Does beauty matter? - An analysis of job market for graduates of Business and Computer Science

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2018-3-30-006

Submitted as a requirement for fulfilment of the BSS in

Economics at East West University

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Course Title: **Supervised Research Paper**

Course Code: **ECO 495**

Letter of Transmittal

Date: 10.7.2023

Dr. A. K. Enamul Haque
Professor, Department of Economics
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Subject: Submission of the thesis Paper on “Does beauty matter? - An analysis of job market for graduates of Business and Computer Science”.

Dear Sir,

It is my great pleasure to present you my thesis paper on “Does beauty matter? - An analysis of job market for graduates of Business and Computer Science”. While developing this research paper, I have come to know a lot of things about labor productivity and how different economist determined the source of labor productivity. I would like to thank you for supervising my thesis paper. I will always be available to respond to any queries that you may have in this regard.

Therefore, I would be obliged if you please accept this thesis paper.

Sincerely Yours,

Karibun Nisha Tushi
ID: 2018-3-30-006

Acknowledgement

It gives me great pleasure to express my gratitude to the individuals who made this thesis possible. I want to sincerely thank my supervisor, Dr. A.K. Enamul Haque, for his ongoing advice, inspiration, and support during my research. I want to express my gratitude to him for his tolerance, confidence, and support during my undergraduate studies. We would especially want to thank everyone who gave of their time to fill out the survey. Last but not least, I want to express my sincere gratitude to Dr. Nahid Hasan Khan and Career Counselling Centre (CCC) for their assistance with my data collecting.

Finally, I'd like to express my gratitude to my family for their help and understanding during this time.

Abstract

The purpose of the study is to analyze whether there is discrimination in the job market based on beauty. The study was conducted on the job market for BBA and Computer Science graduates to understand the effect of beauty premium and plainness penalty on finding employment. The data was collected primarily from Career Counseling Center (CCC). Phone interviews were done for additional information about the respondents. The Probit model was used in the study to find the relationship between beauty and employment. The main findings are that there is a beauty premium for BBA graduates, whereas, for CSE graduates there is no impact of beauty on job market.

Keywords: Beauty Bias, Beauty Premium, Plainness Penalty, Job Market, Labor Market

Paper type: Thesis paper

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Chapter 1: Introduction

1.1 Introduction:

According to Sun Tzu's Art of War, if you know both yourself and others, you will not be in danger in a hundred battles; if you know yourself but not others, you will win one battle and lose one; and if you know neither yourself nor others, you will be in danger in every war. Receiving a job can mean conquering the first significant obstacle in their career for recent graduates. A graduate must be aware of what employers want and what he or she can provide in return in order to succeed (Moy & Lam, 2004).

The recruitment of the greatest personnel available has become a top management priority due to competitive pressures, increased acknowledgment of human resources as a possible source of competitive advantage, and changing workforce demographics. Understanding how job selection decisions are made, the job characteristics (such as pay and working conditions) that are most likely to draw desirable applicants, and the nature of effective recruitment practices are essential to an organization's ability to efficiently and effectively address this concern (Barber, 1998; Rynes & Barber, 1990; Stevens, 1997; Boswell et al., 2003).

Lookism is a term used to describe a type of prejudice based on a person's outward look that was first used in the late 1970s (Ayto 1999). It is supported by social science studies that investigate societal ideals of physical attractiveness and beauty, such as Langlois et Almeta-analytics assessment of face attractiveness findings from 1932 to 1999. Lookism is when people are judged by how they fit the stereotype, either favourably or unfavourably. Rhode (2010) claims that lookism affects a variety of innate traits, from those that are "fixed" at birth, including face and body morphology, to others that might be thought of as being more "mutable" in nature (e.g. clothes, make-up, grooming) (Simorangkir, 2013).

Although the English language is full of -isms, most people miss lookism. It refers to people's prejudice or discrimination towards others based on their looks. While initially used to describe how individuals perceived others who were heavy set, ‘Lookism’ now encompasses the entire

spectrum of beauty, from the "overly" attractive star or actress to the unassuming infant. Economists, sociologists, and psychologists all study how lookism manifests itself in everyday life and how it impacts individuals and society as a whole.

At the same time, the importance of looks has risen to the forefront. It appears that "beauty" is just as significant as "skill" in determining one's financial well-being (Tianzhu, 2019). The study of the impact of attractiveness on labor market outcomes is becoming increasingly popular in the subject of labor economics. A considerable number of well-conducted empirical studies of pay discrimination based on getting job, gender, race, and handicapped employees, among other factors, have been published to date.

The wage-appearance differentials' decomposition results demonstrate that higher earnings for good-looking individuals are often due to differences in individual attributes. The unexplained components of discrimination, such as lower salaries for shorter males and higher wages for thinner girls, are mostly to blame. Males are more affected by the "shortness penalty," whereas females may benefit from the "beautiful face" effect (Tianzhu, 2019).

Several studies have looked into the relationship between salaries and the physical appearance of workers in a specific age or occupational group. Frieze et al. (1991), for example, studied earnings of MBAs for the first ten post-degree years and found different results for males and females. For males, there was a positive correlation with both starting salary and subsequent salaries based on ratings of attractiveness from photographs as a student. Whereas, for females, there was zero correlation with starting salary. But more attractive females experienced faster increase in their salaries (Hamermesh, 1993). It raises the unsettling possibility that, even in the twenty-first-century job, attractiveness outweighs intelligence. Veteran female broadcasters, such as radio personality Libby Purves, who recently complained about the BBC's treatment of women of a certain age, would undoubtedly embrace it (Ahmed, 2020).

Mustafizur Rahman claimed in his research that the most recent accessible Quarterly Labor Force Survey 2015–2016 data from Bangladesh may be used to derive in-depth insights into wage discrimination in the Bangladesh labor market. Quantile counterfactual decomposition reveals

that women face a greater wage penalty at the lower deciles of the wage distribution, with wage gaps ranging from 8.3% to 19.4% at various deciles (Rahman, 2019).

1.2 Research Problem:

Although age, gender, experience, observation time, and interpersonal affect have all been considered in recent research on job performance, no research on the possible effects of job features and working conditions on task and contextual performance has been done (Kahya, 2007).

The results of the decomposition of the wage-appearance differentials indicate that variations in individual qualities account for the majority of the higher salaries for attractive individuals. They include the lower pay for shorter men and the higher pay for women who are slimmer are primarily the result of unexplained discrimination (Gu & Ji, 2019). Anti-discrimination laws are in place in many Western nations to stop employment discrimination based on "weight and personal appearance" and "facial characteristics, build, and height" (Greenhouse, 2003; Saltau, 2001). Cavico, Muffler, and Mujtaba (2013) contend, however, that discrimination based on appearance is not prohibited in the USA unless it "can be connected to a protected category, and thus converted into a discrimination claim based on race, colour, sex, or any other protected characteristic under civil rights laws (Simorangkir, 2013).

An aging person faces declining personal (e.g., physical health) and contextual (e.g., access to training) resources that progressively exceed increases in resources (e.g., experience; Baltes & Lang, 1997). First, selection refers to prioritizing goals based on personal preferences and motivations (elective selection) or because of a perceived loss of resources (internal or external) (loss-based selection). As previously mentioned, a rising number of research (such as Abele & Wiese, 2008; Abraham & Hansson, 1995; Bajor & Baltes, 2003; Baltes & Heydens-Gahir, 2003; Wiese et al., 2002; Zacher & Frese, 2011) demonstrate the positive impacts of using SOC methods at work. Because it is believed that the application of SOC strategies facilitates the efficient and targeted use of resources, people's behaviors of selection, optimization, and compensation have been highlighted as strategies of important interest in this context. When prior methods of goal attainment are no longer sufficient in the face of actual or predicted resource losses,

compensation entails the acquisition and application of alternative individual means or the use of external or technology aid to maintain a desirable level of performance. Therefore, the coordinated application of SOC techniques should facilitate successful aging through the targeted utilization of available resources (Baltes & Baltes, 1990: Weigl et al., 2013).

As well as, over the past three decades, a key hiring criterion has been the compatibility of an applicant's knowledge, skills, and abilities (KSA) with other, more ethereal traits, such as personality and value orientations (Moy & Lam, 2004). It is indisputable that personality attributes have an impact on how well individuals perform on the job, and many organizations make use of this impact. One of the key psychological elements influencing human behaviour is personality attributes (Anwar & Shah, n.d.).

1.3 Research Question:

The questions that are worthy of answer for this study are given below (Liu, 2014)

- Is there a beauty premium or a plainness penalty in Bangladesh and how does physical appearance or personal attributes influence get a job?

1.4 Research Objectives:

To answer this aforementioned question, the objectives of this research are:

- To determine if beauty has any impact on getting a job in business administration and computer science background
- To demonstrate the effect of CGPA, extra-curricular activities and hobbies on getting selected for jobs
- To find out the significance of a thesis for obtaining a job

1.5 Research Hypothesis:

- Beauty premium and plainness penalty affects to get a job.

1.6 Conclusion:

The research is organized as follows: Chapter two explains the history of the study; Chapter three is based on a previous literature review, while Chapter four discusses data design and the study's methodology. The findings are given in chapter five, and the conclusion of the study is covered in chapter six.

Chapter 2: Review of Literature

2.1 Introduction:

The purpose of the paper is to analyze the study on the effects of personal attributes and beauty premium on job selection. The paper conducts a literature review of pertinent sources in order to estimate the impact. The context, technique, and results of earlier studies are the main subjects of the literature review.

2.2 Definitions of beauty:

Lookism is a term used to describe a type of prejudice based on a person's outward look that was first used in the late 1970s (Ayto 1999). It is supported by social science studies that investigate societal ideals of physical attractiveness and beauty, such as Langlois et Almeta-analytics' assessment of face attractiveness findings from 1932 to 1999. Lookism is when people are judged by how they fit the stereotype, either favourably or unfavourably (Granleese, 2016).

2.2.1 Symmetric Beauty:

Symmetry is seen to be a distinguishing feature of attractive looks. This does not imply, however, that the proportions that result from the straightforward split of the face into thirds or fifths are necessarily the most aesthetically acceptable proportions. We get to the conclusion that symmetrical shapes can also be described by the ratio -value, commonly known as the golden ratio or the divine proportion, based on the etymology of the word "symmetry" as well as on specific examples and theories of beauty. As a result, we suggest using this ratio in facial aesthetics (Prokopakis et al., 2013).

This research examined at Ricketts' theory that a person's facial attractiveness can be determined by comparing their facial dimensions to the "divine proportions" (a set of specific ratios). Photos of 90 models and 68 past orthodontic patients were examined for the study (34 attractive and 34 nonattractive individuals of each gender). Different transverse and vertical face distances

were measured by the researchers, and they were then contrasted with the proportions of God (expressed as phi-relationships). Indicators of facial disproportion were also calculated. The findings demonstrated that, on average, attractive people's facial proportions—both models and patients—were closer to the heavenly values than those of unattractive people. This corroborates Ricketts' claim that, to some extent, facial attractiveness may be measure (Celkyte, 2017).

At the same time, Hönn & Göz tried to say in their article that to explore what factors contribute to the attractiveness of a person's face and the methods that can be used to measure these factors. The article discusses the use of artistic standards, cephalometry, and anthropometry in evaluating facial images, and how symmetry, averageness, and specific features such as dental aesthetics and gender-specific characteristics influence attractiveness. The authors suggest that anthropometric methods are more effective than cephalometric methods in determining the dimensions of an ideal face because they are valid, three-dimensional, non-invasive, and easy to use. The article also notes that while symmetry and averageness are important in determining attractiveness, distinguishing features can also make a face particularly attractive. The preferences of women regarding what they find attractive in male faces are mentioned as being somewhat controversial and influenced by factors such as the woman's menstrual cycle and environment. Finally, the article notes that the ideal of beauty is subject to changes in fashion (Hönn & Göz, 2007).

2.2.2 Exploring the Elusive Nature of Physical Attractiveness:

Through summarizing the majority of prior studies, Morrow (1990) offers an inductive definition of physical beauty: physical attractiveness is the extent to which one's facial appearance generates a positive response from another. The authors of Hatfield and Sprecher (1986, p. 37; Hamermesh and Biddle (1994, p. 30) define physical attractiveness as someone who “(...) represents one's conception of the ideal in appearance; (...) which gives the greatest degree of pleasure to the senses”. Rarely have scholars provided a conceptual definition of physical

attractiveness, primarily because it is challenging to pin down exactly what constitutes a physically appealing person (Sierminska, n.d.).

In psychological studies, the two most frequent methods used to gauge attractiveness is measuring the physical beauty of subjects in portrait photographs or using self-reported appearance judgments. According to some researches, these two measurements contribute significantly to how people perceive attractiveness, are less prone to measurement error, and are independent of observers' subjective evaluations. These two metrics are still insufficient from a validity (or construct validity) perspective because a person's physical beauty goes beyond their normal height and weight. Others have employed alternate measures that put emphasis on different aspects of physical attractiveness in addition to the attractiveness metrics created by reviewing photos (Sierminska, n.d.).

2.2.3 The Multi-Sensory Experience of Beauty:

Beauty is a quality that pleases the senses and can be experienced through various means such as sight, taste, touch, smell, and hearing. It is something that elicits delight and devotion in the observer and can be found in nature, art, human forms, and spirituality. While there is no singular definition of beauty, it is often distinguished from being pretty by being something that shines from within and touches the senses on a deeper level. It is also important to note that societal ideals of beauty do not always elicit strong emotions or a deep connection with the observer (Wong et al., 2021).

2.2.4 Eurocentric Beauty Standards:

The influence of societal norms and expectations on personal identity is a widely recognized phenomenon, and most people tend to conform to some degree to these expectations. For black people in the US, one area where this has been particularly difficult is in the realm of beauty standards, which are often based on European physical characteristics and exclude those common among black people. This study explored the impact of these Eurocentric beauty

standards on the cultural identities of black women. The research found that black women who more closely resembled these European standards reported higher levels of confidence and self-esteem, while those who did not, reported feelings of isolation and lower self-esteem, which could impact their social and employment opportunities. To counter the influence of these dominant beauty standards, the participants in the study suggested strengthening cultural identities using an Afrocentric rather than Eurocentric model of beauty, promoting positive messages within families, and practicing self-acceptance regardless of physical characteristics.

Chin Evan tried to give the definition of beauty from his study that appears to be the physical appearance that is in line with mainstream, Western standards that are influenced by Anglo-Saxon culture and are prevalent in American society. These standards are often linked to self-evaluation and are considered important for making positive impressions. The study specifically mentions that physical attractiveness is a significant factor in dating and that mainstream standards of beauty are often internalized and affect self-esteem. The study also notes that there is a trend among Asian women to desire a body type that aligns with these standards and that this can lead to body image disturbances and eating disorders (Chin Evans & McCONNELL, 2003).

2.3 Impact of Personality and Moral Behaviour for getting jobs:

Recent studies have examined the relationship between personality characteristics and moral behaviour (Trevino et al., 2003; Brown et al., 2005; Walumbwa and Schaubroeck, 2009; Kalshoven et al., 2010). Numerous studies have discovered that factors like organizational citizenship behaviour (OCB), organizational commitment (OC), supervisor satisfaction, and perceived leader effectiveness influence outcomes (Brown et al., 2005; Brown & Trevino, 2006; Walumbwa and Schaubroeck, 2009; De Hoogh& Den Dartog, 2008; Mayer et al., 2012).

The consistent beliefs and actions of a person in a variety of contexts and throughout time are referred to as their personality (Roberts & DelVecchi, 2000; Burger 2006; Walumbwa and Schaubroeck, 2009). A resurgence of personality study in organizational behaviour has been facilitated by the Big Five personality model, which has gained significant acceptance in the

scientific community (Digman, 1989; McCrae & Costa, 1987). Several research studies use the five components of personality model as a tool to investigate specific areas of personality traits and ethical conduct. Personality qualities are thus acknowledged as having an impact on how people behave in the workplace when sharing their experiences and perceptions (Barrick & Mount, 1991; Goodstein & Lanyon, 1999).

Thus, this concept has been applied to research correlations between personality and organizationally relevant factors like leadership, job satisfaction, performance, and job turnover in various studies (Barrick, Mount, & Judge, 2001; Judge, Heller, & Mount, 2002; Bono & Judge, 2004; Zimmerman, 2008). The idea that "personality is an essential driver of individual behaviour in the workplace" has received generally positive support (Penney, David, & Witt, 2011, p. 297). Extraversion, neuroticism, agreeableness, and openness to new experiences all have less consistent correlations with professional integrity according to certain research findings, although they are all associated in the workplace generally (Murphy, 2000; Barrick, Mount & Judge, 2001; Ones & Viswesvaran, 1996). Numerous studies have explored the connections between the five fundamental dimensions of neuroticism, extraversion, openness to experience, agreeableness, conscientiousness, and ethical behaviour, in order to expand the existing body of knowledge (Anwar & Shah, n.d.).

2.4 The Impact of Physical Appearance Discrimination on Earnings and Employment Status in the Workplace:

Prior studies on physical appearance discrimination in the workplace has focused on the following dimensions: body weight, height, build (e.g., weight relative to height, or BMI), and physical appearance (e.g., looks). Wage, employment status, and promotion differentials all show discriminatory results. The appearance of the eyes, nose, mouth, ears, brow, and facial contour is referred to as facial appearance. The exterior picture of a human person, including height, figure, and the existence of any impairment is referred to as outward appearance.

Sociologists and psychologists have long been interested in the issue of appearance discrimination, and economists have recently become more active in labor market studies. Height, stature (weight or body mass index (BMI), and facial traits are the most used appearance markers in the literature. The reasons why a person's looks might contribute to disparities in career chances and pay are still being debated. The traditional viewpoint is that appearance discrimination is a valid explanation, but it has also been claimed that individual disparities in working capacity are reflected in appearance markers.

2.5 Exploring the Beauty Premium and Plainness Penalty:

Studies on the influence of attractiveness on earnings by gender demonstrate that the above hypothesis is generally valid. Hamermesh and Biddle (1994) found that males who are considered to be homely are penalized by roughly 9% in hourly earnings, whereas those who are considered to have above-average features enjoy a 5% earning premium. In hourly earnings, there is a 4% beauty premium and a 5% plainness penalty for women. According to Harper (2000), guys who are assessed as ugly at both the ages of 7 and 11 face a 14.9 percent pay penalty. This pattern also applies to their female counterparts, with a 10.9 percent unattractiveness penalty (Liu, 2014).

Studies on appearance discrimination against homely individuals in the labor market date back to Gary Becker (1957), and they assess the beauty premium or plainness penalty in terms of recruitment, pay, and promotion. Hamermesh and Biddle (1994) ascribe salary disparities based on appearance to taste-based discrimination, consumer productivity inequalities, and occupational crowding in groundbreaking research. Later studies (Biddle and Hamermesh 1998; Hamermesh et al. 2002; Fleener 2005; Fletcher 2009; Rooth 2009; Harper 2010; Hamermesh 2011; Hamermesh 2013; Bóo et al. 2013; Von Bose 2013; Doorley and Sierminska 2015; Patacchini et al. 2015; Bruton 2016) provide more empirical evidence of the beauty premium.

Many academics believe that discrimination in the job market explains the beauty premium (Register and Williams, 1990; Loh, 1993; Averett and Koreman 1996, 1999; Gortmaker et al., 1993; Pagan and Davila, 1997; Mitra, 2010; Cawley, 2004). Several researchers have found that

discriminatory labor market behavior is caused by both businesses and consumers (Harper, 2000; Baum and Ford, 2004). The majority of these research discovered that discrimination in the workplace mostly impacts women. The labor market, on the other hand, frequently penalizes males and females of short height, with the punishment manifesting itself in inequalities in profession (Pagan and Davila, 1997). Rooth (2009) utilized experimental data to establish that salary differentials produced by height are attributable to discriminatory conduct, whereas Heineck (2008) and Case et al. (2009) suggested that wage differentials induced by stature may affect the migration of employees between industries.

2.6 The Beauty Bias: How Physical Appearance Affects Labor Market Outcomes

Many studies have looked at the link between obesity and labor market outcomes in developed countries like the United States and Europe (Quintana– Register and Williams 1990; Rothblum et al. 1990; Averett and Korenman 1994; Roehling 1999; Sarlio-Lahteenkorva and Lahelma 1999; Cawley 2004; D'Hombres and Brunello 2005; Garcia and Quintana-Domeque 2006; Greve 2007; Lundborg et al. 2007; Rooth 2009). These researches all come to the same conclusion: bigger women make less money, whereas the data for males is mixed. Obesity discrimination exists for women but not for men in developing nations like China, according to Jiang and Zhang (2013), especially among middle-income female employees. Obesity discrimination, they discovered, has an impact on both women's labor market access and salaries.

Further study looks at the link between height and job performance. On average, taller people have better occupations with greater pay and are more likely to be promoted (Judge and Cable 2004; Blaker et al. 2013). One argument is that taller employees are thought to be healthier and smarter than shorter employees (Blaker et al. 2013). Being taller, on the other hand, indicates fewer absenteeism and more productivity (Farrell and Stamm 1988; Ford et al. 2011).

Height and weight, on the other hand, do not entirely reflect an individual's look and, to some extent, they indicate productivity differences. The third field of research focuses on appearance, namely face and outer appearance. Individuals with a better appearance earn more (Quinn 1978;

Hamermesh and Biddle 1994; Biddle and Hamermesh, 2011; Von Bose 2013; Doorley and Sierminska 2015; Patacchini et al. 2015). Leader selection and voting behavior are also influenced by facial appearance (Hamermesh, 2006; Little et al. 2007; Berggren et al. 2010; Ahler et al. 2017). Even the creation of human capital may be impacted by looks (Mocan and Tekin 2010; Von Bose 2013). Aside from evidence from Western nations, research suggests that prejudice based on external appearance exists in emerging countries like China (Hamermesh, 1999; Hamermesh et al. 2002; Jiang and Zhang 2013; Guo et al. 2017; Liu et al. 2016). Individual appearance is measured in this research using subjective judgements from survey interviewers. A better look correlates with higher earnings and employment. Guo et al. (2017) discover a non-monotonic connection in which the beauty premium for the second most attractive is higher than the most beautiful.

2.7 Exploring the Role of Appearance Discrimination in the Hiring Process: Insights from a Field Experiment:

The existing literature has a number of shortcomings. For starters, pre-interview appearance prejudice has been mostly overlooked. Discrimination in later phases of the labor market, such as employment, salaries, and professional progression, is the focus of most studies. The resume screening process, on the other hand, might be rife with biases. Second, the preceding literature's appearance metrics aren't optimal, and determining how to reliably assess variations in appearance is a difficult task. For example, in Guo et al. (2017), the investigator rates the investigator's appearance, which may differ from public impression. Furthermore, certain crucial contributing elements, such as vacancy requirements, are left out of their estimates. Third, standard empirical approaches may fail to detect appearance discrimination because it is difficult to minimize bias owing to missing factors and unobserved quirks. In previous studies, descriptive statistics (Judge and Cable 2004; D'Hombres and Brunello 2005; Garcia and Quintana-Domeque 2006; Lundborg et al., 2007) and the metering method (Judge and Cable 2004; D'Hombres and Brunello 2005; Garcia and Quintana-Domeque 2006; Lundborg et al., 2007) were primarily used (Blaker et al. 2013; Biddle and Hamermesh, 2011).

By performing a field experiment, we add to the current research from these viewpoints. Experimental designs can aid in the identification of causal processes. Heilman and Saruwatari (1979) found in a lab experiment that handsome males are constantly favored in the labor market, whereas attractive women have an advantage only in non-managerial jobs. Despite Heckman and Siegelman's (1993) criticisms, researchers have routinely employed lab and field studies to determine causation and found consistent evidence of prejudice (Edelman et al. 2017; Neumark 2018).

2.4 Conclusion:

There is no empirical study concentrating on the impact of lookism and personal attributes practice in Bangladesh's employment sector and its relationship to employee performance, despite extensive research in this area. The literature study provides examples of how hiring practices and lookism can be impacted by personal qualities and the employment economy. Additionally, it has an effect on both an organization and specific people.

Chapter 3: Research Background

3.1 Introduction:

The chapter explains the background of the research and the dominance of physical appearance or personal attributes in Bangladesh periodically.

3.2 Background of the study:

There is evidence to suggest that beauty payoffs, or the advantages that physically attractive individuals tend to have in the labor market in terms of employment and wages, exist in Bangladesh as well. One study published in the Journal of Business and Economics Research found that there was a positive relationship between physical attractiveness and job performance evaluations in Bangladesh, with attractive individuals receiving higher ratings from their supervisors (Hossain & Hossain, 2012). Another study published in the Journal of Social Sciences found that attractive individuals in Bangladesh were more likely to be hired for job interviews and to receive higher starting salaries than their less attractive counterparts (Islam & Hasan, 2014). These findings align with the broader research on beauty payoffs in the labor market, which has consistently demonstrated that attractive individuals tend to have advantages in terms of employment and wages.

In several emerging market economies, including Bangladesh, educated unemployment has taken on unsettling dimensions. According to a 1973 estimate, the unemployment rate for educated job seekers—defined as all economically active people with a secondary school diploma or higher—was at 44%. And there is no proof that the circumstance hasn't gotten worse since then. Unemployment among educated people may, of course, vary depending on their level of education (Islam, 1980).

At three stages of the employment process, the job applicant stage, the work entrance stage, and the job promotion stage, barriers to equitable occupational possibilities for minorities are investigated. Four types of exclusionary barriers are investigated using the authors' recent survey of 4078 employers covering a nationally representative sample of jobs: segregated networks at

the candidate stage, information at the entrance level, there is prejudice and statistical discrimination, and at the promotion level, there are restricted internal markets. Equal employment opportunity policies aimed at occupational processes and employment outcomes have practical ramifications (Braddock, 1987).

In our current communities, the concept of ugly as a stigma, as contrasted to the nearly despotic idea of beauty, is a typical occurrence (Vigarello, 2004). The physical or sartorial aspects of appearance, which are part of the notion of beauty (Garner Moyer, 2007), can be evaluated (Pages-Delon, 1989). Their combined appearance is referred to as corporeal appearance, which is defined as "heard as the body and items carried by him, the body, its presentation, and representation" (Pages-Delon, 1989). Enhancement techniques, such as the use of cosmetics, have advanced dramatically in recent years. Cosmetics aid in increasing women's beauty and admiration (Drakuli, 1993, 1996). The beauty of a woman's face ensures that she will be rewarded socially (Kertechian, 2016).

In addition, according to Goffman (1973), the recruiting process is a stage in which the individual employs techniques to benefit from his or her appearance. As a result, it is worthwhile to consider the influence of cosmetics as an embellishing agent on the recruiting process. To put it another way, will a recruiter prefer to call back a woman wearing cosmetics or a woman who is not wearing makeup for the same job? (Kertechian, 2016)

Since unobserved factors related to productivity or missing variables might invalidate results in research utilizing decomposition regressions and precisely planned experimental techniques, demonstrating causation is difficult (Neumark 2012). Beauty premiums quantify discriminatory labor market outcomes that include employers' views of productivity gaps, whether in terms of recruiting decisions or compensation differentials. Employers only witness candidates' productivity and aptitude in part during interviews, and it is experimentally impossible to fully control for elements that influence applicant performance and interviewer judgments. As a result, it's difficult to tell the difference between solely taste-based prejudice and statistical discrimination during the interview stage. (Deng, 2019)

Chine Evan in his study investigates the self-evaluation of minority women, specifically Asian and Black women, in relation to mainstream Western beauty standards. Previous research has shown that Black women are able to maintain positive self-evaluations about their physical appearance despite the presence of these standards, but there have been few studies on Asian women and their responses to mainstream standards of beauty. This study aims to understand whether Asian women's responses to these standards are more similar to those of White women or Black women. The study also explores the use of social comparison and psychological disidentification as coping strategies among minority women in relation to mainstream beauty standards (Chin Evans & McCONNELL, 2003).

Last but not the least some key evidences from several countries showed up results like these; there is a substantial body of research suggesting that beauty payoffs, or the advantages that physically attractive individuals tend to have in the labor market in terms of employment and wages, exist in a variety of countries. One study published in the Journal of Applied Psychology found that attractive individuals in the United States were more likely to be hired for job interviews and to receive higher starting salaries than their less attractive counterparts (Hosoda, Stone-Romero, & Coats, 2003). Another study published in the British Journal of Psychology found that attractive individuals in the United Kingdom were perceived as more competent and trustworthy and were more likely to be hired for managerial positions (Dunning, Meyerowitz, & Holzberg, 1989). Similarly, a study published in the Journal of Social Psychology found that attractive individuals in Canada were more likely to be hired for job interviews and to receive higher starting salaries than their less attractive counterparts (Dion, Berscheid, & Walster, 1972). These findings align with the broader research on beauty payoffs in the labor market, which has consistently demonstrated that attractive individuals tend to have advantages in terms of employment and wages in a variety of countries.

3.3 Conclusion:

In conclusion, numerous studies have found evidence that there are beauty payoffs in the labor market, meaning that physically attractive individuals tend to have advantages in terms of

employment and wages. These payoffs are thought to be the result of a variety of factors, including societal biases and discrimination, as well as the influence of attractiveness on perceptions of intelligence, competence, and trustworthiness. While the existence of beauty payoffs may be controversial, the research suggests that they are a real and significant phenomenon that deserve further investigation.

Chapter 4: Data and Method

4.1 Introduction:

This chapter describes the theoretical framework and research methodology that were employed. The conceptual research model, measures for the study variables, and data design and survey methods are only a few of the fundamental subjects covered in this chapter.

4.2 Theoretical Framework:

The theoretical framework employed in the study is the probit model adapted from Tajfel and Turner (1979) to understand the impact of physical attractiveness on employment outcomes for BBA and Computer Science graduates. The study aims to examine whether physical attractiveness serves as a signal for competence and likeability, and how this affects job market outcomes, including hiring decisions, job offers, and starting salaries. Probit model provides a useful framework for understanding how physical appearance can shape perceptions of social identity and influence hiring decisions, as well as how these perceptions can impact job satisfaction and word of mouth recommendations. The study will use probit regression analysis to model the relationship between physical attractiveness and employment outcomes, controlling for relevant covariates such as academic performance, work experience, and demographic characteristics.

4.3 Probit model:

The Probit model is a statistical model that is used to predict the probability of a particular event occurring based on a set of independent variables. It assumes that the dependent variable is a binary outcome (i.e., it can take on only two values, such as "yes" or "no," "success" or "failure," etc.) and that the relationship between the dependent variable and the independent variables is linear.

The Probit model is used in a variety of fields, including economics, finance, marketing, and psychology. It is particularly useful in situations where the dependent variable is a dichotomous outcome and the independent variables are continuous or ordinal.

One advantage of the Probit model is that it allows researchers to estimate the probability of an event occurring for any given set of independent variables, rather than just predicting the occurrence or non-occurrence of the event. This can be useful for understanding the factors that are most strongly associated with the outcome of interest.

The Probit model is often used in conjunction with other statistical models, such as logistic regression, which is another popular method for analyzing dichotomous dependent variables.

Both the Probit model and the logit model are statistical models that are used to analyze dichotomous dependent variables (i.e., variables that can take on only two values, such as "yes" or "no," "success" or "failure," etc.). Both models assume that the relationship between the dependent variable and the independent variables is linear.

One main difference between the probit model and the logit model is the way in which they model the relationship between the dependent variable and the independent variables. The probit model models this relationship using a cumulative normal distribution function, while the logit model uses a logistic function. This means that the probit model assumes that the latent variable (i.e., the underlying continuous variable that is not directly observed) follows a normal distribution, while the logit model assumes that the latent variable follows a logistic distribution.

Another difference between the two models is the way in which the parameters are estimated. The probit model uses maximum likelihood estimation (MLE), while the logit model uses maximum likelihood estimation with a logit transformation.

There is no one "best" model to use in all situations, and the choice between the probit model and the logit model often depends on the specific research question and the characteristics of the data. Some researchers may prefer the probit model because it is based on the normal distribution, which is a commonly used distribution in many fields. Others may prefer the logit model because it is more robust to outliers and can handle small sample sizes better. Ultimately,

the decision between the two models will depend on the research question, the nature of the data, and the assumptions of the models.

4.4 Data design and Survey technique:

A quantitative approach was undertaken to collect the cross-sectional data for this study. The CV of 250 respondents was taken of the fresh graduates from Career Counseling Center (CCC) Department of East West University. The CV features of the respondents were scrutinized to analyze the determinants that help a fresh graduate for enrolling in a job.

A combination of secondary and primary data from the responses was used to create the cross-sectional data. The basic information that was provided in their CVs, such as information about their hobbies, participation in any extracurricular activities during their time at university, and the development of software abilities, was gathered.

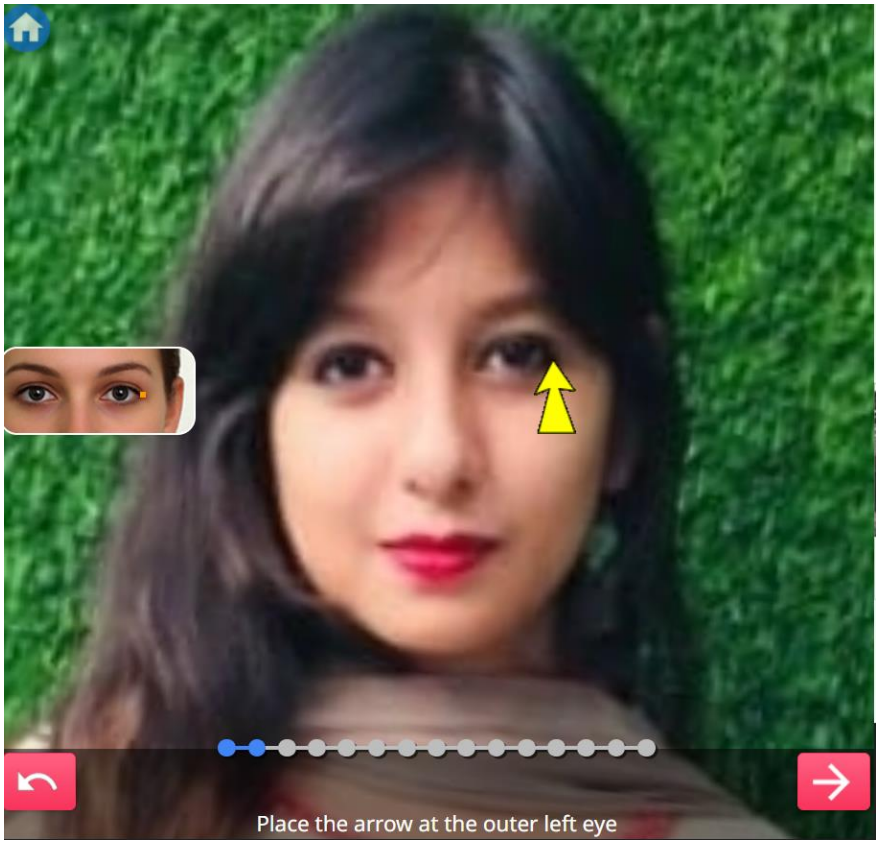
Interviews were conducted over the phone to get additional information about the graduates' post-graduation information that was not included in their university-recorded CVs. Information was collected on:

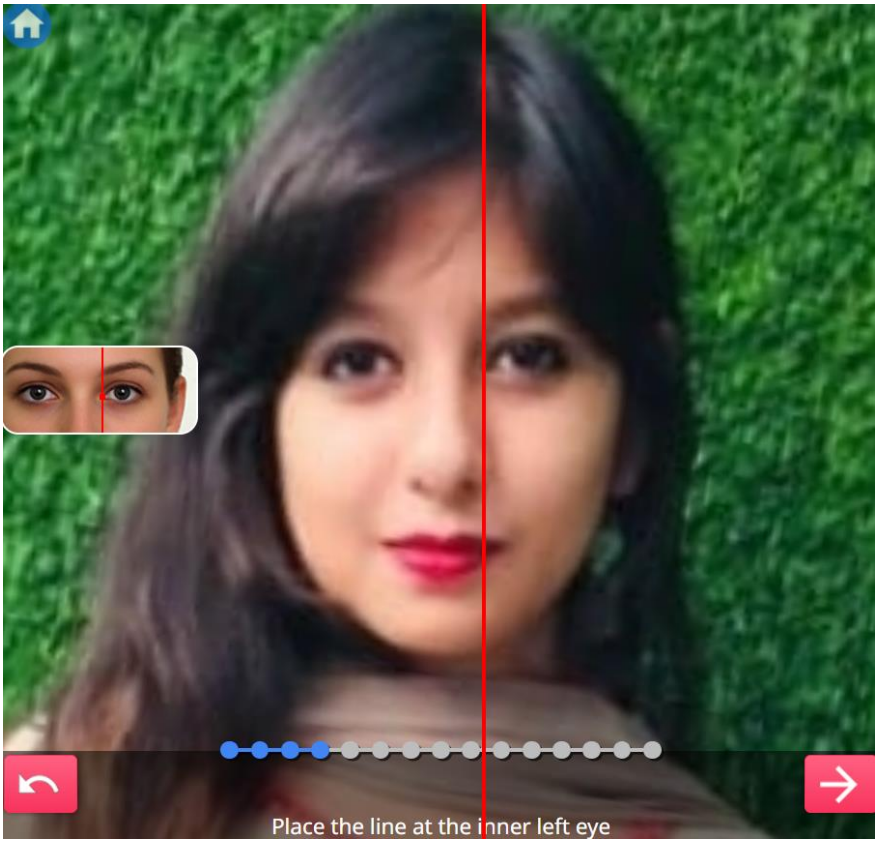
1. Whether they did internship or thesis?
2. Are they currently employed or not?
3. Whether they get the job through internship or not?
4. Whether they use any direct recommendation or not?

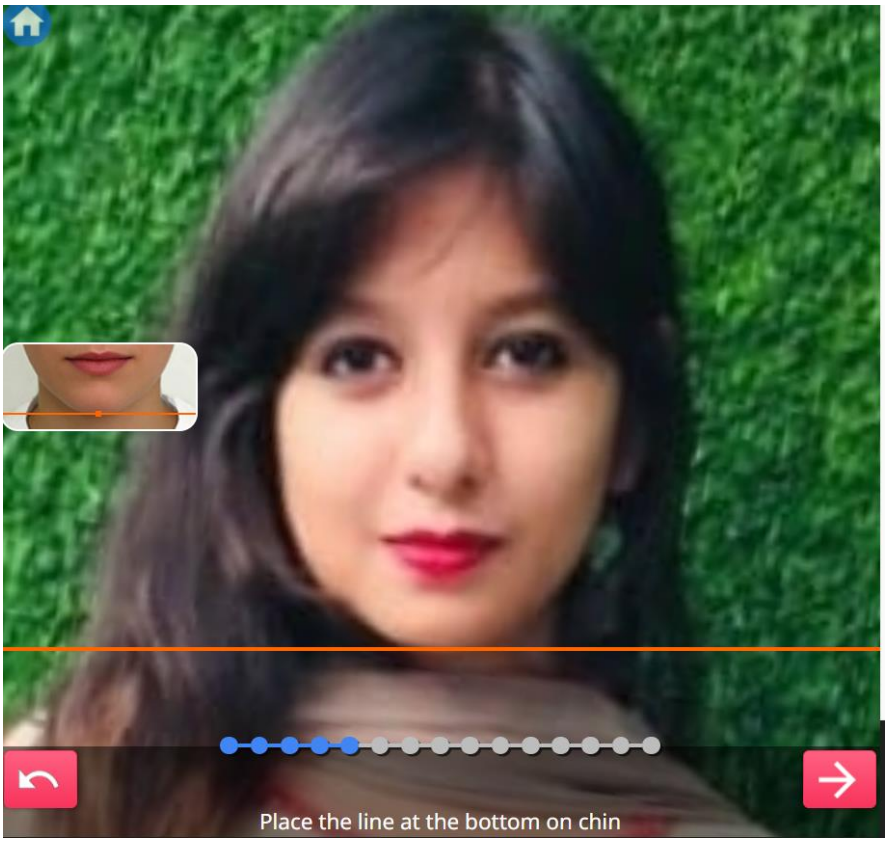
4.5: How do I measure beauty?

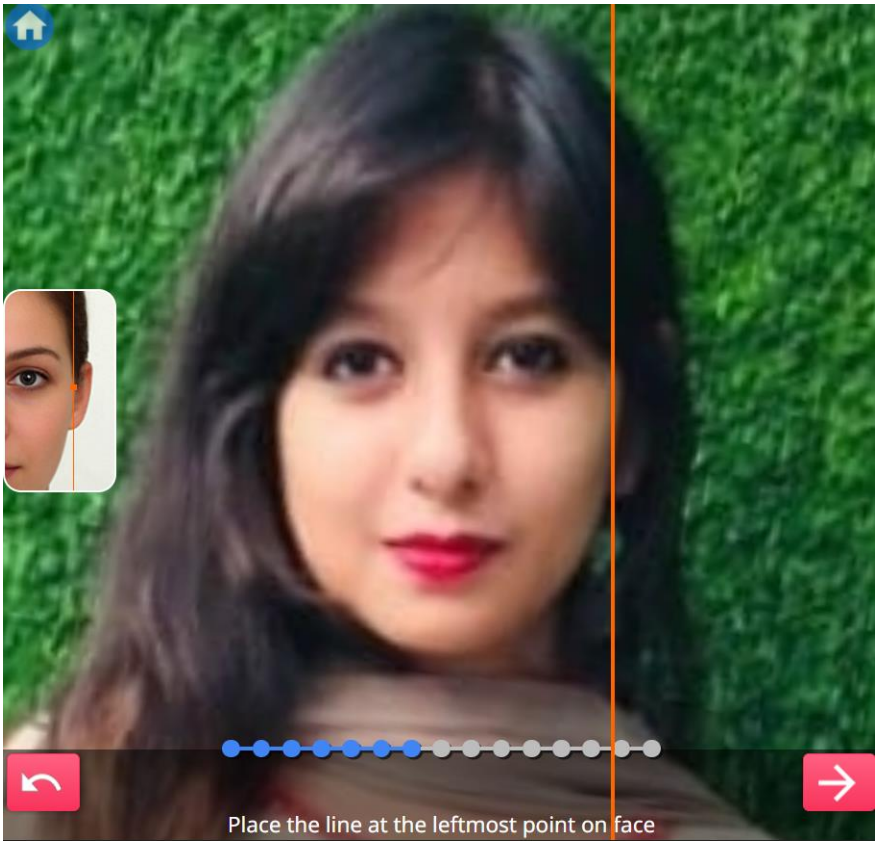
Everyone uses professional picture in their CV. When monitoring CV, people first glance at this picture and inadvertently measure symmetrical beauty from that picture as a measure of beauty. For that we use a verified website to measure the symmetric beauty of these 250 respondents. The website link is: https://www.prettyscale.com/?fbclid=IwAR0qB7fkHW8-IbaOb1bFfIqckA_nHKhJ0WrZtec6LxyhWDdUg00hK1vmf_4 .

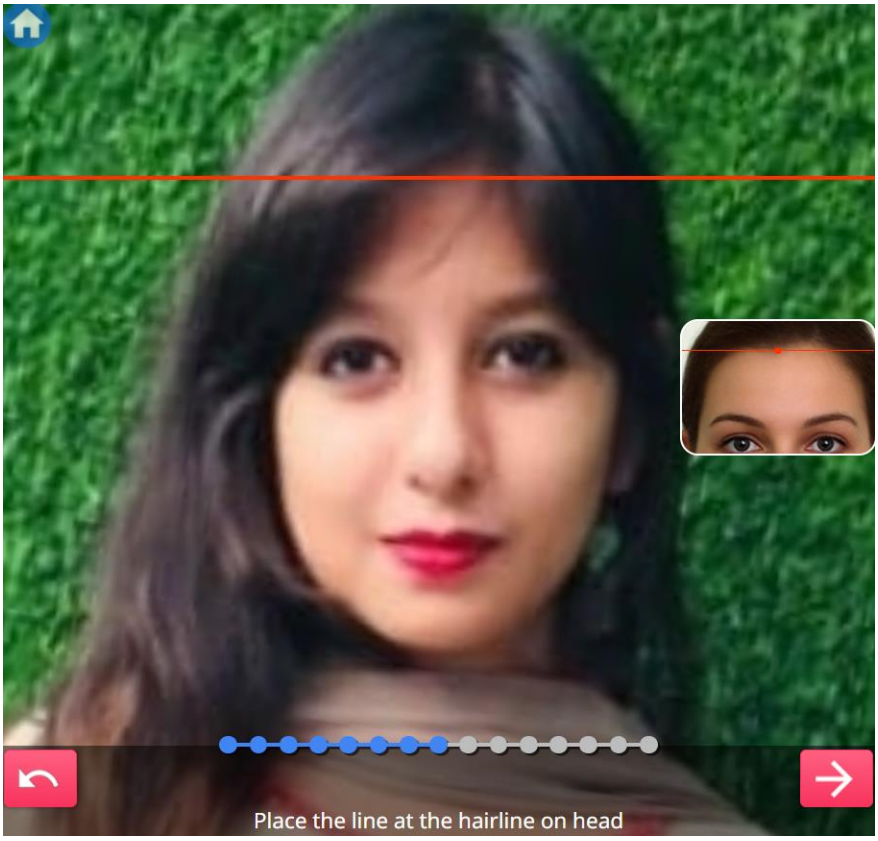
The website is much easier to use. It guides through the whole process of examining a picture. It first adjusts the face of the individual according to a scale from the selected the photo of the individual. According to the scale, the website tells the percentage of the individual's beauty. Some of the photos of how it works are given below.

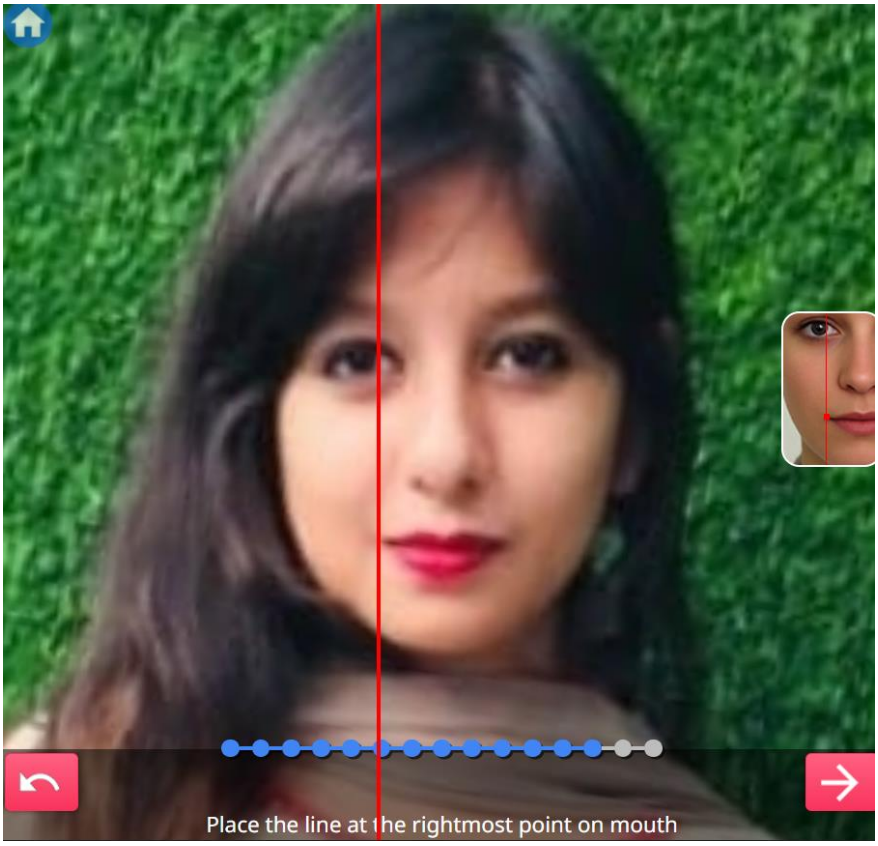


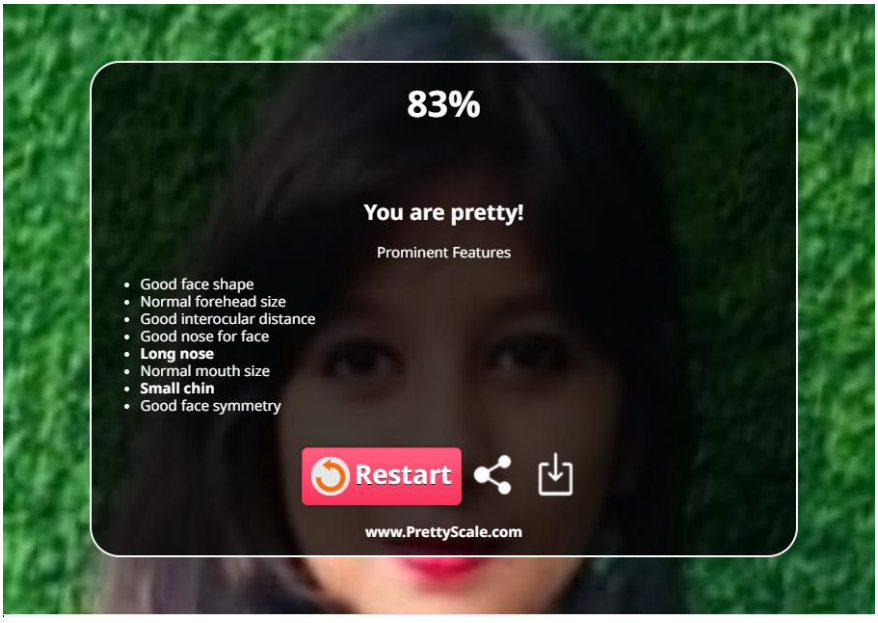

Place the line at the inner left eye


Place the line at the bottom on chin


Place the line at the leftmost point on face


Place the line at the hairline on head


Place the line at the rightmost point on mouth


83%
You are pretty!
Prominent Features
Good face shape
Normal forehead size
Good interocular distance
Good nose for face
Long nose
Normal mouth size
Small chin
Good face symmetry
Restart
www.PrettyScale.com

4.6 Mathematical way of writing model:

- **Structural equation model 1**

$$P_1(Employed = 1|x) = \Phi(\beta 0 + \beta 1\, Face_{rate} + \beta 2\, Male_i + \beta 3\, Bba_i + \beta 4\, Male\#face\_rate + \beta 5\, Bba\#face\_rate + \beta 6 Religion_i + \beta 7\, Extracur_i + \beta 8\, Cumgpa + \beta 9\, Thesis_i + \beta 10 Participation\ Award_i + \beta 11 Nofhobby_i + \beta 12 Hobby_i + \beta 13\, Noflanguage + \beta 14 Fitness_i + \beta 15 Work\_exper_i) + \varepsilon$$

- **Simultaneous structural equation model 2**

$$P_1(Employed = 1|x) = \Phi(\beta 0 + \beta 1\, Face_{rate} + \beta 2\, Male_i + \beta 3\, Bba_i + \beta 4\, Male\#face\_rate + \beta 5\, Bba\#face\_rate + \beta 6 Religion_i + \beta 7\, Extracur_i + \beta 8\, Gpapos + \beta 9\, Thesis_i + \beta 10 Participation\ Award_i + \beta 11 Nofhobby_i + \beta 12 Hobby_i + \beta 13\, Noflanguage + \beta 13 Fitness_i + \beta 14 Work_{exper_i} + \beta 15\ 0.Extracur\#Cumgpa + \beta 16\ 1.Extracur\#Cumgpa) + \varepsilon$$

- **Simultaneous structural equation model 3**

$$P_1(Employed = 1|x) = \Phi(\beta 0 + \beta 1\, Face_{rate} + \beta 2\, Male_i + \beta 3\, Bba_i + \beta 4\, Male\#face\_rate + \beta 5\, Bba\#face\_rate + \beta 6 Religion_i + \beta 7\, Extracur_i + \beta 8\, Cumgpa + \beta 9\, Cumgpa\#extracur + \beta 10\, Thesis_i + \beta 11 Participation\ Award_i + \beta 12 Nofhobby_i + \beta 13 Hobby_i + \beta 14\, Noflanguage + \beta 15 Fitness_i + \beta 16 Work\_exper_i) + \varepsilon$$

Here, x is coefficient of endogenous variable, α is the constant; β is the coefficient of exogenous variable.

The given models are structural equation models that aim to explore the relationship between various factors and the probability of being employed for BBA and Computer Science graduates. The models are based on the topic of whether beauty affects job market outcomes for these graduates.

In all three models, the endogenous variable is whether the graduate is employed or not, while the exogenous variables include factors such as face rate, gender, religion, extracurricular activities, cumulated GPA, work experience, and hobbies, among others.

In Model 1, the probability of being employed is a function of the exogenous variables, including an interaction between face rate and gender, as well as face rate and BBA degree, and an interaction between extracurricular activities and cumulated GPA.

In Model 2, the probability of being employed is also a function of the exogenous variables, including an interaction between extracurricular activities and cumulated GPA, as well as an interaction between extracurricular activities and cumulated GPA squared.

In Model 3, the probability of being employed is a function of the exogenous variables, including an interaction between cumulated GPA and extracurricular activities and an interaction between cumulated GPA and cumulated GPA squared.

Overall, these models provide insights into the various factors that affect the job market outcomes of BBA and Computer Science graduates and highlight the importance of considering multiple variables simultaneously when analysing this relationship.

4.7 Conclusion:

In conclusion, this chapter discusses the theoretical framework and research methodology used in a study to understand the impact of physical attractiveness on employment outcomes for BBA and Computer Science graduates. The study aims to examine whether physical attractiveness serves as a signal for competence and likeability and how this affects job market outcomes, including hiring decisions, job offers, and starting salaries. The Probit model was employed to model the relationship between physical attractiveness and employment outcomes, controlling for relevant covariates such as academic performance, work experience, and demographic characteristics. The Probit model is a statistical model used to predict the probability of a particular event occurring based on a set of independent variables, assuming that the dependent variable is a binary outcome. The study collected cross-sectional data using a combination of secondary and primary data from the CVs of 250 respondents and interviews conducted over the phone. The respondents' beauty was measured using a verified website that measures symmetrical beauty. The choice between the Probit model and the logit model often depends on the specific research question and the characteristics of the data. Ultimately, the decision between the two models will depend on the research question, the nature of the data, and the assumptions of the models.

Chapter 5: Findings

5.1 Introduction:

The results of the data analysis and the study's interpretation are discussed in this chapter. The chapter covers the descriptive statistics of the demographic variables, the skills, extracurricular pursuits, interests, and work experiences of the employees, as well as the Probit modelling of the data.

5.2 Descriptive statistics analysis of demographic characteristics:

The respondent's gender, age, location, marital status, highest academic degree, study discipline, and highest education level in the family were estimated using descriptive analysis. The variables shown in the table below were extracted from the gathered CVs.

Firstly, in case of gender, there were 250 responses in total, 169 of them were men and 81 of whom were women. And in percentage there were 67.60% of male and 32.40% female who participated in this research.

In case of stating the age only 116 respondents mentioned it in their CVs' and the other remaining kept it anonymous, from there 71 candidates were within the age range of 22-24-year-old, which is 61.21% out of 100%, 42 respondents were in the age range of 25-27-year-old, which is 36.21%, and the last 3 respondents fell in the age range of 28-30-year-old, which is 2.59%.

In the case of the variable division, 47, or 18.80%, participants were from Chattogram, 176, or 70.40%, participants were from Dhaka, and the remaining 27, or 10.80%, participants were from other divisions.

According to the next variable, "Religion," out of 250 respondents, or 100%, 233, or 93.20%, were Muslims, and the remaining 17, or 6.80%, were non-Muslims.

Only 216 candidates responded to the variable “SSC Background,” while the others did not. From there, 121 candidates, or 56.02%, came from a “science” background, 94, or 43.42%, from a “business” background, and 1 participant, or 0.42%, from an “arts” background.

Similarly, it goes with “HSC Background”, where 219 candidates responded while the others did not mention in the CV. From there, 102 candidates, or 46.58%, came from a “science” background, 116 or 52.97%, came from a “business” background, and 1 participant, or 0.46%, from an “arts” background.

Likewise, for the variable "Under graduation Background," 250 candidates given information. From there, 68 candidates 27.20% came from a "science" background; 180 candidates 72.00% came from a "business" background; and 2 candidates 0.80% came from an "arts" background.

On the other hand, a handful of candidates responded to the query in their CV about "curriculum results." Following then, 235 observations provided data for SSC gpa, with a mean of 4.82 and a standard deviation of 0.32. Again, 238 observations replied for the HSC gpa, with a mean of 4.53 and an SD of 0.45. Once more, 222 observations for university cgpa answered, with a mean of 3.10 and a standard deviation of 0.40.

Table: Demographic Characteristics of the respondents

Variables	Frequency (f)	Percentage (%)
Gender		
Male	169	67.60
Female	81	32.40
Total	250	100.00
Age		
22 -24	71	61.21
25-27	42	36.21
28-30	3	2.59
Total	116	100.00

Division			
Chattogram	47	18.80	
Dhaka	176	70.40	
Others	27	10.80	
Total	250	100.00	
Religion			
Muslim	233	93.20	
Non-Muslim	17	6.80	
Total	250	100.00	
SSC Background			
Science	121	56.02	
Business_Studies	94	43.52	
Arts	1	0.46	
Total	216	100.00	
HSC Background			
Science	102	46.58	
Business_Studies	116	52.97	
Humanities	1	0.46	
Total	219	100.00	
Under_graduation group			
Computer_Science	68	27.20	
Business_Administr.	180	72.00	
Arts	2	0.80	
Total	250	100.00	
Curriculum Results	**Observations**	**Mean**	**Standard deviation**
SSC_gpa	235	4.816723	.312962
HSC_gpa	238	4.530924	.4521314
University_cgpa	222	3.104234	.4042434

5.3 Personal Information from Curriculum vitae

The table presents the personal information of 250 individuals as recorded in their curriculum vitae. The first variable, Extra-Curricular Activities, shows that 67.6% of the individuals have engaged in such activities, while the remaining 32.4% have not. This suggests that a significant portion of the sample is involved in non-academic activities beyond their studies or work.

The second variable, Training, indicates that only 27.2% of the individuals have received some form of training, while the majority (72.8%) have not. This suggests that the sample may not have had access to specialized or professional training programs.

The third variable, English Language, shows that 74.4% of the individuals are proficient in English, while the remaining 25.6% are not. This may indicate the prevalence of English as a language of communication and education in the sample population.

The fourth variable, Hindi Language, indicates that only 32.4% of the individuals are proficient in Hindi, while the majority (67.6%) are not. This suggests that the sample may be diverse in terms of language and culture.

The fifth variable, Work Experience, shows that 39.2% of the individuals have work experience, while the remaining 60.8% do not. This may suggest that the sample is relatively young or at an early stage in their career.

Finally, the sixth variable, Internship, indicates that 77.11% of the individuals have done an internship, while the remaining 22.89% have not. This 22.89% did thesis instead of internship. This suggests that the sample may be composed of students or recent graduates who have had the opportunity to gain practical experience through internships.

Table: Personal Information from Curriculum vitae			
Variables		**Frequency (f)**	**Percentage (%)**
Extra-Curricular Activities	Yes	169	67.60
	No	81	32.40

Total		250	100.00
Training	Yes	182	27.20
	No	68	72.80
Total		250	100.00
English Language	Yes	186	74.40
	No	64	25.60
Total		250	100.00
Hindi Language	Yes	81	32.40
	No	169	67.60
Total		250	100.00
Work Experience	Yes	98	39.20
	No	152	60.80
Total		250	100.00
Internship	Yes	192	77.11
	No	58	22.89
Total		220	100.00

5.4 Achievements from Curriculum vitae

The table presents the achievements from the curriculum vitae of 250 respondents, including their academic awards, best presenter awards, participation awards, and club awards.

Overall, the table provides insight into the level of achievement and recognition obtained by the respondents in different areas. Academic awards were the most commonly achieved recognition, with 35.60% of respondents having received such awards, indicating that the respondents had made significant academic accomplishments.

Best presenter awards were the least common achievement, with only 6.80% of respondents having received this type of recognition. This suggests that the respondents were not very involved in activities that required public speaking or presentation skills.

Furthermore, the results showed that participation awards and club awards were achieved by 17.20% and 21.60% of respondents, respectively. This indicates that a relatively small proportion of the respondents had participated in extracurricular activities or clubs, which could suggest that they may not have been very involved in social or community activities.

Overall, the table suggests that while the respondents had achieved academic recognition, they may not have been as active in extracurricular activities, which could be important for building well-rounded skills and experiences.

Table: Achievements from Curriculum vitae			
Variables		**Frequency (f)**	**Percentage (%)**
Academic Award	Yes	89	35.60
	No	161	64.40
Total		250	100.00
Best Presenter Award	Yes	17	6.80
	No	233	93.20
Total		250	100.00
Participation Award	Yes	43	17.20
	No	207	82.80
Total		250	100.00
Club Award	Yes	54	21.60
	No	196	78.40
Total		250	100.00

5.5 Hobbies/Interest's from Curriculum vitae

The table shows the frequency and percentage of respondents who mentioned having certain hobbies/interests in their curriculum vitae (CV).

Reading hobby: 93 out of 250 respondents (37.20%) mentioned having a reading hobby, while 157 (62.80%) did not. Writing hobby: 58 (23.20%) mentioned having a writing hobby, while 192

(76.80%) did not. Exercise hobby (Meditation/Yoga/Gym): 31 (12.40%) mentioned having an exercise hobby, such as meditation, yoga, or going to the gym, while 219 (87.60%) did not. Dancing hobby: 31 (12.40%) mentioned having a dancing hobby, while 219 (87.60%) did not. Travel hobby: 82 (32.80%) mentioned having a travel hobby, while 168 (67.20%) did not. Music hobby: 80 (32.00%) mentioned having a music hobby, while 170 (68.00%) did not. Outdoor hobby (Outdoor games/activities): 66 (26.40%) mentioned having an outdoor hobby, such as playing outdoor games or doing outdoor activities, while 184 (73.60%) did not. Movie hobby: 86 (34.40%) mentioned having a movie hobby, while 164 (65.60%) did not. Art/craft hobby: 59 (23.60%) mentioned having an art/craft hobby, while 191 (76.40%) did not. Cooking hobby: 59 (23.60%) mentioned having a cooking hobby, while 191 (76.40%) did not. Photography hobby: 75 (30.00%) mentioned having a photography hobby, while 175 (70.00%) did not. Overall, the most commonly mentioned hobbies were reading (37.20%), movie watching (34.40%), and travel (32.80%). The least commonly mentioned hobbies were exercise (12.40%) and dancing (12.40%). The majority of respondents did not mention having a writing, outdoor, art/craft, cooking, or photography hobby.

Table: Hobbies/Interest's from Curriculum vitae

Variables		**Frequency (f)**	**Percentage (%)**
Reading _hobby	Yes	93	37.20
	No	157	62.80
Total		250	100.00
Writing_hobby	Yes	58	23.20
	No	192	76.80
Total		250	100.00
Exercise_hobby (Meditation/Yoga/Gym)	Yes	31	12.40
	No	219	87.60
Total		250	100.00
Dancing_hobby	Yes	31	12.40
	No	219	87.60

Total		250	100.00
Travel_hobby	Yes	82	32.80
	No	168	67.20
Total		250	100.00
Music_hobby	Yes	80	32.00
	No	170	68.00
Total		250	100.00
Outdoor_hobby (Outdoor games/activities)	Yes	66	26.40
	No	184	73.60
Total		250	100.00
Wmovie_hobby	Yes	86	34.40
	No	164	65.60
Total		250	100.00
Artcraft_hobby	Yes	59	23.60
	No	191	76.40
Total		250	100.00
Cooking_hobby	Yes	59	23.60
	No	191	76.40
Total		250	100.00
Photography_hobby	Yes	75	30.00
	No	175	70.00
Total		250	100.00

5.6 Gender wise LinkedIn and GitHub account

In this section, the gender disparities for possessing a LinkedIn account have been compared using the respondents' information for the two variables, "Gender" and "LinkedIn and GitHub account".

Compared to men, who own a LinkedIn account at a percentage of 49.70, in contrast to men only 45.68% of women have LinkedIn account. There may be a variety of underlying factors that discourage use of LinkedIn.

Table: Gender wise LinkedIn and GitHub account			
Gender	**Linkedingit**		**Total**
	No	Yes	
Female	54.32	45.68	100.00
Male	50.30	49.70	100.00
Total	51.60	48.40	100.00

5.7 Curriculum results in terms of curriculum background

The table shows the percentage of students with different academic backgrounds and their corresponding GPAs.

For SSC, 54.63% of science students had a GPA between 3.50-4.00, while 44.88% of business studies students and 0.49% of arts students had the same GPA range. In the GPA range of 4.01-4.50, 33.33% of science students, 62.50% of business studies students, and 4.17% of arts students had this score. For the GPA range of 4.51-5.00, 57.47% of science students and 42.53% of business studies students had this score, while no arts students had a GPA in this range.

In terms of HSC, 46.41% of science students had a GPA in between 4.01-5.00, while 53.11% of business studies students had the same score. No arts students had a GPA in this range. For the GPA range of 3.01-4.00, 25.00% of science students, 70.83% of business studies students, and 4.17% of arts students had this score. In the GPA range of 1.50-3.00, 50.00% of science students and 50.00% of business studies students had this score.

In terms of university CGPA, 27.48% of science students had a CGPA in between 3.51-4.00, while 79.49% of business studies students had a CGPA in between 3.51-4.00. Only 2.38% of arts

students had a CGPA in the range of 2.00-3.00. In the range of 3.01-3.50, 23.23% of science students and 76.77% of business studies students had this score.

Overall, the data suggests that students with a science background tend to perform better academically than those with a business studies or arts background. However, it is important to note that the sample size for the arts background category is very small, which limits the generalizability of the findings.

Table: Curriculum results in terms of curriculum background

SSC_gpa	**SSC_background**			**Total**
	Science	Business_Studies	Arts	
3.50-4.00	57.14	42.86	0.00	100.00
4.01-4.50	33.33	62.50	4.17	100.00
4.51-5.00	57.47	42.53	0.00	100.00
Total	54.63	44.88	0.49	100.00
HSC_gpa	**HSC_background**			**Total**
	Science	Business_Studies	Arts	
1.50-3.00	50.00	50.00	0.00	100.00
3.01-4.00	25.00	70.83	4.17	100.00
4.01-5.00	49.18	50.82	0.00	100.00
Total	46.41	53.11	0.48	100.00
University_cgpa	**Undergradgroup**			**Total**
	Science	Business_Studies	Arts	
2.00-3.00	35.71	61.90	2.38	100.00
3.01-3.50	23.23	76.77	0.00	100.00
3.51-4.00	20.51	79.49	0.00	100.00
Total	27.48	71.62	0.90	100.00

5.8 Relationship in between Employment and University result:

The table shows the relationship between university CGPA and employment status. The data suggests that there is a higher percentage of employed individuals in each CGPA range compared to unemployed individuals. Specifically, the highest percentage of employed individuals (66.67%) was observed in the CGPA range of 3.51-4.00, followed by 57.14% in the CGPA range of 3.01-3.50, and 55.42% in the CGPA range of 2.00-3.00. On the other hand, the highest percentage of unemployed individuals (44.58%) was observed in the CGPA range of 2.00-3.00, followed by 42.86% in the CGPA range of 3.01-3.50 and 33.33% in the CGPA range of 3.51-4.00. Overall, the data suggests that having a higher university CGPA might increase the chances of getting employed.

Table: Relationship in between Employment and University result

University_cgpa	Employed		Total
	No	Yes	
2.00-3.00	44.58	55.42	100.00
3.01-3.50	42.86	57.14	100.00
3.51-4.00	33.33	66.67	100.00
Total	41.82	58.18	100.00

5.9 Relationship in between Employment and Under Graduate group:

This table shows the relationship between employment and undergraduate group. Among the employed individuals, 71.21% are from the Science group, 49.72% from the Business Studies group, and 100% from the Arts group. On the other hand, among the unemployed individuals, 50.28% are from the Business Studies group, 28.79% from the Science group, and none from the Arts group. Overall, the majority of employed individuals are from the Science and Business Studies group, while none of the unemployed individuals are from the Arts group.

Table: Relationship in between Employment and Under Graduate group

Undergradgroup	Employed		Total
	No	Yes	
Science	28.79	71.21	100.00
Business_Studies	50.28	49.72	100.00
Arts	0.00	100.00	100.00
Total	51.60	48.40	100.00

5.10 Relationship in between Employment and Work experience:

This table shows the relationship between employment and work experience. The data is presented in a contingency table with two variables: "Work experience" (categorized as "No" or "Yes") and "Employed" (also categorized as "No" or "Yes"). The table shows that among those who do not have work experience, 50.33% are not employed, while 49.67% are employed. However, among those who have work experience, the majority (65.63%) are employed. The overall pattern suggests that having work experience may increase the likelihood of being employed.

Table: Relationship in between Employment and Work experience			
Work experience	**Employed**		**Total**
	No	Yes	
No	50.33	49.67	100.00
Yes	34.38	65.63	100.00
Total	44.13	55.87	100.00

5.11 The Probit Regression results:

In the three models provided, the dependent variable is "Employed" which takes a value of 1 if the individual is employed and 0 if they are not employed. The independent variables are a set

of individual and demographic characteristics such as face rate, gender, religion, cumulative GPA, extra-curricular activities, hobbies, work experience, and awards received, among others.

In Model 1, the significant variables at a 95% confidence level are Bba#c.Face_rate, No of hobby, Reading_hobby, Music_hobby, and Photograhy_hobby. The coefficient of Bba#c.Face_rate is positive, indicating that there is a positive interaction between the Business Administration major and face rate. Meanwhile, the coefficients of No of hobby, Reading_hobby, Music_hobby, and Photograhy_hobby are negative, suggesting that having these hobbies decreases the likelihood of being employed.

In Model 2, the significant variables at a 95% confidence level are Bba#c.Face_rate, No of hobby, Reading_hobby, Music_hobby, Photograhy_hobby, and Extracur#Cumgpa. The coefficient of Extracur#Cumgpa is positive, indicating that there is a positive interaction between extracurricular activities and cumulative GPA. Meanwhile, the coefficients of No of hobby, Reading_hobby, Music_hobby, and Photograhy_hobby remain negative.

In Model 3, the significant variables at a 95% confidence level are Bba#c.Face_rate, No of hobby, Reading_hobby, Music_hobby, Photograhy_hobby, and Cumulative GPA. Compared to Model 1, the variable of Cumulative GPA replaces the variable of Business Administration, and an additional variable of Cumulative GPA interaction with Extracurricular activities is added. The coefficients of significant variables are consistent with the ones in Model 1 and 2.

The coefficients represent the effect of each independent variable on the probability of an individual being employed. The t-statistic in parentheses is used to test the significance of each coefficient. A t-statistic larger than 1.64 indicates that the coefficient is significant at the 90% confidence level, a t-statistic larger than 1.96 indicates that the coefficient is significant at the 95% confidence level, and a t-statistic larger than 2.33 indicates that the coefficient is significant at the 99% confidence level.

Model (1) includes the basic set of independent variables and their effect on the dependent variable. Model (2) adds the interaction terms of extra-curricular activities with cumulative GPA and work experience. Model (3) includes the interaction terms of cumulative GPA with extra-curricular activities and hobbies.

Overall, the models show that face rate has a negative effect on the probability of an individual being employed. Business administration and certain hobbies such as reading and photography have a positive effect on the probability of being employed. Cumulative GPA and work experience have a negative effect on the probability of being employed when not interacting with any other variable. However, when interacting with extra-curricular activities or hobbies, the effect becomes positive.

Looking at the table, we can see that all three models have significant coefficients as there are asterisks next to some of the coefficients. Specifically, the coefficients for "Bba#c.Face_rate", "Thesis", "Reading_hobby", "Music_hobby", "Photography_hobby", "Travel_hobby", "No of hobby" are significant across all three models, with p-values less than 0.05 or 0.01.

However, the significance level of some coefficients varies across the models. For example, in model (1), the coefficient for "Extracurricular" is significant at the 90% level, whereas in models (2) and (3), it is not significant. Similarly, in model (1), the coefficient for "Cumulative GPA" is significant at the 90% level, whereas in model (3), it is not significant.

Therefore, it is not appropriate to say that one model is significantly better than the others, as each model has significant coefficients that the other models do not. Instead, we should consider the research question, the theoretical background, and the model fit measures to determine which model is most appropriate for the given research context.

	Model (1)	Model (2)	Model (3)
	Employed	Employed	Employed
Employed			
Face_rate	-2.435	-2.211	-2.202
	(-1.21)	(-1.08)	(-1.07)
Business Administration	-2.659**	-2.388*	-2.386*
	(-1.84)	(-1.62)	(-1.62)
Bba#c.Face_rate	2.985*	2.675*	2.661*
	(1.51)	(1.33)	(1.32)
Male	0.0657	0.0336	0.0293
	(0.05)	(0.02)	(0.02)
Male#c.Face_rate	0.160	0.229	0.228
	(0.08)	(0.12)	(0.12)

Religion	**0.253**	**0.236**	**0.239**
	(0.70)	**(0.65)**	**(0.66)**
Cumulative gpa	**0.0165**		**-0.0535**
	(0.48)		**(-1.13)**
Extra curricular	**0.166**	**-1.044**	**-1.049**
	(0.85)	**(-1.27)**	**(-1.28)**
Thesis	**0.351***	**0.365***	**0.361***

	(1.42)	(1.49)	(1.48)
Participation_award	0.310	0.334*	0.341*
	(1.27)	(1.31)	(1.36)
No of hobby	-0.268**	-0.255**	-0.254**
	(-1.90)	(-1.80)	(-1.79)
Reading_hobby	1.446***	1.371***	1.366***
	(3.03)	(2.87)	(2.86)

Music_hobby	**-1.080****	**-1.041****	**-1.043****
	(-2.00)	**(-1.88)**	**(-1.89)**
Photograhy_hobby	**1.089*****	**1.057****	**1.050****
	(2.93)	**(2.78)**	**(2.76)**
Travel_hobby	**0.920****	**0.858****	**0.856****
	(1.81)	**(1.72)**	**(1.72)**
Cooking_hobby	**0.354**	**0.332**	**0.328**
	(0.97)	**(0.89)**	**(0.88)**

Wmovvie_hobby	**-0.393**	**-0.350**	**-0.339**
	(-0.70)	**(-0.62)**	**(-0.60)**
No Of Language	**-0.131**	**-0.114**	**-0.114**
	(-1.08)	**(-0.94)**	**(-0.94)**
Observations	**250**	**250**	**250**

Note: t statistics in parentheses (One Tailed)

* $p < 0.10$ -90%, ** $p < 0.05$- 95%, *** $p < 0.01$- 99%

5.12 The Average Marginal Effects:

This table presents the average marginal effects of various independent variables on the dependent variable, which is the probability of being employed. The "Dy/Dx" column represents the change in the probability of being employed for a unit change in the independent variable, while holding other variables constant.

The independent variables in this table include face rate, religion, extracurricular activities, CGPA, participation award, and various hobbies and work experience. For face rate, a unit increase leads to a decrease of 0.007 in the probability of being employed, but this effect is not statistically significant. Religion has a positive effect on the probability of being employed, with a unit increase leading to a 0.079 increase, but this effect is not statistically significant either.

Among the extracurricular activities, extra-curricular activity A has a positive effect on the probability of being employed, with a unit increase leading to a 0.059 increase, but this effect is not statistically significant. CGPA also has a positive effect on the probability of being employed, with a unit increase leading to a 0.006 increase, but this effect is not statistically significant either.

Participation award has a positive effect on the probability of being employed, with a unit increase leading to a 0.113 increase, but this effect is also not statistically significant. Among the hobbies, reading hobby has the largest positive effect on the probability of being employed, with a unit increase leading to a 0.454 increase, and this effect is statistically significant at the 0.01 level. Music hobby has a negative effect on the probability of being employed, with a unit increase leading to a 0.347 decrease, but this effect is only marginally significant at the 0.05 level. Travel hobby has a positive effect on the probability of being employed, with a unit increase leading to a 0.284 increase, but this effect is only marginally significant at the 0.10 level. Cooking hobby has a positive effect on the probability of being employed, with a unit increase leading to a 0.109 increase, but this effect is not statistically significant. Watching movies as a hobby has a negative effect on the probability of being employed, with a unit increase leading to a 0.112 decrease, but this effect is not statistically significant. Fitness has a positive effect on the probability of being employed, with a unit increase leading to a 0.125 increase, but this effect is only marginally significant at the 0.10 level. Finally, work experience has a positive effect on the

probability of being employed, with a unit increase leading to a 0.142 increase, and this effect is statistically significant at the 0.05 level.

According to the table, having a higher participation award or work experience is associated with a higher probability of employment. Reading and travel hobbies also have a positive impact on employment, while music hobby has a negative impact. However, the effects of these factors are not statistically significant at the 5% level. Other factors such as face rate, religion, extra-curricular activities, CGPA, cooking hobby, and watching movies do not have a significant impact on the probability of employment.

5.12.1 Work-experience:

Through the resume survey, it has been demonstrated that the previous working experiences helped the respondents to find a job soon after their graduation. The working experience therefore, has a significant positive effect on getting employed at 95% confidence interval.

5.12.2 Hobby:

Hobby is measured via different hobbies stated in resumes and each of them have differences in their significance on finding a job.

The findings show that reading hobby has a positively significant effect for the graduates to get employed at a corporate firm. Similarly, travel hobby has a significantly positive effect on finding a job at 95% confidence interval. The candidates who defined photography as their hobby also received a positive response. That is at 99% confidence interval, the photography hobby also shows a positive effect on finding a job. Lastly, the results showed that cooking as a hobby as a positive effect on landing a job for these graduates at a 90% confidence interval.

However, the teaching hobby, writing hobby, and other hobbies have no significant effect on getting employed.

5.12.3 Fitness:

Fitness is included as another distinct quality to the list of resume-determining factors. Fitness is measured via three variables in this research. The variables are, dancing hobby, exercise hobby, and outdoor games.

The study revealed that, at a 90% confidence level, having a dancing interest as part of the fitness has a significant positive impact on getting a job. Additionally, at 99% confidence interval, playing games, such as outdoor games also have a significant positive effect on getting employed. However, only doing exercise has no impact on getting a job as demonstrated in this study.

In addition, it can be concluded that when recruiting, employers find resumes where the fitness defined as dancing hobby, are perceived as an exceptional feature of the candidates.

Average Marginal Effects			**Number of Obs = 250**	
Expression: Pro (Employed), Predict () **Dy/Dx W.R.T.: Face Rate, Religion Extracurricular, Cgpa, Participation Award…….**				
	Delta-Method			
	Dy/Dx	**Std. Err.**	**Z**	**P>|Z|**
Face Rate	-0.007	0.29	-0.03	0.97
Religion	0.079	0.119	0.67	0.506
Extra-Curricular A	0.059	0.063	0.93	0.351
Cgpa	0.006	0.012	0.55	0.582
Participation Award	0.113	0.082	1.37	0.170
Hobby				
Reading Hobby	0.454	0.154	2.94	0.003
Music Hobby	-0.347	0.182	-1.91	0.057
Travel Hobby	0.284	0.163	1.74	0.081
Cooking Hobby	0.109	0.123	0.89	0.376
W Movie Hobby	-0.112	0.186	-0.60	0.546
Fitness	0.125	0.068	1.82	0.069
Work Experience	0.142	0.059	2.37	0.018

Note: * $p < 0.10$ -90%, ** $p < 0.05$- 95%, *** $p < 0.01$- 99%

5.13 Conclusion:

The conclusion of the study is based on the analysis of three Probit regression models that aimed to determine the effect of various individual and demographic characteristics on the probability of an individual being employed. The models include independent variables such as face rate, gender, cumulative GPA, extracurricular activities, hobbies, work experience, and awards received, among others. Business administration and certain hobbies such as reading and

photography have a positive effect on the probability of being employed. Cumulative GPA and work experience have a negative effect on the probability of being employed when not interacting with any other variable. However, when interacting with extracurricular activities or hobbies, the effect becomes positive. The coefficients of significant variables are consistent across all three models, and each model has significant coefficients that the other models do not. Therefore, it is not appropriate to say that one model is significantly better than the others. Instead, the research question, theoretical background, and model fit measures should be considered to determine which model is most appropriate for the given research context.

Chapter 6: Conclusion

6.1 Conclusion of the study:

The question of whether beauty matters in the job market has been a long-standing debate. This research aimed to provide insight into the impact of physical appearance and personal attributes on the job prospects of graduates in business administration and computer science. The study hypothesized that there is a beauty premium or plainness penalty in Bangladesh that affects the hiring decisions of employers.

The findings of the research indicate that physical appearance has a significant impact on the job prospects of graduates in business administration. The study found that graduates with a higher facial attractiveness rating were more likely to be selected for a job interview and offered a job. This suggests that there is a beauty premium in the job market for graduates in business administration. On the other hand, the study found that physical appearance did not have a significant impact on the job prospects of graduates in computer science. Instead, factors such as CGPA, extra-curricular activities, and skills were found to be more important in securing a job in this field.

The study also investigated the significance of a thesis for obtaining a job. The findings suggest that having a thesis did not have a significant impact on the job prospects of graduates in either field. This implies that while having a thesis may be beneficial in terms of gaining knowledge and developing research skills, it may not necessarily lead to better job prospects.

In terms of the impact of personal attributes, the study found that extra-curricular activities and hobbies were important factors in securing a job in computer science. This highlights the importance of developing a range of skills and interests outside of academic study to increase job

prospects in this field. However, personal attributes such as facial attractiveness and personality traits did not have a significant impact on job prospects in computer science.

Overall, the findings of this study suggest that the impact of physical appearance and personal attributes on job prospects varies depending on the field of study. In business administration, there appears to be a beauty premium that affects hiring decisions, while in computer science, factors such as CGPA, extra-curricular activities, and skills are more important. The study also highlights the importance of developing a range of skills and interests outside of academic study to increase job prospects in computer science.

It is important to note that this study was conducted in Bangladesh and may not be representative of other countries or regions. Cultural and social norms may play a significant role in the impact of physical appearance on job prospects, and these may vary across different countries and regions. Further research is needed to investigate the impact of physical appearance and personal attributes on job prospects in different contexts.

In conclusion, the question of whether beauty matters in the job market is complex and multifaceted. The findings of this study suggest that physical appearance and personal attributes do have an impact on job prospects, but the nature and extent of this impact varies depending on the field of study. It is important for graduates to develop a range of skills and interests to increase their job prospects, and for employers to be aware of the potential biases that may influence their hiring decisions. Further research is needed to investigate the impact of physical appearance and personal attributes on job prospects in different contexts, and to develop strategies to promote greater fairness and equality in the job market.

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