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## Job Preference of University Student: A Discrete Choice Experiment

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### Abstract

*Today employees compete for qualified individuals and try to reduce employee turnover as a profit maximizing condition. That is why a proper understanding of employees' demands, including and beyond wage, is critical. The paper examines how various job attributes affect university students' utility and their tendencies to choose different types of jobs. This study adopted the Discrete Choice Experiment (DCE) to find the Willingness to accept (WTA) among 213 students of Bangladesh University of Professionals (BUP). This study identified four essential job attributes such as monthly wage, job security, working hours and the opportunity of using the knowledge or skills they gained during their bachelor's or masters and quantify the tradeoff preference among these four attributes. The paper finds that students prefer the public job sector more than the private job, entrepreneurship, and higher study. Having job security increases their utility by 35.8 percent and they require an amount of 16 thousand taka in the absence of job security. Working for long hours such as 46-60 hours and 61-75 hours decreases their utility by 39 percent and 25.2 percent respectively. Moreover, Female students are required more compensation than males for longer working hours whereas male students put more value on high wages.*

**Keywords:** Utility, Preference, Attributes, Discrete Choice Experiment.

JEL Codes: C35, J32, J45.

### 1. Introduction

Bangladesh is a small country with a growing economy. According to the World Bank (2020), the GDP of Bangladesh is \$324 billion (current US\$) and the per capita GDP is \$1968 (current US\$). It is a densely populated country that has a

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population of over 164 million (World Bank) and the economy is highly dependent on labour-intensive sectors. So, anything related to employment possesses a major concern here in Bangladesh.

Youth unemployment is a major concern for Bangladesh like any other country. According to a study by Toufique (2014), the youth unemployment rate in Bangladesh was 10.3 percent. The unemployment rate is higher among youth with tertiary level education (26.1%) compared to those with the least education (3.2%). The reason could be that university graduates earn three times higher than the least educated youth and thus they spend more time looking for work that matches their expectations. Toufique (2014) also added that the quality of employment is often very low in Bangladesh and the female unemployment rate (22.9%) is four times higher than the male unemployment rate (6.2%). Moreover, only 36 percent of the youth are employed in the sectors that match their qualification whereas 64 percent of the youth are in occupations for which they are either overeducated or undereducated. So, there also exists a mismatch between the skills demanded by the employers and those supplied by the workers causing employee turnover.

Employee turnover rate is the percentage of employees who leave their current occupation in a specific period of time. A company spends a lot of time and resources to train their employee and when the employee leaves, it is costly for an organization. Half of the employees leave their current job because they do not fit in that job environment. Other reasons for employee turnover are job satisfaction, monthly wage, promotion, effective leadership, alternative employment opportunities etc. (Arokiasamy, 2013). From Bangladesh's perspective, employee turnover is related to job security, pension, job location, increment, unequal wage, inadequate training and not being appreciated for their contribution in the workplace (Shamsuzzoha & Shumon, 2007).

From a study on employee satisfaction in pharmaceutical companies in Bangladesh, it has been found that employees in pharmaceutical companies are not satisfied with their working environment, training, compensation policy and human resource planning (Rahman et al., 2013). According to (Toufique, 2014), only 18 percent of the young employees get paid sick leave, 13.5 percent get

paternity/maternity leave, 5.5 percent get pension and 4.5 percent get childcare facilities. If workers are not satisfied with their working environment, it can affect their productivity. An increase in job satisfaction can lead to an increase in productivity, on the other hand, lack of motivation and satisfaction can reduce productivity (Halkos & Bousinakis, 2010). Thus a study on job preference of future employees, namely final year university students can help employers to understand what employees want from the organization and result in reduced employee turnover rate. Employers will be more efficient in employing people who fit the organization.

In Bangladesh, the Public sector is a very lucrative job sector for the students for many reasons. Some of them start studying for Bangladesh Civil Services (BCS) from their university life. In a survey on the students of University of Dhaka by Mamun et al., (2020) almost half of the participants stated that they preferred a career in Bangladesh Civil Service. The reasons for choosing the public sector were job security, paid leaves, fewer working hours and more days of the termination notice. Moreover, BCS cadres' jobs give the chance to serve the nation and the society. A government job employee is given more social status in our country than a private job employee. Public jobs are seen as highly prestigious, and it comes with administrative power. The working environment is much simpler, and the wage is also high (Mamun et al., 2020; Rafi et al., 2019; Rashid, 2019; Zohara, 2017).

This paper used a choice experiment involving 213 students at Bangladesh University of Professionals (BUP) to determine students' preference for specific benefits associated with different types of employment. In the choice experiment, students were asked to choose between two alternative hypothetical job scenarios where four attributes (such as monthly wage, working hours, job security and the opportunity of using previous educational knowledge/ skill) have differing levels. DCE helps to find the Willingness to Accept (WTA) for compensating any attribute by calculating the trade-off between cost attribute with other attributes. We have included "monthly monthly wage" as the cost attribute which can be used to elicit the marginal willingness to accept any specific job attribute.

To the best of our knowledge, no other paper in Bangladesh has used the Discrete Choice Experiment (DCE) for eliciting marginal willingness to pay (MWTP) for certain job attributes of university students. Although other methodologies are used to depict the job preference of students. The findings of this paper will be useful for the employers and policymakers to understand what our youth want from their job and which attributes influence their decision for choosing public or private job sector.

Analyzing the data from our survey, it was found that students prefer the public sector more than the private sector. They prefer job stability and less working hours. Another interesting finding is that they are not willing to pay more for the scope of using previous knowledge or skills learnt in their university life. This finding can explain that many of the students are not willing to work in the field related to their major subject. This is another reason why the number of BCS candidates is increasing every year. It can reduce specialization in a country and cause loss in professional service (Shahan, 2007). This finding can be used for further analysis if there is any fault in our education system that is failing to create specialized sectors in the job market.

In the rest of the paper, section 2 provides the literature review of previous studies related to this study in Bangladesh and other countries, section 3 provides the survey method, section 4 provides the methodology and finally section 5 provides the result analysis.

## **2. Literature review**

There are several studies regarding the job preference of students in several universities. According to Ahmed (2014), job preference of Dhaka University students, a descriptive study, 73% of students put BCS as their first choice in job, 43.3% of students give Bank job as second preferred choice and 36% of them put private job as their third choice. In addition, Sarker (2022) found that students of Begum Rokeya University, a public university, prefer public job nearly 42.6% (among Banking, Teaching, Business, and NGO job) for its stability and transparency in selection process. However, Hossain & Siddique (2015) studied the preference of private university students and found something different that less than one third, on average, choose private job or bank job but more than half

of them (57%) choose to work related to their field or skills after completing their bachelor's degree. Though the paper only focuses on the choice of business student, but it shows the disinterest towards government job that is only 7.4%. Furthermore, Islam et al. (2013) also explored the private university students at different universities and depicted that majority of the students prefer the field of banks and business for future career, especially the business and science students. In epitome, public job is more preferred in public universities than that of private university. Besides, in private university, students are more focused on banking job and willing to work on their respective field of interest.

Job preference has variation based on gender. Both male and female select BCS as their first job choice, but preference of male is 13% more than that of female. Moreover, in case of private job, male prefer it as a third choice (42%) on the other hand female choose it as a fourth choice with 26 percentage (Ahmed, 2014). Islam et al. (2013) found that female students choose other job (Banking, Business, Private, Teaching) over public job 10.8% more than that of male students. Which mean male students reluctant to other job than female students. In private universities, Banking sector and MNC are top choices of both male and female. But male prefer entrepreneurship and female prefer teacher more as a third choice (Hossain & Siddique, 2015). However, Sarker (2022) contradict above all. The paper found that there is no significant variation occur due to gender differences in Begum Rokeya University.

There are variations in faculty in terms of job preference of students. According to Ahmed (2014), In the University of Dhaka, Arts (85.3%) and social science (84%) prefer BCS the first job choice. Then Science faculty choose BCS as first choice by 64% and lastly Business faculty choose BCS by 53%. Here, business faculty is the sole faculty where private are ranked third by 45% where rest of the faculty ranked 3rd or 4th with other jobs with less percentage (Ahmed, 2014). In the contrary, CSE students choose job like Banking, Private Service, Teaching, Entrepreneur 99.4% more than BBA students (Islam & Islam, 2013).

In Bangladesh, Mahmud et al., (2021), found out that the wage density of the public sector is much higher than that of the private sector. In the "Tracer Study of Graduates of Universities in Bangladesh" by Mahmud et al., (2018) also shares

the similar opinion and added that almost 30% of graduates prefer “Good Pay” in job. According to Islam and Hasan (2020), the employees of public sector are earning 31.2 % more than employees of the private sector, especially after the government revised the PayScale in 2015. Wage is an important factor for the students because higher wage increases job satisfaction which makes wage a good job attribute for the study.

However, there are many factors apart from wage that influence workers to prefer their job. Mahmud et al., (2021), portrayed that long term contract and provident fund are the most dominant attributes than terminal notice, working hours, and paid leave which means workers prefer job stability most and they are ready to give up 27% of their income to achieve 1 year contract and 44% to achieve long term contract (Mahmud et al., 2021). The paper “Is Public Sector Wage Premium Real? Evidence from Bangladesh” by Islam & Hasan (2020) add more weight to the discussion by including job security, paid leave, pension, contributing fund, and food supply in the favor of choosing job.

Among the students, Sarker (2022) depicts that financial benefit is the most motivating factor (23%) after that social status (21%), job security (15%) are the important one. Similarly, Hossain et al. (2015) found monetary benefit is the strongest factor along with social status, future opportunities, job security, and influence of parents are the important motivating factors of choosing job.

There are some interesting facts regarding private and public sector jobs in Bangladesh. According to Islam and Hasan (2020), if there is a government employee in the family, then the chance of the worker to be a government employee is increased by 0.154 percent also if the family lives in a rural area, then the probability is increased by 0.048 percent to be a government employee. However, Mahmud et al., (2018) suggested that public university students get government jobs more than private university students. These conversations refer to what could be the other determinants that could influence a student to do a job in the public sector. On the contrary, there are some points which can play a role in influencing people not to choose the public sector. Author Islam and Hasan

(2020) said that if the household head is a graduate, the chance of one being government employee is decreased by 0.067%. Besides, private university students tend to be more interested in Multinational Companies than public jobs (Mahmud et al., 2018).

Preparing for Bangladesh Civil Service needs rigorous studying and most of the candidates remain unemployed or seek part-time employment at that time. In a study about the mental health of BCS candidates by Mamun et al., (2020), those who were trying for BCS were found significantly more depressed than others. The pervasiveness of depression and stress among the BCS candidates were respectively 49.3 percent and 28.3 percent (Rafi et al., 2019). An interesting finding by Zohara (2017) is that the job satisfaction level of BCS administrative cadres had no significant relationship with their previous academic qualification. That is why some field-level officers expressed that academic achievement was a waste of time and money for them. For such reasons, this study included the attribute called ‘the opportunity of using previous knowledge or skills’ to get a clear idea about whether students want to pursue a career related to their major subject or they want a career unrelated to their degree.

Around the world the job preference among the students varies from one place to another in different attributes. Wage is the most common and significant attribute which was found in almost all the research papers. According to Melly (2005), in Germany, the distribution of wages for public sector personnel is less dispersed than for private-sector employees. Ko & Jun (2015) also stated that South Korean students who consider wage to be a motivating attribute are less likely to pursue public sector jobs. Therefore, the students have a tendency to go for private jobs to get more wages. But Glinskaya & Lokshin (2007) contradicts and found that the average real wage in the public sector was 2.1 times higher than in the formal private sector and 3.8 times higher than in the informal private sector.

In Pakistan, financial incentives are valued less by public sector employees (Rashid & Rashid, 2012). On the other hand, this finding contradicts with the USA. According to Jurkiewicz, Tom K. Massey, & Brown (1998), monetary rewards are significantly more important to public sector employees in the United State. Moreover, according to Clark (1998), income becomes more



important with age. According to Jurkiewicz, Tom K. Massey, & Brown (1998) Employees in the public sector are primarily driven by a need for security and stability. Another study also urges that regardless of their professional interests in various sectors, students place the highest value on a secure and stable future as well as a high wage (Ko & Jun, 2015).

Growth is an important attribute for any job. According to Ko & Jun (2015), opportunities for advancement are negatively related to public sector employment among Singaporean students. In Pakistan, possibilities for career growth are valued less by public sector employees in their job motivation than private-sector employees (Rashid & Rashid, 2012). Both the papers agree that opportunities for advancement are not a significant attribute in the public sector rather it is relatively valuable in the private sector. Moreover, an interesting finding from OECD countries is that the opportunity of advancement in the job becomes less important as people age (Clark, 1998).

Job satisfaction among workers plays a significant role in this study because the students will be in the labor force very soon. According to Kaiser (2014), job satisfaction in the public sector is clearly influenced by a favorable working environment and self-determination, which are mutually contextualized as “no transferability of working skills” and “no autonomy”. In the case of India, accomplishment and self-control are critical motivators in the public sector whereas monetary gain is a strong motive for private-sector employees (Satyawadi & Ghosh, 2012). However, in Pakistan, the first key component that affects job satisfaction is reward and recognition, the second is the workplace environment and the third is empowerment nevertheless, participation in decision-making was shown to be minimal (Waqas, et al., 2014). Emmert & Taher (1992) depicts the dominant factor in a broader way, they found that the nature of public-sector work has minimal impact on job satisfaction; instead, social ties and fundamental needs play the role of attributes. Even Maidani (1991) stated that public sector employees were significantly more satisfied with their jobs. Overall, it can be said that in the public sector, it is the intrinsic value that motivates students which is completely different from that of a private-sector job. According to Ko & Jun (2015), students who prefer public-sector

employment place a higher value on the opportunity to benefit society than those who prefer private-sector jobs. There was also a suggestion that intrinsic motivators show up with a statistical significance rather than extrinsic motivators (i.e., payment), and public employers facilitate their public workers exercising intrinsic motivators (i.e., honorary posts, family situation, leisure, and housing situation) (Blank, 1985).

According to Melly (2005), in Germany, it was observed that those with a primary education receive the highest public sector monthly wage premium. Moreover, another study found that those with the highest levels of education and experience prefer public, particularly the state, and local employment (Blank, 1985). So, it becomes clear from here that both the papers reflect that both primary educated workers and highly educated workers prefer public jobs for higher wages as well as a better position than private.

The paper has found that two discrete choice experiments (DCE) are done in Bangladesh regarding the job market. Mahmud et al., (2021) depicts what Bangladeshi workers value in their job. The paper used 6 different attributes such as Written Contract, Termination Notice, Working hours, Amount of paid leave, Provident Fund, and Monthly income with different levels. On the other hand, Kumar et al., (2019), constructed DCE on patterns of advantages associated with compensation, leave and termination policies, working conditions, and accident insurance, along with incentives for employers which disclose the comparative values that employees and employers attach to each advantage. Termination time from employers, leaving notice from employees, paid casual leave, Hours worked by workers and overtime payment, Accident insurance, and Monthly income attributes are used with various levels.

However, the DCE is used in several papers regarding absenteeism of doctors, women preference on maternal health, consumer preference on fish, and many more. Angell et al., (2019) find that doctors strongly chosen jobs at countryside facilities where there is a sympathetic affiliation with the local people. They have used four attributes with mixed multinomial logistic model. On the other hand, Alam et al., (2019) use DCE to evaluate Maternal Healthcare Services in Bangladesh. The paper has surveyed 601 women with nine attributes. They have

used mixed method approach with Hierarchical Bayes method to measure mean utility parameters. Moreover, DCE is also used to find out the willingness to pay of consumer on specific fish species. Alam M. A.(2019) has used mixed logit model and have found that consumers are willing to pay more for native fish species than for overseas fish species. Besides, local production is preferable to foreign production and fresh fish is preferred to frozen fish (Alam M. A., 2019).

### **3. Research Objectives**

Our study aims to investigate the job preference of the students at Bangladesh University of Professionals (BUP) and how certain job attributes influence their decisions of choosing a career path. To reach the goals, our objectives of the study are-

1. To investigate how different job attributes affect the utility levels of BUP students;
2. To calculate the amount that needs to be compensated (WTA) in the absence of a specific job facility;
3. To study the differences in job attribute preference of the students concerning their gender and faculties (FASS, FBS, FSSS, & FST);
4. To know the job sector preferences of the students and the motivating factors for choosing the sectors;

### **4. Hypothesis**

Based on the research objectives, and literatures the following hypotheses have been formed:

H1: Having no job security decreases the utility of the students.

H2: Male respondents get more utility than female students with the increment in wage or salary.

H3: Students of FBS faculty do not lose utility significantly if they are not given job security compared to other faculties.

H4: Students who prefer the public sector do not want to use their academic qualification-related knowledge in the job sector.

## **5. Methodology**

### **5.1 Survey Method:**

BUP has a unique curriculum administrated by Bangladesh Army which set it aside from other public universities in Bangladesh. Being one of the newest public University, the current performance of the students in the job sector is praiseworthy but very few studies have been done on its students. Apart from this, due to time and resource limitations, the paper takes the students of BUP as the population.

This paper consists of a survey of approximately 213 students at Bangladesh University of Professionals (BUP) who are in their final year of Honors or masters. Orme (2010) has proposed a formula that can be used as a rule of thumb in determining the minimum sample size for a DCE. According to that,  $n$  will be more or equal to  $500c/ta$ .

“ $n$ ” = the minimum sample size or the number of respondents,

“ $t$ ” = is the number of tasks (in this research, there are 8 tasks per respondent),

“ $a$ ” =is the number of alternatives per task (there are three alternatives per task) and

“ $c$ ” = the largest number of levels for any one attribute (the monthly wage attribute had the largest attribute of 4).

So, our sample size of 213 students is highly efficient for a population consisting of 2300 students. The data of this paper is collected from the Honors final year students and master’s students at the Bangladesh University of Professionals (BUP). For our suitability, the Convenient sampling method is used in this paper.

## 5.2 Choice Experiment Design and Model Estimation:

A discrete choice experiment (DCE) is a statistical approach for understanding people's preferences for specific choices. It has been used in product development, marketing, transportation modeling, health policies and government service delivery to provide valuable input for policymakers. The approach asks people to state their preferences over hypothetical situations, goods, or services in the absence of information on actual or revealed preferences. In comparison to other techniques for identifying preferences, DCE has three advantages:

- 1) They can be used to assess the impact of changes in job attributes or services because they control for the influence of demographic factors,
- 2) Provide quantitative measures for the relative importance of different job attributes, including the Willingness to accept and demand elasticities relating to these attributes, and
- 3) Can be used to evaluate the influence of changes in job attributes or services.

## 5.3 Attributes and Levels:

DCEs present participants with several competing options from which they have to choose from a 'choice task repeatedly'. In this paper, respondents are presented with two hypothetical employment scenarios with different levels of the following attributes: Monthly Wage, working hours, Job security, and Opportunity of using previous educational knowledge/skill. The paper did not identify sectors as "Public", "Private", "Higher study" or "Entrepreneur". Doing so may have caused respondents to make assumptions about other aspects associated with the jobs, rather than focusing on the attributes listed above. They were asked to assume that all other attributes not presented in the scenario were identical between the jobs. The individual decision-maker is required to indicate the preferred alternative in a sequence of choice tasks. This could reflect a real-world situation in which a worker has to choose between two different job offers. The full set of attributes and levels is shown in Table I.

*Table I: Attributes and levels*

Monthly Wage (BDT)	Working Hour (Hour/week)	Job Security*	The opportunity of using previous educational knowledge/skill
15000	30-45	Yes	Yes
30000	45-60	No	No
45000	60-75		
60000			

#### 5.4 Experimental Design:

The attributes were combined to create 24 choice sets in 3 blocks, each with 8 choice situations. To lessen the burden of answering a long survey question, each respondent was presented with one block of 8 choice sets. The blocks were assigned to respondents randomly and the choice sets within each block were also randomly placed.

The survey adopted in the paper falls under the questionnaire-based survey, where the responses were collected via the printed form. The paper consists of primary data where all fall under discrete variables except two regarded as continuous.

#### 5.5 Estimating Willingness to Accept:

Generally, a choice set consists of more than one alternative. For simplicity let an individual  $n$  make a choice decision from the choice set  $S$ . There are two alternatives, alternative  $i$  and alternative  $j$ . If an individual  $n$  gets utility  $U_i$  from choosing alternative  $i$ . According to the Random Utility Model, utility  $U_i$  derived

from alternative  $i$  has two components,  $V_{in}$  which is a systematic component of utility and  $e_{in}$  which is a random component of utility.

$$U_{in} = V_{in} + e_{in} \quad (1)$$

Here,  $V_{in}$  is observable because it is the component of utility that the respondent gets from the DCE alternatives. Now, the respondent will choose alternative  $i$  only if  $U_i > U_j$ . The probability that individual  $n$  will choose alternative  $i$  -

$$P(Y=1) = P(V_i + e_i > V_j + e_j) = P(V_i - V_j > e_j - e_i) \quad \forall i = j \quad (2)$$

This paper assumes that the observable components of utility  $ei$  are independent and identically distributed, which follows the Gumbel distribution. By using the Conditional Logit model (CLM), expressing the probability that individual  $n$  will choose alternative  $i$  from the choice set  $S$  is

$$P(i) = \frac{\exp(vin)}{\sum \exp(vjn)} \quad (3)$$

If an individual chooses alternative  $i$ , it means alternative  $i$  gives more utility to this individual than other alternatives available. Following the Random Utility Model (RUM), mathematically the model can be written as,  $Prob(y = I|x) = Prob(U_i > U_j)$  where utility of each alternative depends on the attributes and attribute levels. The linear model used for this study -

$$P(Y=I|x) = \beta_0 + \beta_1W_2 + \beta_2W_3 + \beta_3W_4 + \beta_4H_2 + \beta_5H_3 + \beta_6S_2 + \beta_7O_2 + e \quad (4)$$

Here,  $Y$  = Dependent variable which is 1 if alternative  $i$  is chosen or 0 otherwise

$B_0, B_1, \dots, B_7$  = coefficient for the alternatives  $B_0$  is the intercept term

$W_2, W_3$  and  $W_4$  = monthly wage is 30,000, 45,000 and 60,000 respectively

$H_2$  and  $H_3$  = 45-60 and 60-75 working hours per week respectively

$S_2$ =Does not provide job security and lastly

$e$  = error term.

MWTA is the monetary measure of how much a respondent will require to give up for a certain job attribute. The monthly wage attribute is used to find out the MWTA. Now, assuming that the systematic component of utility is a linear function of independent variables  $X_i:k_n$

$$V_{in} = \hat{\alpha}_0 + \hat{\alpha}_k X_i:k_n \quad (5)$$

where  $\hat{\alpha}_0 = \text{constant}$ ,  $\hat{\alpha}_k = \text{coefficient variable}$ ,  $k$  is the number of coefficients including the constant. Suppose we want to find out the MWTA for job security. So,  $X_i = 1$  if job security is available or otherwise it is 0. After using maximum likelihood method to estimate the coefficients  $\hat{\alpha}_i$  and  $\hat{\alpha}_p$  for corresponding variable  $X_i$  (job security) and  $X_w$  (monthly wage attribute), we can calculate the MWTA for job security-

$$\text{MWTA (job security)} = \frac{\hat{\beta}_i}{\hat{\beta}_p} \quad (6)$$

## 6 Results

### 6.1 Respondent Demographics:

213 students completed the survey. According to the distribution of respondents by faculty, 55 of them are from the Faculty of Arts and Social Science (FASS), 56 of them are from the Faculty of Business Studies (FBS), 49 of them are from the Faculty of Security & Strategic Studies (FSSS), and 53 of them are from the Faculty of Science and Technology (FST). Almost two-thirds of the respondents are female, whereas around one-third of them are male. Other than that, the basic summary statistics for the types of jobs preferred by the respondents explain that 100 of the total respondents chose public as their preferred job while 52 of them preferred private. The dominance of public job is matched with Ahmed (2014) and Sarker (2022), the two public universities. The full demographic summary is shown in the table II.

*Table II: Demographic summary*

Gender	Male	92
	Female	121
Faculty	FASS	55
	FBS	56
	FSSS	49
	FST	53
Education Level	4th Year	151
	Masters	62
Job Preference	Public	100
	Private	52
	Higher Studies	36
	Entrepreneur	25



## 6.2 Conditional Logit Results:

Table III presents the results from the conditional logit model. Column (1) shows the attribute levels except for the base level. Depending on the base level, this study finds that the students of BUP get a utility of 0.548 units even if there is zero monthly wage with 30-45 working hours, availability of job security, and opportunity to use specific field skills or knowledge. This finding explains the utility of those students who may intend on doing a non-paid internship.

*Table III: Results of Conditional Logit model*

Level of Attributes	All Students	WTA
Alternative Specific Constant	0.548*** (0.147)	
No Job Security	-0.358*** (0.072)	16.21
No Opportunity of Using Specific Field Knowledge/ Skill	0.268*** (0.091)	-12.12
46-60 Hour of Working	-0.390*** (0.098)	17.65
61-75 Hour of Working	-0.252*** (0.083)	11.42
monthly wage	0.022*** (0.002)	

Column (2) shows the coefficients that explain the change in utility, while willingness to accept is shown by column 3, which indicates how students value each attribute. First, as expected, having no job security decreases the utility by 0.358 units while not requiring specific field skills or knowledge increases the utility by 0.268 units. This is because people tend to prefer a risk-free life that comes with having a secure job. In another study on Bangladeshi workers by Mahmud et al., (2017), workers were willing to give up 19 percent of their monthly income for a 6-month contract but 44 percent for a permanent contract which means workers preferred a more secure job. Moreover, Ahmed (2014) and Sarker (2022) has also found the same because BCS or Government job does not require the skill or knowledge of specific field. Besides, Job security and stability prevails as well. In addition, the findings by Zohara (2017) where BCS administrative cadres opted for a different job than their major subject and felt that bachelor's or master's degree was a waste of time and money for them. That is why the students must be given the amount of 16.207 thousand takas to compensate for not having job security in their job. This finding satisfies our first hypothesis (H1). Another study by Sarker (2022) that job security is the third-most motivating factor when choosing a job which also justifies hypothesis 1 and relates to the finding of our study. At the same time, they are ready to pay the amount of taka 12.123 thousand to forgo the requirement of using specific field knowledge in their job. On the other hand, working for 46-60 hours in a job decreases the utility by 0.390 units while working for 61-75 hours decreases the utility by 0.252 units. This happens because students face a tradeoff between their leisure and trying to maintain a work-life balance. So, they are ready to work for 46-60 hours if an additional 17.65 thousand takas is given and it'd take 11.42 thousand to work for 61-75 hours. In the case of wages, it positively impacts utility and the per-unit increment of monthly wage results in a 0.022 unit increase of utility.

On the whole, and consistent with theory, the results indicate that respondents prefer more monthly wage, fewer hours of work, and job security while not having the requirement of using a specific field knowledge/skill.

### 6.3 Exploring Heterogeneity in Preferences:

A simple advantage of incorporating a wide variety of students in the choice experiment is that we can examine how preferences change across observable characteristics. First, we examined whether the valuation of benefits differed by gender and faculty of the students in Table IV.

In the case of gender in Table IV, the female students tend to value job security more than their male counterparts and that is why they need 4.62 thousand takas more compensation than male students for the absence of job security. Apart from that, female students are required to have more monthly wages than male students for having long hours of work, as per the findings they require 27.2 thousand takas to work for 46-60 hours while male students require only 8.74 thousand takas. A similar result is also found by Minhaj et.al. (2020). According to them, female workers are averse to long working hours than male workers. The rationality could be our social structure where a female has to take care of both her work and home together which discourages females from spending more time at work. But notably in the case of the monthly wage, for male students per unit increment of monthly wage results in more utility than female students.

*Table IV: Conditional Logit Coefficient Estimates by Gender*

	Male Students	Female Students
No Job Security	-0.381*** (0.108)	-0.346*** (0.097)
WTA	13.79	18.41
No Opportunity of Using Specific Field Knowledge/ Skill	0.328** (0.139)	0.251** (0.120)
WTA	-11.86	-13.32
46-60 Hour of Working	-0.242* (0.146)	-0.512** (0.120)
WTA	8.74	27.2
61-75 Hour of Working	-0.090 (0.133)	-0.381*** (0.107)
WTA	3.25	20.26
monthly wage	0.028*** (0.003)	0.019*** (0.003)

Our findings are similar to another study by Wiswall, M., & Zafar, B. (2016) where women need to be compensated by 4 percent of their average earnings while men only need 0.60 percent compensation if there is a risk of being fired at the workplace. They have also found that the average WTP for 1 percent increase in earnings growth is 3.4 percent for men and 0.59 percent for women, which is very insignificant which means men get more utility for each unit increase in income. According to Hossain and Siddique (2015), 66.91% of the male respondents compared to 63.25% of the female respondents have chosen “financial benefit” as the motivating factor behind choosing a career. So, the second hypothesis (H2) of our study is justified.

**Table V: Conditional Logit Coefficient Estimates by Faculty**

	FASS	FBS	FSSS	FST
No Job Security	-0.392*** (0.141)	-0.025 (0.143)	-0.567*** (0.152)	-0.567*** (0.150)
WTA	35.11	1.05	21.49	17.87
No Opportunity of Using Specific Field Knowledge/ Skill	0.241 (0.168)	0.677*** (0.182)	0.064 (0.193)	0.096 (0.195)
WTA	-21.54	-28.26	-2.43	-3.03
46-60 Hour of Working	-0.590*** (0.196)	-0.552*** (0.205)	-0.009 (0.204)	-0.393** (0.197)
WTA	52.83	23.06	0.36	12.39
61-75 Hour of Working	-0.274* (0.156)	-0.275* (0.157)	-0.154 (0.182)	-0.350* (0.183)
WTA	24.56	11.47	5.82	11.02
monthly wage	0.011*** (0.004)	0.024*** (0.004)	0.026*** (0.004)	0.032*** (0.004)

Similarly, Table V shows the coefficients and WTA for the students by their faculty. In terms of having no job security, students of all faculties except FBS get negative utility which means they lose utility. The students from FASS are willing to sacrifice more of their monthly wage to get job security than other departments whereas the students from FBS put a lower value on job security. Perhaps FBS prefers such private jobs which have less job security and have higher opportunities to use specific skills or knowledge which is also found by Ahmed (2014). According to Islam and Hasan (2020), the majority of people choose the public job sector because of job security. Hence, job security must not be the most motivating factor for FBS students. Thus, it satisfies our third hypothesis (H3). Moreover, students of FBS are willing to do part-time jobs and corporate jobs where they can easily switch to another company. The students from FBS also get more utility from the per-unit increment of monthly wage than the students from FASS.

We also explored heterogeneity due to job preference by dividing the job sector in four groups. A key advantage of the latent model, relative to the interactions shown above, is that it allows us to sort individuals into classes based not only on their observable characteristics but also based on the choices that they make in the experiment.

*Table VI: Conditional Logit Coefficient Estimates by Different Job Sectors*

	Public	Private	Higher Study	Entrepreneur
No Job Security	-0.347*** (0.104)	-0.370** (0.150)	-0.279 (0.170)	-0.518** (0.216)
WTA	16.09	13.1	20.53	20.83

No Opportunity of Using Specific Field Knowledge/ Skill	0.406*** (0.130)	0.205 (0.195)	-0.002 (0.208)	0.262 (0.276)
WTA	-18.87	-7.24	0.1632	-10.56
46-60 Hour of Working	-0.359** (0.144)	-0.457** (0.202)	-0.313 (0.238)	-0.489* (0.291)
WTA	16.65	16.15	23.02	19.67
61-75 Hour of Working	-0.165 (0.121)	-0.398** (0.176)	-0.259 (0.192)	-0.269 (0.253)
WTA	7.65	14.09	19.09	10.83
monthly wage	0.022*** (0.003)	0.028*** (0.004)	0.014*** (0.005)	0.025*** (0.006)

Table VI most notably shows that students who preferred public jobs are placing 22.82 percent more value on job security than the students who chose the private sector and they are also willing to give up more money to avoid using any specific skill/knowledge. This is similar to the finding by Zohara (2017) where BCS administrative cadres opted for a different job than their major subject and felt that a bachelor's or master's degree was a waste of time and money for them, and it justifies our fourth hypothesis (H4). On the other hand, the students who preferred private jobs get more utility than those who chose the public jobs for a per-unit increment of the monthly wage. Interestingly, students who chose higher study put more value on long working hours while giving up a portion of their monthly wage to use their specific knowledge or skill. This might occur as the

students who prefer higher studies have the ambition to be skilled at a specific field of knowledge which creates an affinity to the work based on that field. Therefore, an increase in working hours does not decrease that much of utility compared to public and private jobs. However, the result isn't significant.

## **7 Opportunities for Future Studies**

Due to time constraints, we have taken only four attributes to avoid the complexity of the paper. Many other factors influence our decision of job sector selection such as the scope of future advancement, office environment, healthcare facility, childcare facility, availability of food and transportation facility, the flexibility of working, etc. So, it is recommended for future researchers to include more variables and find out their influence on job sector selection decisions. We have collected our data through a self-administered questionnaire. This process has some limitations like- respondents may not understand the interpretation of some questions or fill hastily without giving importance to the accuracy of the answers. Some respondents may miss some questions. These problems can hamper the reliability of the responses. It is recommended to conduct in-person interviews to avoid such instances so that respondents can understand the question clearly and give accurate answers.

## **8 Conclusion**

In this study, we have used the Discrete Choice Experiment (DCE) to elicit the amount respondents are willing to accept if they are deprived of certain job attributes such as working hours, job security and the opportunity of using previous knowledge/ skills in the workplace and how much utility they get from these attributes. The data has been collected by a self-administered questionnaire from 213 sample sizes by simple random sampling. The population consists of master and final year undergraduate students of the Bangladesh University of Professionals (BUP). We have found from the study that students prefer the public sector more than the private sector. They also prefer to have job security and shorter working hours. This finding suggests that most of the students are risk-averse and working extra hours reduces their utility. Female students need more compensation if they are to sacrifice job security and work longer hours. A large portion of the students have selected that they don't want to use their

previous knowledge in a job. This finding can mean that most of the students are not happy with their major subject in honors or masters or working in other generalized fields gives them more utility rather than a specialized field. Therefore, most of the students prefer the public job sector.

Faculty-wise there was no significant difference in results. Students of FASS placed more importance on job security than the students of FBS and a large portion of FBS students chose the private sector. This could imply that business students are drawn to corporate jobs while social science students want a stable job such as the public sector. Those who chose a public sector job wanted more paid leave by compensating their monthly wage. The reasons students don't want private jobs are- non-flexible working environment, corporate politics, low social acceptance, and those who didn't choose the public sector was because of corruption, highly competitive exams and tough selection process.

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