychological disabilities were excluded. This study does not include undergraduate students who are pursuing their degrees online or through open universities.

2.3. Assessment Measures

The study includes the following measures.

2.3.1. Demographic Sheet

Demographic information was provided on a self-made sheet to research participants. The form includes the participant's age, gender, marital status, university, program, semester, GPA, kind of work, and annual income. It was used to gather the participants' information.

2.3.2. Academic Motivation Scale (AMS-C 28) College (CEGEP) Version

Academic Motivation Scale College Version – 28 items is a set of seven subscales, which measure intrinsic motivation, extrinsic motivation, and amotivation, founded on the principles of self-determination theory. This scale consists of seven subscales with four items each that evaluate various motivational styles. The three subscales of intrinsic motivation are intrinsic motivation to know, intrinsic motivation toward accomplishment, and intrinsic motivation to experience

stimulation. The three subscales of extrinsic motivation are identified, introjected, and external regulation. It is a five-point Likert scale with 1 representing “don’t correspond at all” and 5 representing corresponds exactly. Finding the means of each subscale will be used to compute the final score. It falls between -18 and +18. The person is seen to be more intrinsically motivated if their score is greater. The Internal consistency levels are satisfactory, with a mean alpha value of 0.81. The mean test-retest correlation is 0.79. The Cronbach’s alpha for subscale to know is 0.714, for accomplishment is 0.781, to experience stimulation is 0.797, for identified is .620, for introjected is 0.608, for external regulation is 0.769 and for amotivation is 0.775

2.3.3. Academic Locus of Control

Academic Locus of Control – R is a revised version of Trice’s (1985) Academic Locus of Control Scale for College Students. It was revised by Nicholas A. Curtis and Ashton D. Trice. It is a 21-item scale. It consists of two subscales i.e., Internal Locus of Control and External Locus of Control. It has true and false scoring where true is scored as one and false is scored as zero. Item numbers two, six, seven, eight, ten, 11, 12, 18, and 21 have reverse scoring. The Cronbach’s alpha for the academic internal locus of control is .94 and for the external academic locus of control it is .95. The internal consistency of the scale is .70 and test-retest reliability was .92 with a gap of five weeks. While the construct validity is .50 (Curtis & Trice, 2013)

2.4. Procedure:

Permission was acquired by the authors of the respective scales. The authors gave their consent for the use of the AMS-C 28 and ACL-R scales. Participants were made aware of the investigation's aim. A permission form and demographic information sheet were given before the scales were handed out. The questionnaire was to be completed by the participants in accordance with the guidelines. Any inquiry pertaining to the procedure was welcome from the participants. Participants were thanked for their participation after completing the questionnaire.

2.5. Ethical consideration

Participants were made aware of the study's objectives and methodology. The freedom to withdraw from the study was guaranteed. The participants' confidentiality was protected. Volunteer interest was affirmed. The subjects received impartial treatment without prejudice or discrimination. The participants were made aware that the data would only be utilized for research purposes. The participants' safety from any physical, psychological, or social damage was ensured.

2.6. Statistical analysis

SPSS statistical software was used for data analysis. With the use of means, mean differences, standard deviations, frequencies, and Pearson correlations, a descriptive representation of the variables was achieved. In hypothesis one Pearson's correlation (bivariate) was used to analyze the relationship between the subscales of the Academic Motivation Scale and Academic Locus of Control. For hypothesis two independent sample t-test was conducted to check the difference in motivation and locus of control among working and non-working students. Similarly, for hypothesis three independent sample t-test was applied to check the gender difference among both variables being studied. And lastly, in hypothesis four, simple linear regression was applied to determine whether the academic locus of control will predict academic motivation.

RESULTS

Table 1

Demographic characteristics of participants (n = 400)

Characteristics	n	%
Age		
18-20	146	36.5
21-23	202	50.5
24-26	52	13
Gender		
Male	181	45.3
Female	219	54.8
Marital Status		
Single	369	92.3
Married	23	5.8
Engaged	8	2
University		
Government	145	36.3
Private	136	34
Semi-Government	119	29.8
Program		
Art & Literature	143	35.75
Management	119	29.75
Sciences		
Social Sciences	138	34.5
Semester		
2	76	19
3	11	2.8
4	85	21.3
5	64	16
6	55	13.8

	7	43	10.8
	8	65	16.3
	9	1	.3
GPA			
	Upto 2	6	1.5
	2.1-3	83	20.8
	3.1-4	311	77.8
Earning			
	Yes	200	50
	No	200	50
Nature of Job			
	Public	33	16.5
	Private	68	34
	Online	99	49.5
Earning Amount			
	Less than 25k	100	25
	25-50k	55	13.8
	50-75k	15	3.8
	Above 75k	30	7.5

n = No. (Frequency), % = Percentage

Table 2*Reliability analysis of scales; Academic Motivation Scale & Academic Locus of Control Scale*

Scales	No. of items	Cronbach's Alpha
Academic Motivation Scale	28	.870
Academic Locus of Control	21	.607

Hypothesis 1:

There will be relationship between internal locus of control, external locus of control and intrinsic motivation, extrinsic motivation and amotivation

Table 3

Pearson correlation indicating the relationship among the subscales of Academic Locus of Control (ILOC & ELOC) and Academic Motivation (AMO, IM & EM)

	N	M	SD	1	2	3	4	5
ILOC	400	.4519	.17983	1	.463**	.231	-.279**	-.208**
ELOC	400	.5243	.19697		1	.190**	-.250**	-.137**
AMO	400	2.4675	.89880			1	.000	.004
IM	400	3.2860	.69269				1	.684**
EM	400	3.3792	.73020					1

** . Correlation is significant at the 0.01 level (2-tailed). ILOC= Internal Locus of Control, ELOC= External Locus of Control, AMO= Amotivation, IM= Intrinsic Motivation, EM= Extrinsic Motivation

Internal locus of control has strong and negative correlation with intrinsic motivation $r(398) = -.279$, $p = .000$. Similarly Internal locus of control has strong and negative correlation with extrinsic motivation $r(398) = -.208$, $p = .000$.

External locus of control has strong and negative correlation with intrinsic motivation $r(398) = -.250$, $p = .000$. Similarly, external locus of control has significant but strong and negative correlation with extrinsic motivation $r(398) = -.137$, $p = .006$

Internal locus of control has weak and positive correlation with amotivation $r(398) = .231$, $p = .000$. Similarly, external locus of control has weak and positive correlation with amotivation $r(398) = .190$, $p = .000$.

Hypothesis 2

There will be a difference in internal locus of control, external locus of control and intrinsic motivation, extrinsic motivation and amotivation among working and non-working undergraduate students

Table 4

Independent sample t-test to determine the difference between subscales of Academic Locus of Control and Academic Motivation among working and non-working students.

Variables	Working		Non-Working		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	M	SD	M	SD			
ILOC	.4489	.17536	.4550	.18458	-.339	.734	0.033
ELOC	.5068	.18621	.5218	.20566	-.765	.445	0.076
IM	3.2913	.70101	3.2808	.68598	.150	.881	0.015
EM	3.3300	.77144	3.4283	.68490	-1.348	.178	0.134
AMO	2.5300	.87309	2.4050	.92174	1.392	.165	0.139

ILOC= Internal Locus of Control, ELOC= External Locus of Control, IM= Intrinsic Motivation, EM= Extrinsic Motivation, AMO= Amotivation

There's no significant difference in External locus of control $t(398) = -.765, p > .05$, Internal locus of control $t(398) = -.339, p > .05$, Intrinsic Motivation $t(398) = .150, p > .05$, Extrinsic Motivation $t(398) = -1.348, p > .05$ and Amotivation $t(398) = 1.392, p > .05$ among working and non-working students.

Hypothesis 3: There will be a gender difference in the variable internal locus of control, external locus of control and intrinsic motivation, extrinsic motivation and amotivation

Table 5

Independent sample t-test for gender difference in academic motivation and academic locus of control

Variable	Male		Female		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	M	SD	M	SD			
ILOC	.4586	.17294	.4465	.18555	.669	.504	0.067
ELOC	.5108	.19459	.5172	.19769	-.326	.745	0.032
IM	3.1994	.69824	3.3577	.68135	-2.287	.023	0.229
EM	3.1855	.76954	3.5392	.65579	-4.962	.000	0.494
AMO	2.5166	.92218	2.4269	.87905	.993	.321	0.099

ILOC= Internal Locus of Control, ELOC= External Locus of Control, IM= Intrinsic Motivation, EM= Extrinsic Motivation, AMO= Amotivation

There is a significant difference in Intrinsic Motivation $t(398) = -2.287$, $p \geq .05$ among males and females

Results show that there is no gender based differences in Internal Locus of Control $t(398) = .669$, $p > .05$, External Locus of Control $t(398) = -.326$, $p > .05$, Extrinsic Motivation $t(398) = -4.962$, $p > .05$, Amotivation $t(398) = .993$, $p > .05$ among males and females.

Hypothesis 4: Internal Locus of control and External Locus of control will predict academic intrinsic motivation, extrinsic motivation and amotivation among undergraduate students

Table 6

Simple Linear Regression for predicting intrinsic motivation among undergraduate students.

Variable	B	SE	t	p	95% CI	
					LL	UL
Constant	3.927	.105	37.523	.000	3.721	4.133
ILOC	-.799	.207	-3.854	.000	-1.206	-.391
ELOC	-.544	.190	-2.861	.004	-.918	-.170
R ²	.096					
ΔR ²	.092					

Dependent Variable: Intrinsic Motivation, ILOC= Internal Locus of Control, ELOC= External Locus of Control

Results showed that the internal locus of control is predicting intrinsic motivation $R^2 = .096$, $F(2, 397) = .000$, $p < .05$. Thus, the internal locus of control is a significant predictor of intrinsic motivation. Similarly, the external locus of control is predicting intrinsic motivation $R^2 = .096$, $F(2, 397) = .004$, $p < .05$. Thus, the external locus of control is a significant predictor of intrinsic motivation.

Table 7

Simple Linear Regression for predicting extrinsic motivation among undergraduate students.

Variable	B	SE	t	P	95% CI	
					LL	UL
Constant	3.817	.113	33.664	.000	3.594	4.040
ILOC	-.749	.225	-3.334	.001	-1.190	-.307
ELOC	-.193	.206	-.937	.350	-.598	.212
R ²	.046					
ΔR ²	.041					

Dependent Variable: Extrinsic Motivation, ILOC= Internal Locus of Control, ELOC= External Locus of Control

Results indicated that the internal locus of control is a significant predictor of extrinsic motivation $R^2 = .046$, $F(2, 397) = .001$, $p < .05$. Thus the internal locus of control is a significant predictor of extrinsic motivation. Similarly, the external locus of control is not a significant predictor of extrinsic motivation $R^2 = .046$, $F(2, 397) = .350$, $p > .05$. Thus the external locus of control is an insignificant predictor of extrinsic motivation.

Table 8*Simple Linear Regression for predicting amotivation among undergraduate students.*

Variable	B	SE	t	p	95% CI	
					LL	UL
Constant	1.807	.138	13.063	.000	1.535	2.079
ILOC	.911	.274	3.325	.001	.372	1.450
ELOC	.483	.251	1.924	.055	-.011	.977
R ²	.062					
ΔR ²	.057					

Dependent Variable: Amotivation, ILOC= Internal Locus of Control, ELOC= External Locus of Control

Results depicted that the internal locus of control is a significant predictor of Amotivation $R^2=.062$, $F(2, 397) = .001$, $p<.05$. Thus the internal locus of control is a significant predictor of Amotivation. Similarly, the external locus of control is a significant predictor of Amotivation $R^2=.062$, $F(2, 397) = .055$, $p\leq.05$. Thus the external locus of control is a significant predictor of Amotivation

DISCUSSION

The findings revealed mixed relationship of Internal Locus of Control, External Locus of Control with Intrinsic Motivation, Extrinsic Motivation and Amotivation. So, hypothesis one is accepted. However research data did not support hypothesis two i.e., no significant results were found about the difference of academic motivation and academic locus of control among working and non-working students. According to hypothesis three there were no gender differences found among the subscales except intrinsic motivation. And hypothesis four is supported by the theories as academic locus of control is predicting academic motivation.

According to hypothesis one there is a positive and weak relationship of external and internal locus of control with amotivation. But according to a study by (Zigarmi, 2018) internal locus of control is negatively related with amotivation and external locus of control is positively correlated with amotivation. Moreover, our findings showed that intrinsic motivation has a negative relationship with external locus of control which is proved by the study of Makri-Botsari in 1999. A study showed that internal locus of control significantly influence intrinsic motivation (Sundjoto, 2017). However, our results do indicate significant relationship but in negative direction which is partially accepted.

According to hypothesis two there will be a difference in internal locus of control, external locus of control, intrinsic motivation, extrinsic motivation and amotivation. However, our findings contradict the hypothesis. this contradiction is proved by a study that showed that working students do exhibit lower level of academic motivation due to certain reasons i.e., less time spend on the study, high employment hours etc. (Ross, Prkin & Bodey, 2013). On the other hand studies shows that working students have more internal locus of control than those who don't work (Chang, 2023). Thus this hypothesis is not supported hence more research needs to be done.

According to our third hypothesis results of intrinsic motivation are significant which is proved by the research results of Makri-Botsari in 1999. His findings showed that gender differences in intrinsic motivation exists and they have larger propensity for challenges than do girls. While another study indicated no noticeable gender difference between the variables (Parameswari, 2012) is similar to our research findings. Thus this hypothesis is partially accepted.

According to our fourth hypothesis internal and external locus of control will predict intrinsic, extrinsic and amotivation among undergraduate students. Our findings showed that external locus of control predicted intrinsic motivation. This can be described that students are focused on getting a degree with the goal to pursue a job option that is highly internalized in and of itself as vice versa. Also, it is revealed that internal locus of control is a significant predictor of intrinsic motivation. This is supported by the study of Kamdron (2015), according to which when compared to external employees, internal employees tended to be intrinsically driven. On the other hand amotivation is being predicted by both internal and external locus of control which is quite contradictory to other researches. This can be due to cultural factors, as the scale used to assess academic motivation and academic locus of control is not according to the norms of our culture.

4.1. Conclusion

The research was conducted to examine the effect of academic locus of control on academic motivation among working and non-working undergraduate students. Collecting the data of working students was crucial because they are difficult to reach, and our findings partially support some of our hypotheses while others are contradictory. Based on the findings of our study there was quite a difference in results while comparing it with other researches. One of the major factors was cultural differences and scales. Due to which our findings were quite unique.

4.2. Limitations and suggestions

The research is quantitative in nature therefore participants didn't reply in detail. Due to the lack of detail, it was difficult to interpret the results. Due to which factors students are going for jobs are overlooked in the study. Stress-related variable and self-efficacy is missing which doesn't depict appropriate results. People from Masters were excluded which are the need of the topic, they should have been part of the study. Students doing full-time jobs and part-time studies were excluded.

It is advised that if this issue is investigated using a qualitative approach, it will be examined more thoroughly and efficiently. Because most of the population was made up of university students, several of them answered the questions incorrectly. The accuracy of the answer rate might be questioned because some people had trouble understanding the items. Therefore, it is advised to continue researching the subject using a qualitative approach.

Additionally, research on graduate students is necessary. Since the majority of master's students combine work or internships with their study. Additionally, some full-time employees pursue part-time education in order to advance their careers or meet employment requirements. Therefore, examinations of their academic locus of control and motivation are also possible. For a deeper knowledge of the subject, both of the variables can be studied in conjunction with others, such as job satisfaction, work-life balance, or self-efficacy.

Additionally, a scale based on cultural norms in Pakistan has to be developed. For the benefit of laypeople, scales can also be transcribed into Urdu, the mother language of Pakistan.

Universities should allow working students to attend classes and do well in class. Of course, fundamental consequences must be maintained to ensure that students never neglect their studies. Considering the economic conditions of country, universities can also give their students part-time jobs so they can work and learn at the same place.

REFERENCES

- Abbas, S. (2018). Writing apprehension and performance of Iraq EFL students according to their locus of control orientation. *Al-Ustath*, 224 (1), 15-20.
- Abid, M. A., Kanwal, S., Nasir, M. A. T., Iqbal, S., & Huda, N. (2016). The effect of locus of control on academic performance of the students at tertiary level. *International Review of Management and Business Research*, 5, 860–869.
- Abu Karsh, S. (2018). New technology adoption by business faculty in teaching: Analyzing faculty technology adoption patterns. *International Journal of Technology in Education and Science (IJTES)*, 2(1), 17-30.
- Ahmad, E., Arshad, M. F., & Ahmad, A. (1991). Learning and earning profiles in Pakistan's informal sector. *Pakistan Economic and Social Review*, 29(2), 77-98.
- Ahmed, S., & Raza H. (2019). Work and Study: An Exploration of Undergraduate Students' Experiences in Pakistan. *International Journal of Higher Education*, 8(4), 169-185.
- Akinbadewa, B. O., & Sofowora, O. A. (2020). The effectiveness of multimedia instructional learning packages in enhancing secondary school students' attitudes toward Biology. *International Journal on Studies in Education (IJonSE)*, 2(2), 119-133. <https://doi.org/10.46328/ijonse.19>
- Alharthi, M. (2020). Students' attitudes toward the use of technology in online courses. *International Journal of Technology in Education (IJTE)*, 3(1), 14-23.
- Al-Husban, N. A. (2020). Critical thinking skills in asynchronous discussion forums: A case study. *International Journal of Technology in Education (IJTE)*, 3(2), 82-91. <https://doi.org/10.46328/ijte.v3i2.22>
- Altakhynch, B. H., & Abumusa, M. (2020). Attitudes of university students towards STEM approach. *International Journal of Technology in Education (IJTE)*, 3(1), 39-48.
- Anderman, E. M., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools.

- April, A. K., Dharani, B., & Peters, K. (2012). Impact of locus of control expectancy on level of well-being. *Review of European Studies*, 4, 124–137. doi:10.5539/res.v4n2p124
- Atibuni, D. Z., Ssenyonga, J., Kani Olema, D., & Kemeza, I. (2017). Locus of control as a predictor of academic attitudes among university students. *International Journal of Educational Policy Research and Review*, 4, 125–137.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). Academic Press.
- Bandura, A. (n.d.). *Social-Cognitive View*. Retrieved from Weebly: <http://gavs-appsych-personality-cgfa.weebly.com/social-cognitive-view.html>.
- Basarmak, U., & Hamutoglu, N. B. (2020). Developing and validating a comprehensive scale to measure perceived barriers to technology integration. *International Journal of Technology in Education and Science (IJTES)*, 4(1), 53-71. <https://doi.org/10.46328/ijtes.v4i1.53>
- Basım, N. H., & Sesen, H. (2006). Politeness of employees and helping control the locus of the impact of behavior: A study in public sector. Selçuk University. *Journal of the Institute of Social Sciences*, 16(4), 159-168.
- Batool, S. Q., Sajid, M. A., & Shaheen, I. (2013). Gender and higher education in Pakistan. *International Journal of Gender and Women's Studies*, 1(1), 15-28.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Benek, I., & Akcay, B. (2019). Development of STEM attitude scale for secondary school students: Validity and reliability study. *International Journal of Education in Mathematics, Science and Technology (IJEMST)*, 7(1), 32-52. <https://doi.org/10.18404/ijemst.509258>.
- Bennett, D., McCarty, C., & Carter, S. (2015). The impact of financial stress on academic performance in college economics courses. *Academy of Educational Leadership Journal*, 19(3), 25–30.

- Bozgeyikli, H., Sünbül, A. M., Kesici, S., & Ure, O. (2003). İlköğretim öğretmenlerinin, öğrencileri motive etme düzeyleri ile temel psikolojik ihtiyaçlarının ilişkisel analizi. VII. Ulusal Psikolojik Danışma ve Rehberlik Kongresi, İnönü Üniversitesi: Malatya: 9-11 Temmuz 2003.
- Britt, S.L., Mendiola, M.R., Schink, G.H., Tibbetts, R.H., & Jones, S.H. (2016). Financial stress, coping strategy, and academic achievement in college students. *Journal of Financial Counseling and Planning*, 27(2), 172-183.
- Broadbridge, A., and V. Swanson. 2005. Earning and learning: How term-time employment impacts on students' adjustment to university life. *Journal of Education and Work* 18, no. 2: 235–49.
- Brown, L., & Lee, J. (2019). The Role of University Students in Advancing Diversity and Inclusion. *Journal of Higher Education*, 42(3), 185-202.
- Cayvaz, A., Akcay, H., & Kapici, H. O. (2020). Comparison of simulation-based and textbook-based instructions on middle school students "achievement, inquiry skills and attitude". *International Journal of Education in Mathematics, Science and Technology (IJEMST)*, 8(1), 34-43. <https://doi.org/10.46328/ijemst.v8i1.758>.
- Chang, G. (2023). How is university students' paid work associated with their locus of control? *Research in Social Stratification and Mobility*, 100764.
- Chen, J. C., & Silverthorne, C. (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Leadership & Organization Development Journal*, 29(7), 572-582.
- Covington MV. 1998. *The Will to Learn: A Guide for Motivating Young People*. New York: Cambridge Univ. Press
- Creed, P. A., French, J., & Hood, M. (2015). Working while studying at university: The relationship between work benefits and demands and engagement and well-being. *Journal of Vocational Behavior*, 86, 48-57.
- Csikszentmihalyi M. 1988. The flow experience and its significance for human psychology. See Csikszentmihalyi & Csikszentmihalyi 1988, pp. 15–35.

- Csikszentmihalyi M, Schneider B (2000). *Becoming Adult: How Teenagers Prepare for the World of Work*. New York: Basic Books.
- Cunnien, K. A., Martin Rogers, N., & Mortimer, J. T. (2009). Adolescent work experience and self-efficacy. *International Journal of Sociology and Social Policy*, 29(3/4), 164–175. <https://doi.org/10.1108/01443330910947534>
- Curtis, S., and N. Shani. 2002. The effect of taking paid employment during term time on students' academic studies. *Journal of Further and Higher Education* 26, no. 2: 129–38.
- Darmody, M., & Smyth, E. (2008). Full-time students? Term-time employment among higher education students in Ireland. *Journal of Education and Work*, 21(4), 349–362. [doi:10.1080/13639080802361091](https://doi.org/10.1080/13639080802361091)
- Darolia, R. (2014). Working (and studying) day and night: Heterogeneous effects of working on the academic performance of full-time and part-time students. *Economics of Education Review*, 38, 38-50.
- Datu, J. (2017). Peace of Mind, Academic Motivation, and Academic Achievement in Filipino High School Students. *The Spanish Journal of Psychology*, Vol. 20, E22. DOI: 10.1017/sjp.2017.19.
- deCharms R. 1968. *Personal Causation: The Internal Affective Determinants of Behavior*. New York: Academic
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum
- Deci, E. L., & Ryan, R. M. 1985. *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. 1991. A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation: Vol. 38. Perspectives on motivation* (pp. 237–288). Lincoln: University of Nebraska Press.
- Dogan, U. (2017). Student Engagement, Academic Self-efficacy, and Academic Motivation as Predictors of Academic Performance. *The Anthropologist*, Vol. 20(Issue 3, p553-561). DOI: 10.1080/09720073.2015.11891759.

- Duckworth, A., Peterson, C., Matthews, M. D., & Kelly, D. (2007). Grit: Perseverance and Passion for Long-Term Goals, *Journal of Personality and Social Psychology*, 92(6), 1087-1101. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040–1048. <https://doi.org/10.1037/0003-066X.41.10.1040>
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- E. Makri-Botsari (1999) Academic Intrinsic Motivation: Developmental Differences and Relations to Perceived Scholastic Competence, Locus of Control and Achievement, *Evaluation & Research in Education*, 13:3, 157-171, DOI:10.1080/0950079990866695
- Eccles (Parsons) J, Adler TF, Futterman R, Goff SB, Kaczala CM, et al. 1983. Expectancies, values, and academic behaviors. In *Achievement and Achievement Motivation*, ed. JT Spence, pp. 75–146. San Francisco: Freeman
- Eccles, J. S., & Roeser, R. W. (2009). Schools, academic motivation, and stage-environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Individual bases of adolescent development* (p. 404–434). John Wiley & Sons Inc. <https://doi.org/10.1002/9780470479193.adlpsy001013>
- Fereidooni-moghadam et al. (2017). Relationship between Achievement Motivation and Academic Performance in Nursing and Midwifery Students at Ahvaz Jundishapur University of Medical Sciences in 2014- 2015. *Journal of Research Center for Medical Education Development*. Vol. 8(Issue 3, p335-344). Retrieved from http://journals.ajums.ac.ir/article_79874.html.
- Findley, M., & Cooper, H. M. (1983). The relation between locus of control and achievement. *Journal of Personality and Social Psychology*, 44, 419-427.
- Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, 82, 221–234.
- Finogenow, M. (2017). Need for Achievement. In: Zeigler-Hill V., Shackelford T. (Eds.), *Encyclopedia of Personality and Individual Differences*, 1-4, Springer, Cham. https://doi.org/10.1007/978-3-319-28099-8_537-1.

- Ford, J., D. Bosworth, and R. Wilson. 1995. Part-time work and full-time higher education. *Studies in Higher Education* 20, no. 2: 187–202.
- Gaa J, Shores J (1979). Domain specific locus of control among Black, Anglo, and Chicano undergraduates. *J. Soc.Psy.* 42:9-19.
- Ghasemzadeh, A. (2011). Locus of control in Iranian university Student and its relationship with academic achievement. *Procedia-Social and Behavioral Sciences*, 30, 2491-2496.
- Goldrick-Rab, S. (2016). *Paying the price: College costs, financial aid, and the betrayal of the American dream*. Chicago: University of Chicago Press.
- Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology*, 82, 525-538. <https://doi.org/10.1037/0022-0663.82.3.525>
- Gottschalk, P. (2005). Can work alter welfare recipients' beliefs? *Journal of Policy Analysis and Management*, 24(3), 485–498. <https://doi.org/10.1002/pam.20111>
- Häkkinen, I. (2006). Working while enrolled in a university: Does it pay? *Labour Economics*, 13(2), 167-189.
- Hamid, M. A., Salleh, S., & Laxman, K. (2020). A study on the factors influencing students "acceptance of Learning Management Systems (LMS): A Brunei case study. *International Journal of Technology in Education and Science (IJTES)*, 4(3), 203-217. <https://doi.org/10.46328/ijtes.v4i3.101>.
- Hans, T. (2000). A meta-analysis of the effects of adventure programming on locus of control. *Journal of Contemporary Psychotherapy*, 30(1), 33-60.
- Hawkins, A. (2004). *The impact of cooperative education participation on career indecision, career decision-making self-efficacy and career decision-making style among college students*. Unpublished doctoral dissertation, Temple University, Philadelphia.
- Hebb DO. 1955. Drives and the C.N.S. (conceptual nervous system). *Psychol. Rev.* 62:243–54
- Heckhausen H. 1991. *Motivation and Action*. Berlin: Springer-Verlag

- Heckman, J. J., Stixrud, J., & Urzua, J. (2006). The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics*, 24(3), 411–482. <https://doi.org/10.1086/504455>
- Hill, R. (2016). Locus of Control, Academic Achievement, and Discipline Referrals. *Murray State Theses and Dissertations*. Murray state University.
- Holmes, V. (2008). Working to live: Why university students balance full-time study and employment. *Education + Training*, 50, 305–314. [doi:10.1108/00400910810880542](https://doi.org/10.1108/00400910810880542)
- Horn, L., and J. Berkhold. 1998. *Profile of undergraduates in US postsecondary education institutions: 1995–96*. NCES 98-084. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Hovdhaugen, E. (2015). Working while studying: The impact of term-time employment on dropout rates. *Journal of Education and Work*, 28(6), 631-651.
- Hulleman, C. S., Barron, K. E., Kosovich, J. J., & Lazowski, R. A. (2016). Student motivation: Current theories, constructs, and interventions within an expectancy-value framework. In A. A. Lipnevich, F. Preckel, & R. D. Roberts (Eds.), *The Springer series on human exceptionality. Psychosocial skills and school systems in the 21st century: Theory, research, and practice* (pp. 241–278). Springer International Publishing. https://doi.org/10.1007/978-3-319-28606-8_10.
- Humphrey, R. (2006). Pulling structured inequality into higher education: The impact of part-time working on English university students. *Higher Education Quarterly*, 60(3), 270–286. <https://doi.org/10.1111/j.1468-2273.2006.00317.x>
- Hunt, A., I. Lincoln, and A. Walker. 2004. Term-time employment and academic attainment: Evidence from a large-scale survey of undergraduates at Northumbria University. *Journal of Further and Higher Education* 28, no. 1: 3–18.
- James, R., E. Bexley, M. Devlin, and S. Marginson. 2007. *Australian University Student Finances 2006: A summary of findings from a national survey of students in public universities*. Canberra: Australian Vice-Chancellors' Committee.

- Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology, 102*, 588–600.
- Jenkins, K. E. (2004). The influence of parental attachment, gender, and academic major choice on the career decision-making self-efficacy of first year African American college students. Unpublished doctoral dissertation, University of Pennsylvania State, State College, PA.
- Jibril M (2004). How to construct a knowledge society: The World Bank’s new challenges for tertiary education. *J. H. Educ. Af. 2*:133–138.
- Johnson, L., & Smith, A. (2021). Undergraduate Research and Critical Thinking Skills. *Journal of Educational Research, 68*(3), 237-257.
- Kamdron, T. (2015). Work motivation: Relationships with job satisfaction, locus of control and motivation orientation. *International Journal of Liberal Arts and Social Science, 3*(6), 125-148.
- Khan, S., & Shafique, A. (2020). The Impact of Work on Undergraduate Students in Pakistan: Challenges and Opportunities. *Journal of Education Studies, 37*(2), 97-113.
- Kim, H. W., Kim, W. J., Wilson, A. T., & Ko, H. K. (2019). Attitudes toward Using and Teaching Confidence Intervals: A Latent Profile Analysis on Elementary Statistics Instructors. *International Journal on Social and Education Sciences, 1*(2), 43-56. <https://doi.org/10.46328/ijonses.19>
- King R.M. (2002), Managing Teaching Loads--And Finding Time for Reflection and Renewal, *Inquiry, 7*(1), 11-21
- King, T., and E. Bannon. 2002. *At what cost? The price that working students pay for a college education*. Washington, DC: United States Public Interest Research Group.
- Koyuncuoğlu, Ö. (2021). An investigation of academic motivation and career decidedness among university students. *International Journal of Research in Education and Science (IJRES), 7*(1), 125-143. <https://doi.org/10.46328/ijres.1694>

- Krampen G, Weiberg H (1981). Three aspects of locus of control in German, American, and Japanese university students. *J. Soc. Psy.* 113:133-134.
- Kutanis, R. Ö., Mesci, M., & Övdür, Z. (2011). The effects of locus of control on learning performance: A case of an academic organization. *Journal of Economic and Social Studies*, 1(2), 113-136.
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1984). Relation of self-efficacy expectations to academic achievement and persistence. *Journal of Counseling Psychology*, 31(3), 356-362. <http://dx.doi.org/10.1037/0022-0167.31.3.356>
- Maizam, A., Zainal, A. A. & Mohd, J. K. (2016). Relationship between locus of control, self-efficacy efforts and academic achievement among engineering students. In Proceedings of the 8th WSEAS International Conference on education and educational technology. Retrieved from: www.tree.utm.my/wp-content/uploads/2013/03/1569533261.pdf. Accessed 5/5/2019.
- Matheuws, K. B. (2018). The working time-poor: Time poverty implications for working students' involvement. Doctoral Dissertation. USA: Ohio University.
- McAdams, D. P., & Pals, J. L. (2006). A new Big Five: fundamental principles for an integrative science of personality. *American psychologist*, 61(3), 204-217.
- McCartan, A. 1988. Students who work: Are they paying too high a price? *Change* September/October: 11–20.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.
- Mearns, J. (2006). The social learning theory of Julian Rotter. In D. P. Crowne (Ed.), *Personality theory*. New York: Oxford University Press.
- Meece JL, Wigfield A, Eccles JS. 1990. Predictors of math anxiety and its consequences for young adolescents' course enrollment intentions and performances in mathematics. *J. Educ. Psychol.* 82:60–70
- Metcalf, H. 2003. Increasing inequality in higher education: The role of term-time working. *Oxford Review of Education* 29, no. 3: 315–29.

- Metcalf, H. 2003. Increasing inequality in higher education: The role of term-time working. *Oxford Review of Education* 29, no. 3: 315–29.
- Metcalf, H. 2001. *Increasing inequality in higher education: The role of term-time working*. Discussion Paper No. 186. London: National Institute of Economic Research.
- Mounsey, R., Vandehey, M., & Diekhoff, G. (2013). Working and non-working university students: Anxiety, depression, and grade point average. *College Student Journal*, 47(2), 379-389.
- Nauta, M. M. (2007). Assessing college students' satisfaction with their academic majors. *Journal of Career Assessment*, 15(4), 446-462. <https://doi.org/10.1177/1069072707305762>
- Njus, D. M., & Brockway, J. H. (1999). Perceptions of competence and locus of control for positive and negative outcomes: predicting depression and adjustment to college. *Personality and individual differences*, 26(3), 531-548.
- Olowo, B. F., Alabi, F. O., Okotoni, C. A., & Yusuf, M. A. (2020). Social Media: Online Modern Tool to Enhance Secondary Schools Students' Academic Performance. *International Journal on Studies in Education*, 2(1), 26-35. <https://doi.org/10.46328/ijonse.7>.
- Onkundi, M. E. (2014). Locus of control and self-efficacy as predictors of academic achievement among form three students in Nyamaiya division, Nyamira county, Kenya. M.ed thesis, Kenyatta university, Nairobi, Kenya.
- Panitz, T. (1999). Benefits of Cooperative Learning in Relation to Student Motivation. In M. Theall (Ed.), *Motivation from within: Approaches for Encouraging Faculty and Students to Excel, New Directions for Teaching and Learning* (pp. 59-68). San Francisco, CA: Jossey-Bass Publishing.
- Pascarella, E., and P. Terenzini. 2005. *How college affects students*. San Francisco, CA: Jossey-Bass.
- Paulsen, M., & Feldman, K. (1999). Student Motivation and Epistemological Beliefs. *New Directions for Teaching and Learning*, 78, 17-25. <https://doi.org/10.1002/tl.7802>

- Perna, L. W. (2010). Understanding the working college student. *Academe*, 96(4). Retrieved from <http://www.aaup.org/AAUP/pubsres/academe/2010/JA/>
- Peterson, S. L., & Delmas, R. C. (2001). Effects of career decision-making self-efficacy and degree utility on student persistence: A path analytic study. *Journal of College Student Retention: Research, Theory & Practice*, 3(3), 285-299. <https://doi.org/10.2190/4d9v-dfw1-vdlx-k7gf>.
- Pintrich PR, De Groot EV. 1990. Motivational and self-regulated learning components of classroom academic performance. *J. Educ. Psychol.* 82:33–40
- Pintrich PR. 2000a. An achievement goal perspective on issues in motivation terminology, theory, and research. *Contemp. Educ. Psychol.* 25:92–104
- Pintrich PR. 2000b. The role of goal orientation in self-regulated learning. See Boekaerts et al. 2000, pp. 452–502
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Pearson Education.
- Pisarik, C. T. (2009). Motivational orientation and burnout among undergraduate college students. *College Student Journal*, 43(4), 1238–1253. <https://eric.ed.gov/?id=EJ872339>
- Rat, S., Hild, S., Gaultier, A., Khammari, A., Bonnaud Antignac, A., Quéreux, G., Nguyen, J. (2017). Anxiety, locus of control and sociodemographic factors associated with adherence to an annual clinical skin monitoring: A cross-sectional survey among 1000 high-risk french patients involved in a pilot targeted screening program for melanoma. *British Medical Journal Open*, 7, 1–9.
- Razmerfar, Z. (2017). Examining the Relationship between Self-Efficacy, Locus of control and Academic Achievement of Students Girls and Boys in Secondary School City. *Journal of Environmental and Biological Sciences, Text Road* 4(2)137-146.
- Reeve, J. (2010). Motivation and Emotion. In *Educational Psychology: A Practitioner-Researcher Model of Teaching* (pp. 44-90). John Wiley & Sons.

- Robotham, D. (2009). Combining study and employment: A step too far? *Education + Training*, 51, 322–332. [doi:10.1108/00400910910968337](https://doi.org/10.1108/00400910910968337).
- Rogayan Jr, D. V. (2019). Biology Learning Station Strategy (BLISS): Its effects on science achievement and attitude towards biology. *International Journal on Social and Education Sciences*, 1(2), 78-89.
- Rotter, J. B. (1954). Social learning and clinical psychology. *Englewood Cliffs, NJ: Prentice-Hall*
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80, 1–28. Doi: 10.1037/h0092976
- Ross, M., Perkins, H., & Bodey, K. (2013). Information literacy self-efficacy: The effect of juggling work and study. *Library & Information Science Research*, 35(4), 279-287.
- Ryan RM, Deci E. 2000. Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemp. Educ. Psychol.* 25:54–67.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. <https://psycnet.apa.org/doiLanding?doi=10.1037%2F0003-066X.55.1.68>
- Schunk, D. H., Pintrich, P. R., & Meece, J. L. (Eds.). (2008). *Motivation in education: Theory, research and applications* (3rd ed.). Upper Saddle River: Pearson Education Inc.
- Serhan, D. (2019). Web-Based Homework Systems: Students’ Perceptions of Course Interaction and Learning in Mathematics. *International Journal on Social and Education Sciences*, 1(2), 57-62. <https://doi.org/10.46328/ijonses.18>.
- Smith, C., et al. (2020). Enhancing Academic Understanding through University Students’ Research Contributions. *Journal of Applied Research in Higher Education*, 34(4), 285-302.

- Smith, R. L., & Karaman, M. A. (2019). Development and validity of the Contextual Achievement Motivation Scale. *International Journal of Psychology and Educational Sciences*, 6, 16–26. <https://doi.org/10.17220/ijpes.2019.03.003>
- Stillman, S., & Velamuri, M. (2020). Are personality traits really fixed and does it matter? *Cesifo Working Papers*, No. 8359. <https://doi.org/10.2139/ssrn.3628947>
- Stipek, D. J., & Weisz, J. R. (1981). Perceived personal control and academic achievement. *Review of Educational Research*, 51, 101–137.
- Sünbül, A. M., Kesici, S., & Bozgeyikli, H. (2003a). Öğretmenlerin öğrencileri motive etme ölçeğinin geçerlik ve güvenilirliği. Paper presented at VII. Ulusal PDR Conference, Turkey: Malatya.
- Sünbül, A. M., Kesici, Ş., & Bozgeyikli, H. (2003b). The Psychological needs of teachers, the level of teachers’ motivating and managing students. *Selçuk University, BAP Research Project*, Turkey: Konya.
- Sundjoto, Sundjoto (2017) The Role of Internal Locus of Control on Intrinsic Motivation and Employee Performance of Ceramic Company in East Java. *The Role of Internal Locus of Control on Intrinsic Motivation and Employee Performance of Ceramic Company in East Java*, 19. 01-17. ISSN e-ISSN: 2278-487X, p-ISSN: 2319-7668.
- Suren, N., & Kandemir, M. A. (2020). The effects of mathematics anxiety and motivation on students’ mathematics achievement. *International Journal of Education in Mathematics, Science and Technology*, 8(3), 190-218. <https://doi.org/10.46328/ijemst.v8i3.926>.
- Tannock, S., & Flocks, S. (2003). “I know what it’s like to struggle”: The working lives of young students in an urban community college. *Labor Studies Journal*, 28, 1–30.
- Trice, A. D. (1985). An academic locus of control scale for college students. *Perceptual and Motor Skills*, 61, 1043-1046.
- Türker MV, İnel MN (2012). The effect of locus of control orientation on perceived individual innovativeness: An empirical research in Turkey. *Procedia Soc. Beh. Sci.* 58:879-888.

- Turunen, I. (2019). Computer-assisted use of reading-through-writing method in relation to technical literacy and reading motivation. *International Journal of Technology in Education (IJTE)*, 2(1), 42-59.
- Ulaş-Kılıç, Ö. (2018). Üniversite son sınıf öğrencilerinin kariyer kararı verme yetkinliği düzeylerini etkileyen değişkenler. *OPUS-Uluslararası Toplum Araştırmaları Dergisi*, 9(16), 248-275. <https://doi.org/10.26466/opus.462704>.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brière, N. M., Senécal, C., & Vallières, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52, 1003-1017.
- Vaughn, A.A., Drake, R.R., & Haydock, S. (2016). College student mental health and quality of workplace relationships. *Journal of American College Health*, 64(1), 26-37.
- Watts, C., & Pickering, A. (2000). Pay as you learn: Student employment and academic progress. *Education+ Training*, 42(3), 129-135.
- Watts, C., & Pickering, A. (2000). Pay as you learn: Student employment and academic progress. *Education+ Training*, 42(3), 129-135.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548-573.
- Weiss, F., Klein, M., & Grauenhorst, T. (2014). The effects of work experience during higher education on labour market entry: Learning by doing or an entry ticket. *Work, Employment and Society*, 28(5), 788–807. <https://doi.org/10.1177/0950017013506772>
- White RH. 1959. Motivation reconsidered: the concept of competence. *Psychol. Rev.* 66:297–333
- Wigfield, A., & Eccles, J. S. (2002). Development of achievement motivation. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 91-120). Academic Press.
- Winn, S., and R. Stevenson. 1997. Student loans: Are the policy objectives being achieved? *Higher Education Quarterly* 51, no. 2: 144–63.
- Zaidi, I. H., & Mohsin, M. N. (2013). Locus of control in graduation students. *International Journal of Psychological Research*, 6(1) 15-20

Zigarmi, D., Galloway, F.J. & Roberts, T.P. Work Locus of Control, Motivational Regulation, Employee Work Passion, and Work Intentions: An Empirical Investigation of an Appraisal Model. *J Happiness Stud* 19, 231–256 (2018). <https://doi.org/10.1007/s10902-016-9813-2>

APPENDICES

APPENDIX A
Informed Consent

We (Amna Arif Khan, Ifrah Munir, and Sidra-tul-Muntaha) are students of Bs Psychology Bahria University Lahore Campus. We are conducting a research project of our degree and you are requested to take part in our research. The topic of our research is “Impact of Stress on Academic Locus of Control and Academic Motivation in Undergraduate Students”. Read this form if you are willing to participate. You will be given a demographic sheet consisting of some basic questions about your name, age etc. Then questionnaire will be given related to Academic Locus of Control and Academic Motivation. This will take almost 15-20 minutes.

The decision to take part in this study is entirely up to you. There are no expected negative psychological and emotional effects of participating in this study. The identity and your given responses will be kept confidential. So, try to answer each question. You are always free to drop out of the study. In this situation, the data will be erased, and you will be charged for leaving the study earlier. If you want to take part, the information gathered will only be used for research and publication purposes. In case of any additional information is needed, you can contact the researchers at

ifrah.munir345@gmail.com

Statement of consent: I have read all the information above and all my concerns are cleared. I am ready to take part in the study.

Signature:_____

APPENDIX B
Demographic Sheet

Age

- 18-20
- 21-23
- 24-25

Gender:

- Male
- Female

Marital Status:

- Single
- Married
- Engaged

University:

- Government
- Private
- Semi-government

Program:

- Arts & Literature
- Management Sciences
- Social Sciences

Semester:

GPA:

- Up to 2
- 2.1-3
- 3.1-4

Are you earning?

- Yes
- No

If yes

Nature of Job:

- Public
- Private
- Online

Earning Amount

- Less than 25k
- 25-50k
- 50-75k
- Above 75k

APPENDIX C

Scales

Academic Motivation Scale

(Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière,
Caroline B. Senécal, Évelyne F. Vallières, 1992)

Section-I

Instructions: Using the scale below, indicate to what extent each of the following items presently corresponds on one of the reasons why you go to college.

1= Don't correspond at all

2= Corresponds a little

3= Corresponds Moderately

4= Corresponds a lot

5= Corresponds exactly

Sr. no	Statement	1	2	3	4	5
1	Because with only a high-school degree I would not find a high-paying job later on.					
2	Because I experience pleasure and satisfaction while learning new things.					
3	Because I think that a college education will help me better prepare for the career I have chosen.					
4	For the intense feelings I experience when I am communicating my own ideas to others.					
5	Honestly, I don't know; I really feel that I am wasting my time in school.					
6	For the pleasure I experience while surpassing myself in my studies.					
7	To prove to myself that I am capable of completing my college degree.					
8	In order to obtain a more prestigious job later on.					
9	For the pleasure I experience when I discover new things never seen before.					
10	Because eventually it will enable me to enter the job market in a field that I like.					
11	For the pleasure that I experience when I read interesting authors.					

12	I once had good reasons for going to college; however, now I wonder whether I should continue.					
13	For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.					
14	Because of the fact that when I succeed in college (CEGEP) I feel important.					
15	Because I want to have "the good life" later on.					
16	For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.					
17	Because this will help me make a better choice regarding my career orientation.					
18	For the pleasure that I experience when I feel completely absorbed by what certain authors have written.					
19	I can't see why I go to college and frankly, I couldn't care less.					
20	For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.					
21	To show myself that I am an intelligent person.					
22	In order to have a better salary later on.					
23	Because my studies allow me to continue to learn about many things that interest me.					
24	Because I believe that a few additional years of education will improve my competence as a worker.					
25	For the "high" feeling that I experience while reading about various interesting subjects.					
26	I don't know; I can't understand what I am doing in school.					
27	Because college allows me to experience a personal satisfaction in my quest for excellence in my studies.					
28	Because I want to show myself that I can succeed in my studies.					

Academic Locus of Control

(NICHOLAS A. CURTIS AND ASHTON D. TRICE)

Section-II

Instructions: Using the scale below, indicate for each statement whether it's true or false for you.

Sr no.	Statement	True	False
1	I came to college because it was expected of me.		
2	I have largely determined my own career goals.		
3	Some people have a knack for writing, while others will never write so well no matter how hard they try.		
4	There are some subjects in which I could never do well.		
5	I sometimes feel that there is nothing I can do to improve my situation.		
6	I never feel really hopeless - there is always something I can do to improve my situation.		
7	I would never allow social activities to affect my studies.		
8	Studying every day is important.		
9	For some courses, it is not important to go to class.		
10	I consider myself highly motivated to achieve success in life.		
11	I am a good writer.		
12	Doing work on time is always important to me.		
13	I am easily distracted.		
14	I can be easily talked out of studying.		
15	I get depressed sometimes and then there is no way I can accomplish what I know I should be doing.		
16	Things will probably go wrong for me sometime in the near future.		
17	I keep changing my mind about my career goals.		
18	I feel I will someday make a real contribution to the world if I work hard at it.		

19	There has been at least one instance in school where social activity impaired my academic performance.		
20	I would like to graduate from college, but there are more important things in my life.		
21	I plan well and I stick to my plans.		

APPENDIX D
Scales Permission

Permission for AMS-C 28

Inbox



Ifrah Munir 16 Mar

Dear Sir, I hope this email finds you well. I am a BS Psychology student at the Bahria



Sam Tion, Michael 16 Mar

to me ▾



Hello Ifrah,

Please find the different versions of the AMS on our website: <https://www.lrcs.uqam.ca/en/scales/> (including the High School version) or attached for the College version.

You will see that the Scoring key is at the end of the scale (document). The articles attached will help you understand and interpret the scale so feel free to have a good look at them.

7:37



Ashton Trice sent you a message
on ResearchGate

External

Inbox



Ashton Trice via Researc... 7:36 PM



to me ▾

ResearchGate

Ashton sent you a message



Ashton Trice

James Madison University

The scale is in the public domain, so you are able to use it. Let me know if you need something more official.

Reply on ResearchGate

This message was sent to 223594814@formanite.fccollege.edu.pk by ResearchGate. To make sure you receive our updates, add



APPENDIX E
Plagiarism Report