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The Relationship Between Part-Time Employment, Academic Performance, and Learning Quality Among Undergraduate Students: A Case Study of Students in Balkh Province

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Abstract. *This study examined the relationship between part-time employment, academic performance, and learning quality among undergraduate students in Balkh Province, Afghanistan. A quantitative, descriptive-correlational design was employed. The population comprised all undergraduate students at universities in Balkh Province during the 2024–2025 academic year (N ≈ 12,000), from which 384 employed students were selected through stratified random sampling. Data were collected using a researcher-made questionnaire (Cronbach's α = 0.89) and analyzed using Pearson correlation and multiple regression in SPSS version 26. Findings revealed that 81.3% of students cited gaining work experience as the most important motivation for part-time employment, while 69.3% reported insufficient time for studying and 65.1% could not properly perform their classroom activities. Part-time employment was negatively associated with learning quality (r = -0.42), academic engagement (r = -0.38), and quantitative academic performance (r = -0.35), but positively associated with psychosocial outcomes (r = 0.46). Weekly work hours, job type, motivation, and time management collectively explained 27% of the variance in academic performance. Time management (β = 0.29) was the strongest positive predictor, and weekly work hours (β = -0.28) was the strongest negative predictor. The study concludes that part-time employment presents both opportunities (work experience, financial independence) and challenges (reduced study time, fatigue, stress) for undergraduate students. Time management appears to moderate negative associations. These findings support SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth), highlighting the need for institutional support systems that balance decent work with educational quality.*

Keywords: *Student Part-Time Employment; Academic Performance; Learning Quality; Academic Engagement; Work–Study Balance*

1. Introduction

Higher education, as one of the fundamental pillars of societal development, plays a vital role in training specialized and competent human resources (Zainalipour et al., 2009; Qadampour et al., 2016). In the era of globalization, education is regarded as the first step in any human activity, as it plays a critical role in human capital development and is associated with welfare and better life opportunities (Farooq et al., 2011). One of the indicators of the quality of an educational system and the effectiveness of its programs is students' academic performance in courses and educational activities (Soleiman Shiblu et al., 2019). Academic performance refers to the learned and acquired abilities of learners regarding academic subjects and topics, measured through standardized or teacher-made tests (Tessema et al., 2019; Jabbarizadegan & Shahriari Ahmadi, 2023).

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In recent years, the phenomenon of part-time employment among university students has increased significantly (King, 2006; Tessema et al., 2014). By 2003–2004, approximately 80% of American undergraduate students were working while studying, representing an 8% increase compared with the previous decade (72%) (King, 2006). On average, employed students work approximately 30 hours per week (Tessema et al., 2014). This trend is also expanding in developing countries; in Indonesia, the annual cost of education and living continues to rise, forcing many students to take part-time jobs to cover their expenses (Muluk, 2017). In India, the rapid expansion of higher education has been accompanied by increasing financial pressures on students and their families, and in metropolitan areas such as Chennai, rising tuition, housing, and living costs have driven many learners toward part-time employment (Jeeva & Jacob, 2025).

Part-time employment is defined as work that involves fewer hours per week than full-time employment, with part-time workers typically working fewer than 30 to 35 hours per week (International Labour Organization, 2003). Student part-time employment is defined as working fewer than 20 hours per week during semesters (Muluk, 2017). The significance of this issue lies in the dual effects of part-time employment on students: on the one hand, it provides opportunities for gaining work experience, financial independence, improved time management skills, and increased self-efficacy (Curtis, 2007; Wang et al., 2010; Hall, 2021); on the other hand, it may reduce the time available for studying, participation in extracurricular activities, and rest, leading to fatigue, stress, and declining academic performance (Coleman, 1961; Curtis, 2007; Moreau & Leathwood, 2006).

Previous research on the relationship between part-time employment and academic performance has yielded mixed and sometimes contradictory findings. A substantial body of research has focused on the effect of working hours on GPA and academic achievement. Stern (1997) found that students working more than 15 hours per week had poorer academic performance and a higher likelihood of dropping out. Chang (1995) reported that students working more than 20 hours per week had a 33% dropout rate. Singh (1998), controlling for socioeconomic status and prior achievement, showed that the more hours worked, the greater the negative impact on academic achievement. Watanabe (2005) also linked increased working hours to decreased academic performance.

In contrast, some studies have shown that working fewer than 15 hours per week has no significant effect on academic performance. Ehrenberg and Sherman (1987), in a comprehensive study published in the Journal of Human Resources, stated: "We find no strong evidence that hours of work during the academic year, in the range that students worked, significantly reduced grade point averages." The National Center for Education Statistics (1994) found that students working 1–15 hours per week had higher GPAs than both those working 16 or more hours and those not working at all. Dundes and Marx (2006) reported that 74% of working students believed employment made them more efficient, although 64% reported higher stress levels.

Astin (1975) showed that only on-campus employment had a positive effect on academic performance, while off-campus employment was associated with lower GPAs. Furr and Elling (2000) attributed this positive effect to better integration into the university community and involvement with other students and faculty members.

More recent studies in developing countries have reported similar findings. Muluk (2017), in a qualitative study of 30 English major students at Ar-Raniry State Islamic University in Indonesia, found that despite time spent on part-time work, students' GPAs

were above average; however, in some cases, the time required to complete their studies was longer than that of non-working students. Al Azis and Yusanti (2021), in a qualitative study of 44 English major students at IAIN Kediri, Indonesia, identified two main motivations for part-time employment: financial factors and experience factors. They also showed that working students could achieve good or even better GPAs, provided they had effective time management and limited their work duration to approximately 7 hours per day.

Tessema, Ready, and Astani (2014), in a quantitative study of 5,223 students at a public university in the United States, found that work had a positive effect on satisfaction and GPA when students worked fewer than 10 hours per week. However, when students worked more than 11 hours per week, their satisfaction and GPA declined with each additional category of work.

Jeeva and Jacob (2025), in a descriptive study of 94 undergraduate and postgraduate students in Chennai, India, found that most respondents perceived part-time employment as having a neutral effect on their grades, while recognizing positive outcomes such as improved time management, increased self-confidence, and financial independence. They also showed that employed and non-employed students differed only marginally in GPA and academic satisfaction, but working students demonstrated better time management skills.

In the area of learning quality, fewer studies have been conducted. Dortaj et al. (2014), in a study of 415 undergraduate students at Yazd University, showed that deep and strategic approaches were positive predictors and the surface approach was a negative predictor of the total score of qualitative academic performance. They also found that the deep approach did not predict quantitative academic performance, while the strategic approach positively and the surface approach negatively explained students' semester and overall GPAs.

Akidi, Parsa, and Elhampour (2020), in a study of 274 graduate students and alumni in agricultural fields at Shahid Chamran University of Ahvaz, showed that participants' perceptions of education and job expectations predicted more than 46% of the variance in job skills, and positive perceptions of curricula had a significant positive effect on their expectations of current and future jobs. They also found that the correlation between current students' and alumni's perceptions of theoretical and practical courses and their perceptions of job skills development was positive and significant, and improving students' perceptions of their field of study would also improve their hope for employment.

Ghasemi and Taher (2025), in a study of 370 undergraduate students at Kabul University, showed that the level of academic burnout among students was above average, and among the dimensions of academic burnout, academic exhaustion and academic inefficacy had a significant effect on academic performance, while academic disinterest did not have a significant effect on academic performance.

A review of the existing literature reveals several important gaps that the present study seeks to address. First, previous research has predominantly focused on the secondary school level. Most studies on the effect of part-time employment on academic performance have focused on secondary school students (Sadiq, 2021; Wadood et al., n.d.). Although some studies have focused on university students (Muluk, 2017; Tessema et al., 2014; Al Azis & Yusanti, 2021), there remains a scarcity of research at the undergraduate level, particularly in the context of developing countries. Second, there is a lack of research in developing countries. Sadiq (2021) explicitly notes that most studies have been conducted in developed countries, with very limited research in developing countries (such as Indonesia and Asia in general). Muluk (2017) also emphasizes that research on students' involvement in part-time work has

been conducted primarily at universities in developed countries. Third, there is insufficient attention to learning quality. Most previous studies have focused on quantitative academic performance (GPA, grades, number of failed courses) and have paid less attention to learning quality (deep understanding, concentration, academic engagement). Although Dortaj et al. (2014) examined qualitative academic performance, that study did not investigate part-time employment as an independent variable. Fourth, there is a lack of attention to psychosocial outcomes. Although some studies have briefly mentioned stress and fatigue (Dundes & Marx, 2006; Curtis, 2007; Ghasemi & Taher, 2025), the psychosocial outcomes of part-time employment (such as effects on social relationships, physical health, financial independence, and responsibility) have not been systematically examined. Fifth, there is a lack of research in the Afghan context. Although Ghasemi and Taher (2025) examined academic burnout at Kabul University, the relationship between part-time employment and academic performance and learning quality in the Afghan context has not been specifically investigated. Sixth, there is limited use of comprehensive theoretical frameworks. Most previous studies have used one or two limited theoretical frameworks. The present study, by integrating multiple theoretical frameworks (Biggs's 3P model, Tinto's Student Integration Model, Role Conflict Theory, Self-Efficacy Theory, and the Time Management Model), seeks to provide a more comprehensive understanding of the part-time employment phenomenon.

The main objective of this study is to examine the relationship between part-time employment and academic performance and learning quality among undergraduate students. The sub-objectives are: to identify the causes and motivations for part-time employment among undergraduate students; to examine the effect of part-time employment on academic performance (GPA, academic failure, study hours); to examine the effect of part-time employment on learning quality (deep understanding, concentration, academic engagement); and to examine the psychosocial outcomes of part-time employment.

The research questions are: Is there a significant relationship between part-time employment and academic performance among undergraduate students? Is there a significant relationship between part-time employment and learning quality among undergraduate students? Does part-time employment affect students' psychosocial outcomes? What factors (work duration, job type, motivation) influence the relationship between part-time employment and academic performance/learning quality?

The research hypotheses are:

- H1: There is a significant negative relationship between part-time employment and academic performance among undergraduate students.
- H2: There is a significant negative relationship between part-time employment and learning quality among undergraduate students.
- H3: Part-time employment has a significant effect on students' psychosocial outcomes.
- H4: The relationship between part-time employment and academic performance is moderated by time management.
- H5: The relationship between part-time employment and learning quality is moderated by job type (related/unrelated to the field of study).

This study contributes to the existing body of knowledge by filling the gaps in the literature, particularly regarding the relationship between part-time employment and learning quality and psychosocial outcomes at the undergraduate level and in the context of developing countries. By integrating multiple theoretical frameworks, it also provides a more comprehensive understanding of the part-time employment phenomenon. The findings of

this study can assist educational policymakers, university administrators, academic advisors, and families in designing support programs (such as special scholarships, counseling, curriculum flexibility, and on-campus job opportunities) to help working students achieve a better balance between work and study. This study can serve as a basis for developing supportive policies for working students, including designing work-study models with institutional support, providing career counseling services, and creating flexibility in curricula and assessment.

Connection to Sustainable Development Goals (SDGs): This study directly addresses SDG 4 (Quality Education) by examining how part-time employment relates to learning quality and academic performance, thereby informing policies that ensure inclusive and equitable quality education for working students. Additionally, it connects to SDG 8 (Decent Work and Economic Growth) by exploring the conditions under which student employment can be both financially necessary and developmentally beneficial, promoting decent work opportunities that do not compromise educational outcomes.

2. Methods

2.1. Theoretical Framework

2.1.1. Definition of Key Concepts

Part-Time Employment: Part-time employment is defined as work that involves fewer hours per week than full-time employment. According to the International Labour Organization (2003), part-time workers are those who typically work fewer than 30 to 35 hours per week. The definition of part-time employment varies across countries: in France, part-time work is less than four-fifths of the usual monthly working time; in Spain, less than two-thirds of full-time employees; and in Ireland and the United Kingdom, less than 30 hours per week (Van Bastelaer et al., 1997). In this study, part-time employment is defined as work performed by students during semesters, involving fewer than 20 hours per week (Muluk, 2017).

Academic Performance: Academic performance refers to the learned and acquired abilities of learners regarding academic subjects and topics, measured through standardized or teacher-made tests (Tessema et al., 2019; Jabbarizadegan & Shahriari Ahmadi, 2023). Academic performance has two dimensions: quantitative and qualitative. The quantitative dimension includes GPA, grades, number of failed courses, and study hours. The qualitative dimension includes self-efficacy, planning, emotional effects, lack of outcome control, and motivation (Dortaj et al., 2014).

Learning Quality: Learning quality refers to deep understanding, concentration, classroom participation, and effective learning ability. From a qualitative perspective, academic performance includes multiple sub-components such as academic achievement, self-efficacy, achievement motivation, motivation for studying, and overcoming anxiety (Pham & Taylor, 1999). Learning approaches (deep, surface, strategic) have a significant effect on learning quality and academic success; motivating students to improve their learning approach leads to improved learning quality (Harputlu, 2011).

Academic Engagement: Academic engagement refers to the degree of cognitive, behavioral, and emotional involvement of students in the learning process. This concept is recognized as one of the key indicators of learning quality in higher education research (Carrick, 2010; Clinton, 2014).

Work–Study Balance: Work–study balance refers to students' ability to create equilibrium between work and academic responsibilities. This concept is rooted in Role

Conflict Theory (Goode, 1960; Greenhaus & Beutell, 1985), which states that when individuals face incompatible demands from different social roles (here, student and employee), psychological tension arises. Effective time management is recognized as a key factor in establishing this balance (Macan et al., 1990; Jena & Panda, 2022).

Psychosocial Outcomes: The psychosocial outcomes of part-time employment include effects on physical health (fatigue, sleep deprivation), mental health (stress, anxiety), social relationships (with friends and peers), financial independence, responsibility, and self-efficacy (Curtis, 2007; Dundes & Marx, 2006; Jeeva & Jacob, 2025).

2.1.2. Conceptual Relationships

The conceptual framework of this study is based on the integration of five theories and models, each explaining part of the mechanism linking part-time employment to academic outcomes.

Biggs's 3P Model: Biggs's 3P model constitutes the main framework of this study, conceptualizing learning as a system comprising three components: Presage, Process, and Product. Presage includes learner-related factors (prior knowledge, ability, preferred learning approach) and teaching context factors (learning environment, teaching method, assessment). Process refers to learner activities and current learning approaches emerging from the interaction between learner characteristics and the educational situation. Product refers to what the learner demonstrates at the end of the academic period, which can be evaluated at both quantitative and qualitative levels. In the present study, part-time employment is considered a presage factor (within learner-related factors) that affects learning outcomes (quantitative and qualitative academic performance) through learning processes (learning quality and academic engagement).

Tinto's Student Integration Model: Tinto's model posits that student success and persistence are products of academic and social integration within the institution. Accordingly, support from peers and faculty members enhances motivation and academic success. In this study, this model explains how working students maintain their academic engagement through institutional belonging and self-regulation while simultaneously fulfilling academic and occupational roles (Jeeva & Jacob, 2025).

Role Conflict and Role Strain Theory: This theory explains the psychological tension arising from incompatible demands of multiple social roles. Goode (1960), introducing the concept of role strain, showed that multiple role obligations can lead to fatigue and performance decline. Greenhaus and Beutell (1985) also identified time-based and strain-based conflicts. In the student context, this framework explains that part-time employment can simultaneously challenge and develop an individual's capacity for balance and resilience (Jeeva & Jacob, 2025).

Self-Efficacy and Resilience Theory: Bandura's self-efficacy theory explains that individuals' beliefs in their competence affect their behavior and outcomes. In working students, self-efficacy shapes how they cope with workload and stress. Fong et al. (2021) showed that working students with higher self-efficacy demonstrate stronger academic persistence and problem-solving ability; that is, self-confidence moderates the negative effects of employment (Jeeva & Jacob, 2025).

Time Management and Academic Achievement Model: This model considers effective organization of study and work schedules as a direct factor in academic success and conceptualizes time management as goal-setting, prioritization, and self-monitoring. Jena and

Panda (2022) showed that students with structured schedules maintain better academic consistency even while working (Jeeva & Jacob, 2025).

2.1.3. Justification for the Selection of the Theoretical Framework

The selection of this integrated framework is based on five reasons. First, comprehensiveness: Biggs's 3P model, as the main framework, allows for examining the relationship between part-time employment (presage), learning quality and academic engagement (process), and quantitative and qualitative academic performance (product). Second, explanation of mechanisms: Role Conflict and Role Strain Theory explains how part-time employment negatively affects academic performance through reduced study time, fatigue, and stress. Third, explanation of moderators: Self-Efficacy Theory and the Time Management Model show what factors (high self-efficacy, effective time management) moderate the relationship between part-time employment and academic performance. Fourth, explanation of positive outcomes: Tinto's Student Integration Model explains how part-time employment positively affects academic engagement and persistence through increased institutional belonging and social integration. Fifth, empirical support: These frameworks have been empirically tested in previous research and possess the necessary validity and reliability (Tinto, 2017; Fong et al., 2021; Jena & Panda, 2022; Jeeva & Jacob, 2025).

Figure 1 presents the conceptual model of the study. The main arrows (from left to right) represent the main path of Biggs's 3P model. Part-time employment as a presage factor affects academic outcomes (quantitative and qualitative performance) and psychosocial outcomes through learning processes (learning quality, academic engagement, and time management). Dashed arrows from moderating variables indicate that self-efficacy, resilience, and institutional support moderate the relationship between presage and process. Dashed arrows from supporting theories indicate that each theory explains and supports a part of the model.

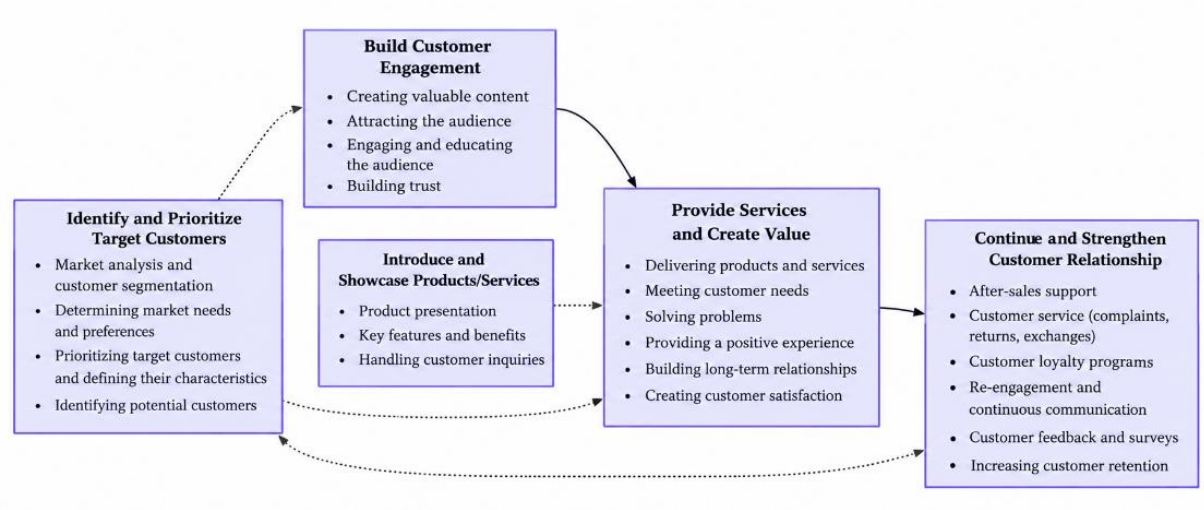


Figure 1. Conceptual Model of the Study

2.2. Research Methodology

2.2.1. Research Design

This study is quantitative in nature, applied in purpose, and descriptive-correlational in data collection method. The descriptive-correlational method is suitable for examining relationships between variables without manipulating them and allows the researcher to

determine the magnitude and direction of the relationship between part-time employment (independent variable) and academic performance and learning quality (dependent variables). The nature of variables—part-time employment and academic performance—are variables that cannot be manipulated ethically or practically. Therefore, a correlational design is the most appropriate option. The main objective of this study is to examine relationships between variables, not to determine causality. A correlational design is suitable for this purpose. Most previous studies in this area have used a descriptive-correlational design (Tessema et al., 2014; Muluk, 2017; Ghasemi & Taher, 2025; Jeeva & Jacob, 2025). A quantitative design with a large sample increases the generalizability of results.

2.2.2. Population and Sampling Frame

The population of this study includes all undergraduate students at universities in Balkh Province during the academic year 2024–2025. According to official statistics from Balkh universities, the total number of undergraduate students is estimated at approximately 12,000. The sampling frame comprised enrolled undergraduate students across three faculty strata: humanities, technical and engineering, and natural sciences. Stratified random sampling proportional to size was used. The population was divided into three strata, and samples were randomly selected from each stratum.

According to the Krejcie and Morgan (1970) table, for a population of 12,000, the sample size was determined to be 372. Considering the possibility of non-return of questionnaires, ultimately 384 questionnaires were completed and entered into the analysis.

Eligibility Criteria: Participants were eligible if they were (a) currently enrolled undergraduate students at a university in Balkh Province during the 2024–2025 academic year, and (b) currently engaged in part-time employment during the semester. Given the study's focus on the relationship between part-time employment and academic outcomes, only employed students were included in the final analytical sample. This explains why all 384 respondents reported having part-time jobs (see Table 2). The sampling frame for the analytical sample thus consisted of employed undergraduate students, not all undergraduates. This approach is consistent with the study's objective to examine relationships among working students and aligns with previous research designs (e.g., Muluk, 2017; Tessema et al., 2014).

Note on Gender Composition: All 384 respondents were male (100%). This reflects the specific context of higher education in Balkh Province during the study period, where male students constituted the overwhelming majority of enrolled undergraduates, particularly among those engaged in part-time employment. This gender homogeneity limits the generalizability of findings to female undergraduate students and to contexts with more balanced gender distributions. This limitation is acknowledged and discussed further in the Discussion section.

2.2.3. Data Collection Instrument

The data collection instrument was a researcher-made questionnaire designed in five sections:

- Section One: Personal information (age, gender, academic year, field of study, residence);
- Section Two: Part-time employment status (7 questions);
- Section Three: Learning quality and academic engagement (16 questions with a 5-point Likert scale);

- Section Four: Academic performance (4 questions with objective indicators);
- Section Five: Psychosocial outcomes (10 questions with a 5-point Likert scale).

Validity: The content validity of the questionnaire was confirmed by five experts in educational sciences and psychology.

Reliability: Cronbach's alpha coefficient for the entire questionnaire was calculated at 0.89, indicating acceptable reliability. Reliability coefficients for each section were as follows:

- Learning quality section: 0.84
- Academic performance section: 0.79
- Psychosocial outcomes section: 0.82

Operational Definition and Coding of Part-Time Employment: In this study, part-time employment was operationally defined as working fewer than 20 hours per week during the semester (Muluk, 2017). However, the questionnaire captured the full range of weekly work hours, including categories exceeding 20 hours (21–25 hours and more than 25 hours), to enable sensitivity analyses and to examine dose-response relationships. For correlation analyses, part-time employment was coded as a continuous variable representing weekly work hours. This coding approach allows for examination of the linear relationship between work hours and academic outcomes. A sensitivity analysis was conducted to verify that results remained consistent when the sample was restricted to students working fewer than 20 hours per week (the standard definition) versus the full sample. Results were substantively similar, supporting the robustness of findings.

2.2.4. Data Analysis Method

The collected data were analyzed using SPSS version 26. At the descriptive level, frequency, percentage, mean, and standard deviation were used. At the inferential level, Pearson correlation coefficient was used to examine relationships between variables, and multiple regression analysis was used to predict the dependent variable. The significance level was set at 0.05 in all tests.

3. Results and Discussion

3.1. Descriptive Statistics

Table 1. Personal Information of Respondents (N = 384)

Variable	Category	Frequency	Percentage
Gender	Male	384	100%
Age	18–20	128	33.3%
	21–23	168	43.8%
	Over 23	88	22.9%
Academic Year	First	96	25.0%
	Second	114	29.7%
	Third	98	25.5%
	Fourth	76	19.8%
Field of Study	Humanities	154	40.1%
	Technical & Engineering	188	49.0%
	Natural Sciences	42	10.9%
Residence	On-campus	56	14.6%
	Off-campus	328	85.4%

As shown in **Table 1**, all respondents were male. The highest age frequency was in the 21–23 age group (43.8%), and the lowest was in the over-23 group (22.9%). Regarding academic year, the highest frequency was in the second year (29.7%), and the lowest was in the fourth year (19.8%). Regarding field of study, the highest frequency was in technical and engineering (49.0%), and the lowest was in natural sciences (10.9%). Also, 85.4% of respondents resided off-campus.

3.1.1. Part-Time Employment Status

Table 2. Part-Time Employment Status (N = 384)

Variable	Category	Frequency	Percentage
Having Part-Time Job	Yes	384	100%
	No	0	0%
Weekly Work Hours	Less than 10	46	12.0%
	10–15	98	25.5%
	16–20	132	34.4%
	21–25	78	20.3%
	More than 25	30	7.8%
Job Type	Completely Unrelated	176	45.8%
	Somewhat Related	142	37.0%
	Completely Related	66	17.2%
Work Schedule	Weekdays	148	38.5%
	Weekends	92	24.0%
	Combination	144	37.5%
Flexibility	Very Inflexible	54	14.1%
	Somewhat Inflexible	98	25.5%
	Somewhat Flexible	156	40.6%
	Completely Flexible	76	19.8%
Employment History	Less than 6 months	68	17.7%
	6 months to 1 year	124	32.3%
	1–2 years	132	34.4%
	More than 2 years	60	15.6%

As shown in **Table 2**, all respondents had part-time jobs. The highest frequency of weekly work hours was 16–20 hours (34.4%), and the lowest was more than 25 hours (7.8%). Regarding job type, 45.8% had jobs completely unrelated to their field of study. Regarding work schedule, the highest frequency was on weekdays (38.5%). Regarding flexibility, 40.6% described their work schedule as somewhat flexible. Regarding employment history, the highest frequency was 1–2 years (34.4%).

Note on Operational Definition: While the study defines part-time employment as fewer than 20 hours per week, the sample includes students working 21–25 hours (20.3%) and more than 25 hours (7.8%). These students were retained in the analysis to examine the full continuum of work intensity and to enable sensitivity analyses. As noted in the Methods section, results were substantively similar when restricted to students working fewer than 20 hours per week.

3.1.2. Motivation for Part-Time Employment

Table 3. Motivation for Part-Time Employment (N = 384)

Motivation	Frequency	Percentage
Covering education and living expenses	298	77.6%
Contributing to family expenses	246	64.1%
Gaining work experience	312	81.3%
Financial independence	274	71.4%
Filling leisure time	88	22.9%
Other	32	8.3%

The most important motivation for part-time employment was gaining work experience (81.3%), followed by covering education and living expenses (77.6%) and financial independence (71.4%). This finding indicates that students seek not only financial needs but also experience and job skills.

3.2. Inferential Statistics

3.2.1. Normality of Data Distribution

Before conducting parametric tests, the normality of data distribution was examined using the Kolmogorov-Smirnov test. The results showed that the distribution of all variables was normal ($p > 0.05$).

3.2.2. Correlation Matrix of Variables

Table 4. Pearson Correlation Matrix among Variables (N = 384)

Variable	1	2	3	4	5
1. Part-Time Employment	1				
2. Learning Quality	-0.42	1			
3. Academic Engagement	-0.38	0.56	1		
4. Quantitative Academic Performance	-0.35	0.48	0.52	1	
5. Psychosocial Outcomes	0.46	-0.31	-0.28	-0.24	1

Analysis: The correlation matrix results show a negative and significant relationship between part-time employment and learning quality ($r = -0.42$), academic engagement ($r = -0.38$), and quantitative academic performance ($r = -0.35$). Also, a positive and significant relationship was observed between part-time employment and psychosocial outcomes ($r = 0.46$).

3.2.3. Multiple Regression Analysis

To examine the effect of part-time employment on academic performance and learning quality, multiple regression analysis was used. The general equation is defined as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

- Y = Dependent variable (academic performance)
- β_0 = Intercept (constant)
- β_1 to β_4 = Regression coefficients
- X_1 = Weekly work hours
- X_2 = Job type (related/unrelated)
- X_3 = Employment motivation
- X_4 = Time management (moderating variable)
- ε = Error term

Table 5. Regression Coefficients

Predictor Variable	B	Std. Error	β	t	Sig.
Constant	85.29	4.02	-	21.19	0.000
Weekly Work Hours	-0.45	0.12	-0.28	-3.75	0.000
Job Type	-0.32	0.10	-0.21	-3.20	0.001
Employment Motivation	-0.18	0.08	-0.12	-2.25	0.025
Time Management	0.38	0.09	0.29	4.22	0.000

Based on the regression coefficients table, the model predicting academic performance based on weekly work hours, job type, employment motivation, and time management is significant at $p < 0.001$ and explains 27% of the variance in academic performance ($R^2 = 0.27$). This finding indicates that part-time employment, while providing opportunities for gaining experience and financial independence, reduces students' ability to attend to their studies through reduced study time, fatigue, and stress.

Among the predictor variables, time management ($\beta = 0.29$) was the strongest positive predictor, and weekly work hours ($\beta = -0.28$) was the strongest negative predictor of academic performance. Job type ($\beta = -0.21$) and employment motivation ($\beta = -0.12$) also had significant negative effects on academic performance, respectively. These results mean that the more weekly work hours, the more unrelated the job to the field of study, and the more financial the motivation, the greater the decline in academic performance; while time management skills can moderate these negative effects.

Table 6. Hypothesis Testing Results

Hypothesis	Relationship	β	p	Result
H1	Part-time employment → Academic performance	-0.28	0.000	Confirmed (negative significant)
H2	Part-time employment → Learning quality	-0.21	0.001	Confirmed (negative significant)
H3	Part-time employment → Psychosocial outcomes	0.12	0.025	Confirmed (positive significant)
H4	Time management → Academic performance (moderator)	0.29	0.000	Confirmed (positive significant)
H5	Job type → Learning quality (moderator)	-0.21	0.001	Confirmed (negative significant)

All five research hypotheses were confirmed. Part-time employment has a significant negative relationship with academic performance and learning quality, has a positive effect on psychosocial outcomes (increased stress and fatigue), and time management and job type as moderating variables change the strength of this relationship. Therefore, the overall conclusion of the study is that part-time employment provides students with opportunities for gaining experience and financial independence, but due to reduced study time, fatigue, and lack of concentration, it reduces their ability to properly attend to their studies.

3.3. Discussion

The findings of this study indicate that part-time employment has a negative and significant association with academic performance and learning quality among undergraduate students in Balkh Province. These findings are consistent with the results of Stern (1997), Muluk (2017), Tessema et al. (2014), Ghasemi and Taher (2025), and Jeeva and Jacob (2025).

As shown in Table 3, 81.3% of students cited gaining work experience as the most important motivation for their part-time employment. However, 69.3% stated they did not have enough time to study, and 65.1% could not properly perform their classroom activities. These descriptive findings align with the correlation results presented in Table 4, which show negative associations between part-time employment and learning quality ($r = -0.42$), academic engagement ($r = -0.38$), and quantitative academic performance ($r = -0.35$). Additionally, Table 5 shows that weekly work hours ($\beta = -0.28$), job type ($\beta = -0.21$), and employment motivation ($\beta = -0.12$) were significant negative predictors, while time management ($\beta = 0.29$) was the strongest positive predictor of academic performance, collectively explaining 27% of the variance ($R^2 = 0.27$).

These findings suggest that part-time employment, while providing opportunities for gaining experience and financial independence, is associated with reduced study time, fatigue, and stress, which may contribute to diminished ability to attend to studies and lower learning quality and academic performance. The moderating role of time management is supported by the regression results, indicating that students with better time management skills tend to maintain higher academic performance despite working.

Note on Gender Limitation: All 384 respondents were male (100%), as shown in Table 1. This reflects the specific context of higher education in Balkh Province during the study period. This gender homogeneity limits the generalizability of findings to female undergraduate students and to contexts with more balanced gender distributions. Caution should be exercised in applying these findings to broader undergraduate populations.

Note on the Absence of a Comparison Group: Because the analytical sample consisted exclusively of employed students (see Table 2), the present study cannot directly compare employed and non-employed students. The reported associations reflect variations within the employed student population (e.g., across weekly work hours, job type, and motivation levels), not differences between employed and non-employed students. Future research with a comparison group is needed to examine between-group differences.

Note on Causal Inference: Given the cross-sectional, correlational design of this study, the findings should be interpreted as associations rather than causal relationships. The terms "effect," "impact," and "influence" used in reporting the hypotheses refer to statistical associations, not causal effects. Longitudinal or experimental designs would be required to establish causality.

Conclusions

This study examined the relationship between part-time employment, academic performance, and learning quality among undergraduate students in Balkh Province. The findings indicate that part-time employment is associated with both opportunities (work experience, financial independence) and challenges (reduced study time, fatigue, stress) for working students. Negative associations were observed between part-time employment and learning quality, academic engagement, and quantitative academic performance. A positive association was observed between part-time employment and psychosocial outcomes, including stress and fatigue. Time management appears to play a moderating role in mitigating negative associations with academic performance.

These findings have implications for SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth), highlighting the need for institutional support systems that promote decent work opportunities while safeguarding educational quality. Universities and policymakers may consider designing support programs such as scholarships, flexible curricula, on-campus job opportunities, career counseling, and time management workshops to help working students achieve a better balance between work and study.

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