

Exploring the Impact of Part-Time Employment on Academic Performance among University Students: Evidence from Rajshahi City of Bangladesh

Md Shamsul Alam¹, Md Asduzzaman Kiron^{1*}, Rakibul Islam², Md Sabbir Hossain³

¹Lecturer, Department of Economics, Varendra University, Bangladesh

²Assistant Professor, Department of Economics, Varendra University, Bangladesh

³Student, Department of Economics, Varendra University, Bangladesh

*Corresponding Author's Email Address: kiron@vu.edu.bd (Md Asduzzaman Kiron)

Abstract

Part-time employment is increasingly common among university students, often viewed as a means to achieve financial independence and enhance professional development. While it provides opportunities to manage educational expenses and gain real-world experience, it may also pose challenges such as time management issues and declining academic performance. This study investigates the characteristics of part-time employment and its impact on the academic performance of university students in Rajshahi City, Bangladesh. Data were collected from 100 respondents aged 21 to 25 years, with family incomes ranging from Tk. 5,000 to Tk. 50,000. A pilot study was conducted to ensure the reliability and validity of the research variables. Using a multiple regression model, the study finds that factors such as age, gender, co-curricular activities, and family income significantly influence students' engagement in part-time work. Study time was found to have a positive impact on academic performance, whereas part-time work had a direct negative effect. The findings also highlight that students from public universities face greater academic pressure alongside increased job opportunities, which may further hinder academic achievement. The study recommends policy measures such as enhanced scholarship programs, better academic support, and reduced educational costs to mitigate the adverse effects of part-time employment on academic outcomes.

Keywords: Part-time employment, academic performance, university students, multiple regression, Rajshahi City, Bangladesh.

1. Introduction

Over the past two decades, the trend of part-time employment among university students has shown a significant rise worldwide. While the motivations behind student employment differ across contexts, they typically include economic necessity, the pursuit of self-reliance, and the desire to gain practical experience [1]. In developed countries such as the United States, the United Kingdom, and Australia, part-time work among students is a common phenomenon, often undertaken not out of monetary crisis but as a means of gaining experience. For instance, in Australian universities, the proportion of full-time students engaged in part-time employment rose by 9% between 1994 and 1999, with the percentage of students working between 11 and 20 hours per week increasing from 32% to 42% [2].

Conversely, in developing countries, the motivations for student employment are largely financial [3]. Students often take up part-time jobs to manage rising educational expenses and contribute to family income. In Bangladesh, particularly in university towns such as Rajshahi, this trend has become increasingly prevalent. Students from middle-income families often find themselves compelled to work to meet the costs associated with higher education. However, similar to other developing countries, the reasons behind student employment in Bangladesh are not solely financial. Many students seek part-time work to gain professional experience, achieve a sense of independence, and prepare for future careers. While part-time employment offers several benefits, such as the development of time management skills and increased employability

through on-the-job training, it can also pose significant challenges. Balancing academic responsibilities with employment can lead to decreased academic performance, delayed graduation, increased stress levels, and reduced engagement in extracurricular activities. Numerous studies have examined the effects of part-time work on students' academic outcomes, with mixed findings. Stern (1997) reported that students working more than 15 hours per week tend to have lower grades, spend less time on homework, and are more likely to drop out of school [4].

A study by Cheng (1995) in Toronto found that students working over 20 hours per week had a 16% dropout rate, which increased to 33% for those working more than 20 hours. Similarly [5], Singh (1998) concluded that, regardless of socio-economic status or prior academic achievement, the number of hours worked negatively affects educational performance [6]. Younger students, in particular, are more susceptible to adverse outcomes [7], while many report difficulties in balancing academic and work commitments [8]. Furr and Elling (2000) found that 29% of students worked 30–39 hours per week, and 39% worked full-time, with both groups experiencing academic setbacks [9]. Dundes and Marx (2006) noted that while 74% of student-workers believed employment improved their efficiency, 64% reported increased stress levels [10]. Studies in developed countries have documented both the positive and negative outcomes of student employment. Kalenkoski and Pabilonia (2012) noted the increasing participation of students in part-time work in the United States, United Kingdom, and Australia [11]. Ehrenberg and Sherman (1987), using data from 1980 to 1984, found that one in every twelve students worked full-time, while 25% worked less than 20 hours per week [12]. Stinebrickner (2003) observed that many employed students worked an average of 30 hours per week, with some considering themselves more as employees than students [13]. Beffy et al. (2010), studying a sample of 1,010 young individuals, found that 92.8% engaged in paid part-time work [14].

2. Objectives

In recent years, the landscape of part-time employment opportunities for students in

time work [14]. The impact of part-time employment on academic performance remains debated. While some researchers argue that working enhances skills such as time management and responsibility [15], others highlight its potential to interfere with academic progress [16], [11], [17].

McInnis (2000) emphasized that work-related learning can support personal development and help bridges the gap between academic learning and the labor market [2]. Similarly, Volkwein et al. (1989) identified positive effects on cognitive development [18], while Pascarella et al. (1994) reported mixed findings, suggesting that cumulative grade point average (CGPA) can serve as a reliable indicator of academic performance [19]. Some studies indicate that the number of hours worked plays a critical role in determining academic outcomes. Astin (1999) and Manthei and Gilmore (2005) found that working fewer than 20 hours per week could positively affect the cumulative grade point average (CGPA) while working between 20 and 35 hours showed no effect on grades but lowered graduation rates [20], [21]. Ehrenberg and Sherman (1987) similarly reported that students working 23 hours per week were less likely to graduate, despite CGPA remaining unaffected [12].

Despite the growing body of research in developed countries, empirical studies on this issue in Bangladesh remain limited. Given the increasing trend of part-time employment among university students in regions such as Rajshahi, there is a pressing need to explore the relationship between part-time work and academic performance in the local context. Many students in Bangladesh are navigating rising educational costs, balancing familial responsibilities, and striving for personal and professional development—all while maintaining their academic standing. This study aims to investigate the impact of part-time employment on academic performance among university students in Bangladesh and to identify how students can effectively manage both responsibilities without compromising their academic success.

Bangladesh has evolved significantly. With the rapid urbanization and growth of service sectors,

students in major cities such as Dhaka, Chattogram, Sylhet, Rajshahi, and Mymensingh are increasingly able to access various forms of part-time work. Among these urban centers, Rajshahi presents a unique context. While the number of part-time job opportunities in Rajshahi is not as extensive as in larger metropolitan areas, university students are nonetheless engaging in various employment activities, often in the face of social and familial constraints. In particular, female students in Rajshahi face additional barriers, including lack of family permission and social expectations. Despite this, many continue to pursue part-time work in roles such as tuition, retail assistance in super-shops, and small-scale food production from home. Male students, on the other hand, are more frequently involved in activities such as online product delivery, shopkeeping, private tutoring, freelancing, and security services.

3. Methods

With the objectives of this study in mind, this section outlines the methodological approach employed to investigate the influence of part-time employment on the academic performance of university students in Rajshahi, Bangladesh. As educational expenses in the country have steadily increased in recent years, many undergraduate students—particularly those from middle-income families—are compelled to seek part-time work to finance their studies. Despite the rising prevalence of this trend, there is a notable gap in empirical research exploring its implications within the Bangladeshi context. Hence, a detailed investigation is warranted.

3.1 Conceptualization

To develop the conceptual framework for this study, the researcher consulted resource persons and reviewed a wide range of academic sources, including journal articles, working papers, seminar papers, and unpublished theses. In addition, statistical information was obtained from the Bangladesh Bureau of Statistics (BBS) to provide a contextual economic background. The primary aim was to explore the motivations behind students' involvement in part-time jobs and examine the extent to which such employment affects their academic success. Consequently, data collection

Given this emerging trend, it is essential to understand how part-time employment affects students' academic performance within this localized context. While part-time work may provide students with financial relief and practical skills, it may also impose challenges in balancing academic responsibilities. This study, therefore, aims to investigate the dynamics of student employment and its potential academic implications.

The specific objectives of this study are:

1. To identify the key factors influencing the participation of university students in part-time employment.
2. To examine the impact of part-time job engagement on the academic performance of university students.

was designed to reflect both the economic and educational dimensions of the issue.

3.2 Nature of the Study

This research adopts a descriptive design, which is appropriate for understanding the characteristics, trends, and patterns of student employment and its impact on academic performance. Descriptive research is particularly useful in identifying relationships between variables within a defined population, allowing for a broader understanding of observed phenomena [14].

3.3 Data Collection Method

Data collection involved gathering primary data through a structured survey questionnaire administered to university students. The process was systematic, with responses recorded and compiled for analysis. Primary data methods are recognized for capturing first-hand, situation-specific insights [22]. A total of 100 respondents were targeted for this study to ensure diversity and representation across different academic institutions.

3.4 Study Area and Sampling

The study was conducted in Rajshahi city, focusing on students enrolled in institutions such as University of Rajshahi, Rajshahi University of

Engineering and Technology (RUET), and affiliated colleges under the National University (e.g., Rajshahi College and Rajshahi Government City College). A stratified random sampling technique was employed to ensure inclusion of students from different disciplines and academic levels. Due to the potential sensitivity of the data, confidentiality and anonymity of respondents were strictly maintained.

3.5 Analytical Framework

Both descriptive and empirical methods were used to analyze the data. Statistical tools such as t-tests, correlation analysis, and regression models were applied to evaluate the relationships between part-time work and academic outcomes. The analysis was structured to first assess the motivational factors behind part-time job participation, followed by the impact of such employment on students' academic performance.

3.6 Empirical Models

Model 1: Motivation for Part-Time Work

To examine the determinants of students' motivation to engage in part-time employment, the following regression model was estimated:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon \quad (1)$$

Where:

- Y = Motivation for part-time work
- X_1 = Age
- X_2 = Gender
- X_3 = Number of earning members in the family
- X_4 = Number of siblings
- X_5 = Reason for part-time work
- X_6 = Academic performance

4. Results

The general information of the questionnaire survey respondents is included in this chapter. This research has 100 respondents as a respondent. Stratified random sampling procedures were

- β_0 = Intercept term
- β_1 to β_6 = Coefficients
- ϵ = Error term

This model captures the influence of demographic and socioeconomic factors on the decision to engage in part-time work. It assumes that motivation is shaped by both personal and contextual variables.

Model 2: Impact on Academic Performance

To estimate the effect of part-time employment on students' academic performance, a second regression model was used:

$$Y_i = \beta_0 + \beta_1 W_1 + \beta_2 W_2 + \beta_3 W_3 + \beta_4 W_4 + \beta_5 W_5 + \epsilon \quad (2)$$

Where:

- Y_i = Academic performance (measured by CGPA on a 4.00 scale)
- W_1 = Key independent variables (e.g., working hours)
- W_2 = Individual characteristics (e.g., age, gender)
- W_3 = Family background (e.g., parental education, income)
- W_4 = University engagement (e.g., class attendance, extracurriculars)
- W_5 = Health-related issues
- β_0 = Intercept term
- β_1 to β_5 = Coefficients
- ϵ = Error term

This model seeks to quantify how variables related to employment and personal background influence students' academic performance. By estimating the coefficients, the study determines the magnitude and direction of these effects.

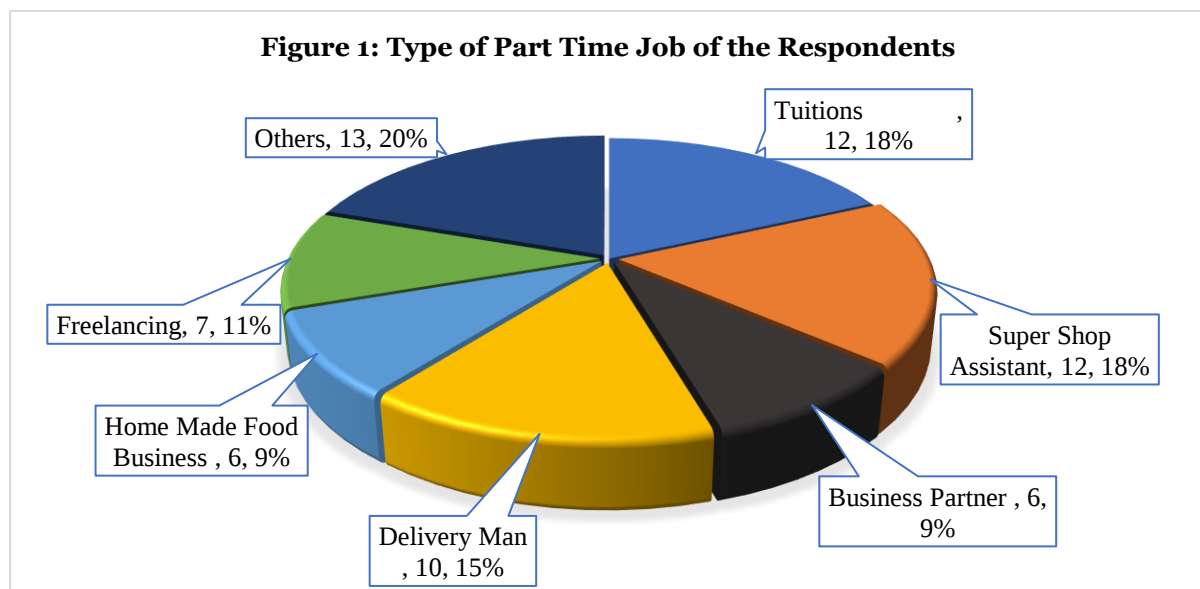
followed to select the respondents from different disciplines of Rajshahi University, RUET, National Universities (e.g.- Rajshahi college, Rajshahi degree college). Additionally, collected information may include some personal information, and therefore,

researchers intended to limit its collection to minimally necessary basic information.

4.1 Type of Part-Time Job

In contrast to developed countries, students in Bangladesh have very limited access to part-time job opportunities. The scope for student employment is quite narrow, offering few avenues for gaining practical experience or financial independence alongside academic pursuits. Based on the information collected from respondents, it is evident that some part-time jobs are more common and popular among students, particularly in urban areas like Rajshahi.

Many students in Rajshahi are involved in various types of part-time work such as private tutoring, assisting in super-shops, participating in small business ventures as partners, working as delivery personnel, and engaging in homemade food businesses. Some students also take up freelancing or other informal and local forms of employment. Specifically, 18.00 percent of students work as super shop assistants, another 18.00 percent are engaged in tutoring, 9.00 percent are involved in homemade food businesses, 15.00 percent work as delivery personnel, 9.00 percent act as business partners, 11.00 percent engage in freelancing, and about 20.00 percent are involved in other types of local part-time jobs.

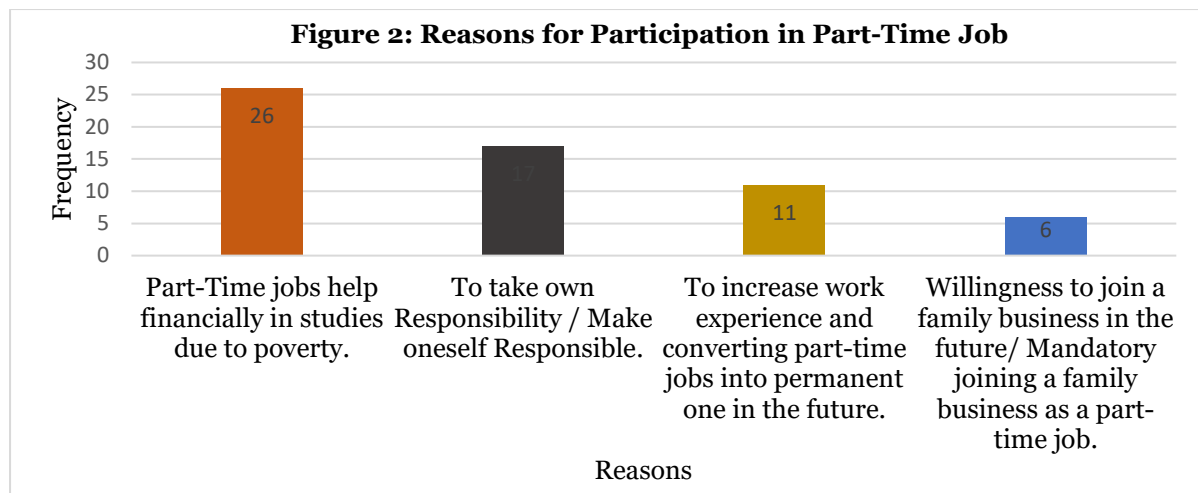


Source: Field Survey, 2025

4.2 Reasons for Participation in Part-Time Employment

Figure 2 highlights the various reasons why students engage in part-time jobs. The most frequently cited reason is financial necessity, with 26 students indicating that part-time jobs help them support their education due to poverty. This suggests that economic hardship is a primary driver for student employment. The second most common reason, reported by 17 students, is the desire to take personal responsibility and become more self-

reliant. This reflects a growing awareness among students about the importance of independence and accountability. Additionally, 11 students mentioned that they engage in part-time work to gain work experience and potentially convert these roles into permanent positions in the future, showing a strategic approach to career development. Lastly, 6 students expressed that their participation in part-time jobs stems from a willingness—or necessity—to join a family business, either as a way to contribute or to fulfill familial expectations.



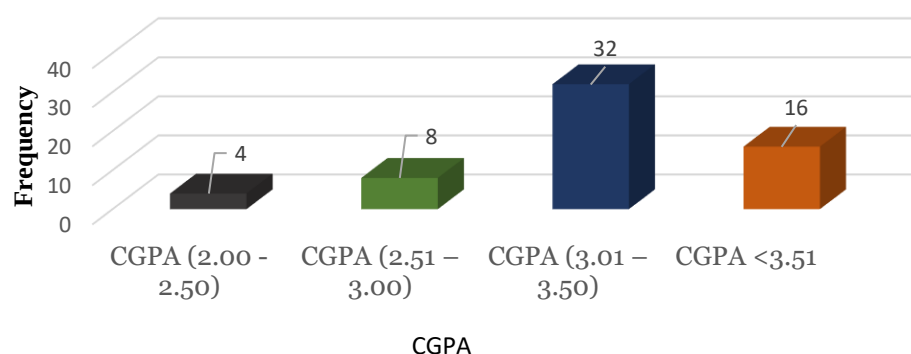
Source: Field Survey, 2025

Distribution of Respondents by their Academic Performance Due to Part-Time Job

According to the data collected from the respondents, part-time employment has a slightly negative impact on students' academic performance, although the effect appears to be relatively low. Most of the students reported maintaining a satisfactory academic standing despite working part-time. Specifically, 53.33 percent of the respondents have a CGPA ranging

between 3.31 and 3.50, indicating that over half are performing fairly well. Furthermore, 26.66 percent of the students have achieved a CGPA above 3.50, demonstrating strong academic performance. On the other hand, 13.33 percent of respondents fall within the CGPA range of 3.00 to 3.30, while 6.66 percent of students reported CGPAs in the lower ranges of 2.00–2.50 and 2.50–3.00. These findings suggest that while part-time jobs may pose some challenges, the majority of students are enabled to balance their academic responsibilities effectively.

Figure 3: Distribution of the Respondents According to Their Academic Performance Due to Part Time Jobs



Source: Field Survey, 2025

4.3 Impact of Part-time Work on Academic Performance

An attempt was made to examine how students' overall grade points are influenced by part-time employment using a regression model. This model was developed to evaluate the relationship from multiple dimensions, incorporating various types of independent variables—continuous, dummy, and

categorical—while using the previous year's CGPA as the continuous dependent variable. The analysis revealed mixed effects, as different predictors influenced the academic outcome in varying ways. Notably, the model showed that students engaged in part-time work had, on average, CGPAs that were 0.48 units lower than those who did not participate in such employment. This difference was

statistically significant at the 5 percent level, indicating a meaningful negative association between part-time work and academic performance. Another important finding was that study time had a strong positive effect on academic achievement. Specifically, the model estimated that doubling the amount of study time led to an increase of 18.628 units in CGPA, a result statistically significant at the 1 percent level. This suggests that greater dedication to academic preparation significantly enhances student performance. In contrast, the number of working hours showed a negative relationship with CGPA. According to the model, each additional hour of work per day was associated with a 0.027 unit decrease in CGPA, a result statistically significant at the 10 percent level. This can be explained by the fact that students who are overburdened with work may struggle to allocate sufficient time and energy to their studies.

The model also included a dummy variable for morbidity to assess the impact of illness on academic performance. Results indicated that students who experienced illness during the academic term had CGPAs that were 0.10 units lower than their healthier peers, a difference statistically significant at the 5 percent level. This finding underscores the importance of health in maintaining consistent academic attendance and performance. Additionally, co-curricular activity participation was found to have a slight negative impact on CGPA. Students involved in such activities had CGPAs that were 0.21 units lower than those who did not participate, a result significant at the 1 percent level. Although co-curricular activities may offer personal and developmental benefits, they can also reduce the time available for academic study, thereby influencing academic outcomes.

Table 1: Regression Analysis for Part-Time Work Impact on CGPA

Variables	Coefficient	P-value
Job Status (Dummy, 1=Yes, 0=No)	-0.480**	0.041
Study Hour (in Hour)	0.056***	0.001
Work Hour (in Hour)	-0.027*	0.102
Siblings (in Number)	-0.037	0.243
Sickness (Dummy, 1=Yes, 0=No)	-0.100**	0.032
Co-curricular Activities (Dummy, 1=Yes, 0=No)	-0.210***	0.002
Gender (Dummy, 1=Male, 0=Female)	-0.048	0.267
Age (in Number)	-0.021	0.365
Family Income (in BDT)	-1.007	0.786
Constant	2.175*	0.072
R-squared	0.643	
N	100	

Note: ***p<0.01, **p<0.05, p<0.1

The study identified several demographic and socioeconomic factors—such as age, household income, gender, and current residence—as potentially influential in determining students' engagement in part-time work. However, regression analysis revealed that none of these

variables had a statistically significant impact on students' academic performance, as measured by CGPA. Although these factors may shape students' decisions to work part-time, the data suggests that they do not significantly affect grade outcomes.

To assess the broader hypothesis regarding the impact of part-time employment on academic success, a regression model was developed. While not all proposed variables within the hypothesis were tested for their effect on students' academic performance, this chapter focused on examining the primary determinants of student participation in part-time jobs and their resulting academic implications. The model utilized a dummy variable to represent employment status and included additional factors such as age, gender, household income, scholarship availability, and participation in co-curricular activities. Despite some of these variables being theoretically relevant, the analysis confirmed that residence, for example, did not significantly influence students' participation in part-time work or affect academic performance. The core finding from the regression model was that students engaged in part-time employment had, on average, CGPAs that were 0.48 units lower than those who did not work, and this result was statistically significant.

5. Discussion

This study set out to explore the impact of part-time employment on the academic performance of students, with a particular focus on those enrolled in public universities in Rajshahi. The findings present a nuanced picture and, in some respects, diverge from the outcomes of previous quantitative studies conducted in similar contexts. Not all predictors included in the analysis were found to significantly influence students' academic outcomes. However, several critical variables—such as employment status, study hours, working hours, access to scholarships, and involvement in co-curricular activities—were identified as statistically significant factors affecting students' CGPA.

The results of the regression model showed that students who engage in part-time work experience a slight but statistically significant decline in academic performance, averaging a 0.48-unit

reduction in CGPA compared to their non-working peers. Nevertheless, the study also reveals that if students manage their study time effectively, the negative effects of part-time employment can be mitigated. This suggests that with proper balance and time management, part-time work does not necessarily hinder academic success and may, in some cases, contribute positively by fostering responsibility and discipline. Based on these insights, several recommendations are proposed. Firstly, while minimal involvement in part-time work may not drastically affect academic performance, universities should still provide guidance and resources to help students manage their time effectively. This could include academic counseling, workshops, or scheduling support. Secondly, it is essential to focus on delivering course content in a clear and accessible manner. By helping students better understand the material, instructors can reduce the need for repeated study sessions, thereby saving valuable time for students who also work. Thirdly, efforts should be made to build self-confidence among students, as this can play a crucial role in academic achievement. Confidence can empower students to perform better, even when balancing multiple responsibilities. Additionally, increasing the availability of scholarships and financial aid can reduce the economic pressures that compel many students to take up part-time employment in the first place. Finally, universities should consider offering flexible class schedules and supplementary sessions tailored to the needs of working students. Providing such academic support would be instrumental in helping students stay on track with their coursework and improve their exam performance despite the demands of part-time work. In summary, while part-time employment does pose challenges for student learning, these challenges are not insurmountable. With institutional support, effective time management, and targeted interventions, students can successfully balance work and academic responsibilities.

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