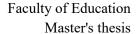


# Assessing the Meritocratic and Equitable Nature of Higher Education in Bangladesh: Identifying Barriers and Proposing Strategies for Improvement



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#### **Dedication**

I dedicate this thesis to my loving mother, supportive father, devoted wife, precious daughter, and caring siblings, whose constant love, guidance, and encouragement have been my pillars of strength throughout this academic journey. Additionally, I dedicate this work to the resilient students of Bangladesh, whose determination and pursuit of educational excellence inspire me to advocate for a more equitable and meritocratic higher education system.

#### **Abstract**

Equity and meritocracy in higher education are universally recognized goals, yet the attainment of these objectives is often impeded by multifaceted barriers. In the context of Bangladesh, this study employed a quantitative methodology to systematically analyze the obstacles, targeting students' perceptions at three educational stages: pre-university students, university students, and university graduates.

Utilizing a comprehensive questionnaire, the research scrutinized perceptions related to fairness, transparency, barriers, awareness, and the impacts on equity and meritocracy. A complex landscape was revealed, wherein gender discrimination was not a significant barrier, contrary to initial expectations. Instead, pervasive hindrances emerged such as limited access to resources, socioeconomic discrimination, quotas, corruption, and political influence.

The findings illustrate significant predictors that influence perceived equity and meritocracy, including Barriers to Equity and Meritocracy (BEM), Awareness (AWN), and Impact of Barriers (IOB), exhibiting variations across the educational journey. Moreover, the analysis underscores the evolution of specific factors like Perceptions of Fairness and Transparency (PFT) as students progress through their education.

Contributing nuanced insights, this study enhances the understanding of the complexities surrounding equity and meritocracy within Bangladesh's higher education system. The results emphasize the necessity of context-specific interventions and policies, tailored to address the identified barriers at various educational levels. Practical implications include actionable strategies for policymakers and educators to foster a merit-based system, resonating with the unique challenges identified within the Bangladeshi context.

In conclusion, this research provides a robust analysis of the multifaceted challenges in achieving equity and meritocracy in higher education in Bangladesh, delineating key predictors and offering targeted solutions. The study represents a crucial advancement towards a more equitable educational landscape in Bangladesh, with implications that may extend to similar global contexts. By spotlighting these significant challenges and proposing tailored interventions, this research lays a foundational groundwork for future investigations, aiming at refining practices and policies for universal access and opportunity within higher education.

**Keywords:** Barriers, Challenges, Equity and Meritocracy, Awareness, Perceived Fairness and Transparency, Quantitative Method, Higher Education System, Bangladesh.

# 1. Introduction

Meritocracy and equity stand as foundational principles in the domain of higher education, embodying ideals of fairness, justice, and equal opportunity that resonate across international academic research and policy discourse (Brooks et al., 2015; Kim & Choi, 2017).

Meritocracy, as an underlying philosophy, promotes the notion that an individual's success and prospects ought to be determined by their intrinsic abilities, skills, and diligence rather than extrinsic factors like social background, wealth, or personal connections (Kim & Choi, 2017). This principle aims to facilitate equal educational opportunities and social mobility for those who demonstrate academic excellence or unique talents. Concurrently, the concept of equity emphasizes the just distribution of resources and opportunities within the education system. It engages with the complexities of socioeconomic, gender, and other disparities that may obstruct access to education, seeking to ensure that quality education and the resources essential for academic achievement are accessible to all students, irrespective of their background (Rizvi & Lingard, 2009).

In Bangladesh's context, the realization of equity and meritocracy within the higher education framework faces multifaceted challenges and impediments. These include restricted access to higher education owing to economic constraints, an unequal dispersion of resources, and lingering socioeconomic inequalities that act as barriers for students from less privileged backgrounds (Monem & Baniamin, 2010). Specific policies, such as quotas for women and freedom fighters, may inadvertently lead to non-meritocratic practices by prioritizing particular groups (Islam, 2014).

Furthermore, the integrity of the meritocratic system is at risk from corruption, nepotism, and political interference, which may permeate admission processes and institutional decision-making in higher education (Bhuiyan, 2008). The variance in quality across educational institutions, particularly concerning infrastructure and instructional quality, contributes to systemic inequity. Students from rural regions or disadvantaged socioeconomic backgrounds often face limited access to institutions that provide quality education. Social status and geographic disparities, especially the urban-rural dichotomy, further accentuate these inequalities in educational access (Ahmed, 2021).

Though the sociology of education has delved into the themes of equity and meritocracy, an extensive examination has particularly emphasized the universal need for fair and equal opportunities for all students (Brooks et al., 2015; Smith et al., 2018). There still exists a specific need for tailored research within the Bangladeshi context, aiming to discern the unique challenges and obstacles inhibiting a truly equitable and meritocratic higher education environment.

This present research aspires to undertake a detailed exploration of the barriers that obstruct equity and meritocracy in Bangladesh's higher education landscape. By focusing on challenges such as quotas, corruption, nepotism, political influence, gender, social status, and geographic location, and employing a quantitative approach through questionnaires, it seeks to delineate patterns, trends, and statistical relationships. The participants, comprising pre-university students, currently enrolled university students, and university graduates, will contribute insights into perceptions of fairness, transparency, barriers, awareness, and the impacts of these barriers on the country's higher education system.

Through the identification of specific barriers and an assessment of existing equity and meritocracy levels, this research stands to offer significant insights into the contemporary state of Bangladesh's higher education system. Such insights will empower stakeholders with the information necessary for crafting targeted strategies to enhance equity and meritocracy. Encapsulating the viewpoints of students across diverse educational levels will enable policymakers to fine-tune their strategies to meet distinct group needs. Moreover, the findings of this study will augment the scholarly dialogue surrounding equity and meritocracy in higher education, thereby enriching the collective understanding within this critical field.

# 1.1 Background of the Study

In the continually evolving landscape of higher education, Bangladesh has made concerted efforts to expand access and elevate quality, aligning with the global trend towards increased inclusivity and excellence. However, notwithstanding these considerable strides, the country's higher education system remains beleaguered by multifaceted challenges that impede the full realization of equity and meritocracy, principles foundational to any robust educational framework (Islam, 2011).

A particularly salient issue within not only Bangladesh but also throughout the Asian region is the application of quota systems in higher education admissions (Harman, 1994). In Bangladesh, the quota system is a widespread phenomenon within the education sector, with specific quotas like women's and freedom fighters' quotas introduced to redress historical disparities and bolster the representation of marginalized communities. While conceived with the aim of fostering equity, these quota mechanisms have simultaneously sparked debates regarding their impact on merit-based admissions and the overall integrity of the admissions system. The design, execution, and governance of these quotas have faced criticism, igniting controversies and even protests (Ferdous, 2017).

Beyond quotas, the challenge to equity and meritocracy in Bangladeshi higher education is further compounded by the pervasive issues of corruption and nepotism (Islam, 2014). Reports of bribery, favoritism, and unethical practices within admission procedures stand as a testament

to the compromised state of fairness and equal opportunity, erecting additional barriers for meritorious students. These malpractices do more than impede individual advancement; they further entrench societal inequalities and obstruct the realization of a genuinely meritocratic framework (Bhuiyan, 2008).

Moreover, the sway of political power and social stature may play an influential role in delineating access to higher education within Bangladesh (Zafarullah & Siddiquee, 2001). In some instances, connections and influence can eclipse merit as the primary criterion for selection, thereby disadvantaging those from less privileged socioeconomic backgrounds and perpetuating disparities. The divide in educational opportunities between urban and rural locales presents another significant factor that accentuates inequity within higher education, with limited resources and infrastructure in rural areas constraining the accessibility and caliber of education available to students in those regions (Ahmed, 2021).

Bangladesh's higher education system, despite undergoing considerable transformations, grapples with complex challenges that obstruct the establishment of equity and meritocracy. Issues ranging from quota systems, corruption, and nepotism to disparities in educational opportunities between urban and rural areas have created an intricate web of barriers. In confronting these multifaceted challenges, a critical analysis of the impediments to equity and meritocracy in Bangladesh's higher education system is paramount.

#### 1.2 Research Problem

The research problem delineated in this study revolves around the insufficiency of comprehensive understanding regarding the equitable and meritocratic nature of the Bangladeshi higher education system, with an accentuated focus on the perceptions from disparate groups, namely, pre-university students, university students, and university graduates. This deficiency in knowledge extends across the complex landscape of public, private, and national universities and manifests in various multifaceted challenges that obstruct the realization of equal opportunities based on merit and equity (Islam, 2011).

Central to this problem is the presence of various quota systems in higher education admissions, like women's quotas and freedom fighters' quotas, originally instituted to redress historical inequalities. These quotas, while well-intentioned, may inadvertently have engendered concerns about their consequences on merit-based admissions and the overarching fairness within the system (Ferdous, 2017).

Compounding this issue, corruption and nepotism may permeate the admission process, potentially culminating in the admission of undeserving students, thereby undermining the equity of the system (Ahmed, 2021). The persistence of gender disparities, stemming from

cultural biases and constrained opportunities, further exacerbates these inequities and poses a significant barrier to the establishment of a genuinely meritocratic environment (Ferdaush, & Rahman, 2011).

Furthermore, the schism in the quality of education provided by public and private universities casts shadows on the notions of equal access and quality, particularly for students hailing from disadvantaged backgrounds (Hadjar, 2016).

This intricate ensemble of issues coalesces into a research problem that necessitates a rigorous, analytical examination to ascertain the underlying factors contributing to these inequities. The specific focus on perceptions from distinct groups – pre-university students, university students, and university graduates – offers a granular perspective that may unveil variations among these groups.

The central thrust of this research is not merely to delineate these complexities but to pave the way for informed interventions aimed at transforming the higher education landscape in Bangladesh into one that is more equitable and meritocratic. This problem, rooted in the lack of knowledge about the current state of equity and meritocracy, calls for a nuanced understanding of the landscape, shedding light on the variations and facilitating the crafting of targeted strategies to elevate the Bangladeshi higher education system.

#### 1.3 Previous work around the problem

Meritocracy in higher education continues to be a subject of global academic interest, with a multitude of studies focusing on challenges and barriers that impede the realization of this fundamental principle. The literature has extensively examined diverse facets such as quota systems, corruption and nepotism, political influence, and disparities in access to education, each contributing unique insights.

Quota Systems, implemented to enhance access for underrepresented groups, have been scrutinized for both their merits and potential shortcomings. Research by Ahmed (2021) in Bangladesh and Varughese and Bairagya (2020) in India illustrates the dual role of quotas, where, while fostering accessibility, they might inadvertently favor privileged individuals within disadvantaged groups, thus perpetuating inequalities. This underscores the complexity of implementing quota systems and the necessity to examine their structure critically to ensure genuine meritocracy.

Corruption and Nepotism may represent significant challenges to meritocracy in higher education. Studies by Boyle et al. (2014) and Gale et al. (2017) delve into the corrosive impacts of corruption on higher education, elucidating how it undermines fairness and erodes

meritocratic principles. Furthermore, the scholarly work of Deem (2007) and Liu (2016) sheds light on the deleterious effects of nepotism on academic progress, constraining merit-based advancement.

The effect of political power on higher education has been another critical area of research, as illustrated by works such as those by Brint and Karabel (1989) and Hadjar (2016). They examine the politicization of higher education and the consequent compromise on autonomy and integrity. Archer et al. (2018) and Joshi and Smith (2012) further explore how political patronage can affect access to resources and academic opportunities, inhibiting merit-based practices.

Socioeconomic disparities and social class significantly influence access to education, as explored by McCowan (2015), Harper et al. (2009), and Meyer et al. (2013). Their research highlights historical and structural inequalities that continue to challenge meritocracy, emphasizing the imperative for equity-centered policies.

In a specific case study, Tan (2018) dissects the landscape of "Equity and Meritocracy in Singapore," providing comprehensive insights into Singapore's nuanced approach. Singapore's strategies, including financial assistance schemes, affirmative actions, and support measures for disadvantaged students, embody an earnest commitment to leveling the playing field.

Drawing upon the extensive previous work on meritocracy and equity in various educational contexts, the primary objective of this study is to conduct a systematic and rigorous assessment of the meritocratic and equitable nature of higher education in Bangladesh. Specifically, it aims to find out the major barriers to achieving equity and meritocracy in Bangladeshi higher education and explore students' perceptions regarding fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy within the higher education system.

By weaving together, the broad themes explored in previous research, such as quota systems, corruption and nepotism, political influence, gender disparities, and access challenges, this study extends the conversation to the particular context of Bangladesh. The research not only examines the existing barriers but also explores how students' perceptions vary across three different educational levels: pre-university students, university students, and university graduates. These nuanced insights are expected to uncover variations among these groups, providing a multifaceted understanding of the existing challenges.

By uncovering these specific details, the study seeks to provide valuable insights into the current level of equity and meritocracy in Bangladesh's higher education system. The ultimate goal is to contribute to the advancement of an inclusive and merit-based higher education

environment that empowers all students to thrive, succeed, and reach their full potential. The research thus aligns with the global discourse on equity and meritocracy in higher education and endeavors to pave the way for efficacious strategies and interventions that can promote a more inclusive, equitable, and meritocratic educational landscape within Bangladesh.

# 1.4 Gaps in the Knowledge

While existing studies on the challenges and barriers to achieving meritocracy in higher education have laid a foundation, there remain significant gaps in knowledge that align with the specific aims of this research within the context of Bangladeshi higher education. Notably, previous research such as that conducted by Hossain and Khan (2015), Knox (2009), Ahmed (2021), and Ahsan and Burnip (2007a) offers insights into aspects like education reform, corruption, and inclusive education. However, these studies do not provide a comprehensive understanding of the meritocratic and equitable nature of higher education, particularly in the Bangladeshi context.

The existing literature has inadequately explored the interplay between factors including quota systems, corruption and nepotism, political power, and socioeconomic disparities in Bangladesh's higher education system. Moreover, the studies available have only touched upon specific elements such as access to education and gender disparities (Ferdaush & Rahman, 2011), without considering the variations in perceptions across different educational levels, such as pre-university students, university students, and university graduates.

This study, therefore, recognizes the pressing need to bridge these gaps in knowledge. The primary objective is to conduct a systematic and rigorous assessment of the meritocratic and equitable nature of higher education in Bangladesh. By focusing on the major barriers hindering equity and meritocracy, and exploring students' perceptions regarding fairness, transparency, barriers, awareness, and impacts across three educational levels, the study seeks to provide a more nuanced and comprehensive understanding. Through this in-depth analysis, the research aims to contribute valuable insights into the current state of equity and meritocracy within Bangladeshi higher education. Ultimately, it aspires to inform policy and practice, advancing an inclusive and merit-based higher education environment that empowers all students in Bangladesh to thrive, succeed, and reach their full potential.

#### 1.5 Research Purpose and Research Questions

#### 1.5.1 Research Purpose

The primary objective of this study is to conduct a systematic and rigorous assessment of the meritocratic and equitable nature of higher education in Bangladesh. Specifically, it aims to

find out the major barriers to achieving equity and meritocracy in Bangladeshi higher education and explore students' perceptions regarding fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy within the higher education system. The study also seeks to provide valuable insights into the current level of equity and meritocracy and examine how these perceptions vary across three different educational levels. By doing so, the study aims to contribute to the advancement of an inclusive and merit-based higher education environment that empowers all students to thrive, succeed, and reach their full potential.

The study sets out the following specific objectives:

- i. To examine whether factors such as lack of access to coaching, financial constraints, gender discrimination, discrimination based on social class, unequal admission criteria, quota systems, corruption, nepotism, and political influence act as barriers to accessing and studying in universities in Bangladesh.
- ii. To examine students' perceptions regarding fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy in Bangladeshi higher education.
- iii. To explore variations in students' perceptions of fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy across different educational levels (pre-university students, current university students, and university graduates).

#### 1.5.2 Research Questions

This study addresses the following research questions:

- i. To what extent do lack of access to coaching, financial constraints, gender discrimination, discrimination based on social class, unequal admission criteria, quota systems, corruption, nepotism, and political influence hinder students from accessing and studying in universities in Bangladesh?
- ii. To what extent do students' perceptions regarding fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy in Bangladeshi higher education provide insights into the existing level of equity and meritocracy within the system?
- iii. To what extent do students' perceptions of fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy in Bangladeshi higher education

vary across different educational levels (pre-university students, current university students, and university graduates), and what implications do these variations have for understanding the current level of equity and meritocracy within the system?

These research questions will guide the study in examining various aspects of equity and meritocracy in Bangladeshi higher education and provide a comprehensive assessment of the current situation.

# 1.6 Scope of the Study

The scope of this study is focused on assessing the meritocratic and equitable nature of higher education in Bangladesh. The study will specifically find out the barriers to achieving meritocracy and equity in Bangladeshi higher education and examine the perceptions of students regarding fairness, transparency, challenges, barriers, and awareness related to equity and meritocracy within the Bangladeshi higher education system. Furthermore, this research will collect data from students at three distinct levels: pre-university students, currently enrolled university students, and university graduates. By analyzing data from these three groups, the study aims to identify and examine potential differences that may exist among them.

Previous studies have highlighted the importance of understanding students' perspectives in evaluating equity and meritocracy within higher education (Brooks et al., 2015). Therefore, this study aims to gather data through surveys to gain insights into students' perspectives on these issues, allowing for a comprehensive examination of the current state of equity and meritocracy within the higher education system in Bangladesh.

While the study acknowledges that broader systemic factors such as government policies and institutional practices may influence equity and meritocracy, the primary focus will be on understanding students' perceptions and experiences. By exploring students' perspectives, the study aims to provide an in-depth understanding of the challenges and barriers faced by students from diverse backgrounds in accessing equal opportunities and achieving success within the higher education system in Bangladesh.

It is important to note that this study does not aim to evaluate the effectiveness of specific policies or interventions. Instead, the focus is on identifying barriers and proposing strategies for improvement based on the findings. By examining the experiences and perceptions of students, the study aims to contribute to the existing knowledge on equity and meritocracy in the context of Bangladeshi higher education and inform policy and practice in the country.

The recommendations derived from the study will be tailored to the Bangladeshi higher education context, taking into account the unique challenges and opportunities within the system (Ahmed, 2021).

# 1.7 Significance of the Study

The significance of this study lies in its potential to contribute to the development and enhancement of a meritocratic and equitable higher education system in Bangladesh. By exploring students' perceptions of fairness, transparency, challenges, barriers, and awareness related to equity and meritocracy, the study aims to shed light on the current state of the higher education system and identify areas for improvement.

Research has shown that understanding students' perspectives is crucial for evaluating the effectiveness and fairness of higher education systems (Brooks et al., 2015). Therefore, this study's focus on gathering students' insights through surveys will provide valuable data that can inform decision-making processes and policy formulation, making it significant for policymakers, educational institutions, and stakeholders in higher education.

The findings of this study can guide the development of targeted strategies and interventions to address the identified barriers and enhance fairness, transparency, and equal opportunities within the higher education system in Bangladesh. This aligns with the broader goals of sustainable development and social progress, as a meritocratic and equitable higher education system can contribute to reducing socioeconomic disparities and promoting social mobility (Ahmed, 2021). The study's recommendations can support efforts to create an environment where all students, regardless of their background or circumstances, have an equal opportunity to access and succeed in higher education.

Furthermore, the study's focus on the specific context of Bangladesh adds to the existing body of knowledge on meritocracy and equity in higher education. While previous research has explored these concepts in various contexts, there is a need for context-specific studies that examine the unique challenges and dynamics within the Bangladeshi higher education system. By addressing this gap, the study will provide valuable insights that can contribute to the global discourse on promoting equity and meritocracy in higher education.

In summary, the significance of this study lies in its potential to drive positive change in the higher education system in Bangladesh, foster equal opportunities for all students, and contribute to the broader goals of sustainable development and social progress.

# 1.8 Chapter Summary

This chapter provides an introduction to the research study, outlining its background, research problem, previous work, gaps in knowledge, research purpose, research questions, scope, and significance. The chapter sets the stage for the subsequent chapters and highlights the importance of the study in addressing specific research gaps and contributing to the existing body of knowledge.

#### 1.9 Research Structure

The introduction provides an overview of the research, while the literature review examines existing knowledge and identifies research gaps. The research methodology chapter outlines the approach and methods used, and the data analysis chapter presents the findings. Finally, the discussion and conclusion chapter interpret the results and provide a final assessment of the research. This structure ensures a systematic and organized presentation of the study's objectives, methods, and outcomes.

# 2. Chapter 02: Literature Review

#### 2.1 Introduction

This chapter provides an in-depth review of the existing literature relevant to the study. This study aims to investigate students' perceptions of fairness and transparency, barriers, awareness, and the impacts of these barriers on equity and meritocracy in higher education in Bangladesh, while also exploring variations in these perceptions across different educational levels, in order to address existing gaps in knowledge and provide an in-depth analysis of the factors hindering the achievement of meritocracy and equity in the country's higher education system. So, this chapter focuses on five core factors that are central to this research, namely, Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM). These five factors serve as the variables for this study, with four of them acting as independent variables and Equity and Meritocracy (EQM) as the dependent variable. The questionnaire items were formulated based on these variables, making them crucial components of this research.

The literature review is structured around these five variables to provide a comprehensive understanding and support for the research framework. By drawing upon relevant literature from past studies, the chapter substantiates the significance and relevance of these core factors in the context of higher education in Bangladesh. This logical organization helps establish a solid foundation for the research and aids in the development of the research framework.

#### 2.2 Perceptions of Fairness and Transparency (PFT)

Fairness and transparency play a crucial role in higher education, contributing to the equity and meritocracy of the system (Brown & Tannock, 2009). The perception of fairness and transparency provides valuable insights into the extent to which a higher education system promotes equal opportunities and rewards based on merit (Meyer et al., 2013). This section will discuss the importance of fairness and transparency in higher education, their connection to equity and meritocracy, and then delve into the specific context of Bangladeshi higher education, highlighting the barriers to fairness and transparency.

Transparency refers to openness and clarity in the processes and decision-making within higher education institutions (Piattoeva, 2018). Transparent practices ensure that stakeholders, including students, educators, and the wider community, can understand and trust the mechanisms by which decisions are made. Transparency fosters accountability and allows individuals to assess the fairness of the system (Boyle et al., 2014). When the criteria and procedures for admission, evaluation, and promotion are transparent, individuals can have confidence that their outcomes are based on merit and not arbitrary factors.

On the other hand, fairness in higher education ensures that individuals have equal access to educational opportunities and resources, regardless of their background or circumstances (Piattoeva, 2018). It promotes social justice and reduces inequalities, enabling individuals to pursue their educational goals based on their abilities and aspirations (Meyer et al., 2013). Fairness implies that the evaluation and distribution of opportunities, such as admissions, grading, and promotion, are based on objective and transparent criteria, rather than favoritism or bias (Smith et al., 2018).

The perception of fairness and transparency provides important information about the equity and meritocracy of a higher education system (Piattoeva, 2018). When students, educators, and stakeholders perceive the system as fair and transparent, it suggests that opportunities and rewards are allocated based on merit rather than personal connections or bias (Mijs, 2015). Conversely, if there are concerns or perceptions of unfairness and lack of transparency, it indicates potential barriers to achieving an equitable and meritocratic higher education environment.

In the context of Bangladeshi higher education, the assessment of meritocracy and equity relies heavily on the principles of fairness and transparency. Although fairness and transparency are interconnected, it is crucial to recognize that something may appear clear and transparent (Islam, 2014) but not necessarily fair. Therefore, it is essential to evaluate items for both their transparency and fairness. For instance, in Bangladesh, the quota system might seem transparent, and everyone may know the percentage allocations for different quotas, but it is also necessary to determine whether the quota system is fair or introduces disparities.

However, the perception of fairness and transparency in Bangladeshi higher education faces several barriers. Studies have identified concerns regarding favoritism, nepotism, and subjective decision-making in the admission processes (Bhuiyan, 2008). These challenges contradict the meritocratic ideals of the system, as opportunities may be influenced by personal connections rather than individual merit. Similarly, transparency issues have been highlighted in grading practices, with concerns surrounding subjective evaluation criteria and inconsistencies in grading standards (Ehsan, 2021). Furthermore, the lack of clear criteria for promotion and career advancement could be another barrier to fairness and transparency in Bangladeshi higher education (Hossain & Khan, 2015). The absence of transparent and merit-based promotion processes may hinder the development of a meritocratic environment and create perceptions of favoritism or subjective decision-making among educators (Jabunnesa, & Islam, 2021). These barriers undermine the perception of fairness and raise pertinent questions about the equitable distribution of educational opportunities in the higher education system.

By examining these barriers and their impact on fairness and transparency, this research aims to shed light on the current state of meritocracy and equity in Bangladeshi higher education and provide insights to address these challenges in policy and practice.

# 2.3 Barriers to Equity and Meritocracy (BEM)

The variable of Barriers to Equity and Meritocracy (BEM) holds significant importance in this research, as it addresses the main research question related to potential challenges to achieving equity and meritocracy in Bangladeshi higher education. This variable constitutes a substantial portion of the literature review, as it is crucial in assessing the existing level of meritocracy and equity within the higher education system. The presence of barriers indicates a less meritocratic and equitable system, while their absence suggests a higher level of equity and meritocracy.

Several factors in the context of Bangladesh, such as quota systems, corruption, nepotism, and political influence, social and financial disparities may serve as potential barriers to accessing and studying in universities. It is essential to investigate whether these factors indeed act as hindrances to equitable and meritocratic education opportunities in Bangladeshi higher education.

#### 2.3.1 Quota

In the context of equity and meritocracy, there is an ongoing debate about whether to prioritize equality or equity for achieving a meritocratic society. While some researchers use equity and equality interchangeably, it is essential to recognize their distinct differences. Equity takes into account individual shortcomings and unique circumstances to ensure fairness and justice, while equality focuses on equal treatment regardless of individual situations (Espinoza, 2007). Many countries, including Bangladesh, are concerned about equitable access to higher education, leading to discussions on what constitutes a fair system for establishing equity (McCowan, 2015).

In Bangladeshi higher education, the quota system was introduced to ensure equity and fairness. However, there are conflicting views on its effectiveness in achieving its intended objectives. Some argue that quotas provide advantages to disadvantaged groups and promote equity, as they aim to uplift the less privileged segments of society (Yasmin, 2010). For example, there are quotas for female students, disabled students, and tribal groups in Bangladesh.

Conversely, the quota system is also seen as a major hindrance to meritocracy in the country's education system. Critics contend that establishing meritocracy becomes challenging in a society where the quota system prevails. Different types of quotas favor specific groups over others, making it difficult to achieve true justice and meritocracy. As a result, numerous talented

students miss out on opportunities to attend top-ranked universities in Bangladesh despite their exceptional abilities. This situation leads to the loss of valuable talent for the country (Islam, 2014).

The impact of the quota system is not limited to university admissions but also extends to job recruitment in Bangladesh. The presence of quotas in the government recruitment process further hinders meritorious students from securing jobs, affecting their career prospects (Islam, 2014).

Overall, the quota system in Bangladeshi higher education remains a contentious issue, with both supporters and critics offering differing perspectives on its role in promoting equity and meritocracy within the education system. The debate surrounding the quota system reflects the complex nature of ensuring fairness and equal opportunities in higher education while upholding principles of meritocracy.

#### **Women Quota**

The women's quota was officially introduced in Bangladesh in 1977, with its practical implementation commencing in 1982. It was initially proposed to assist females affected by the 1971 war between East Pakistan (now Bangladesh) and West Pakistan (Yasmin, 2010). The war resulted in Bangladesh gaining independence, but it also brought significant damage and hardship, particularly for women who faced harassment during the conflict. As a response, the Bangladeshi government introduced quotas for women.

Under the women's quota, women in Bangladesh are granted a 10% advantage in admission to government educational institutions and job sectors (Yasmin, 2010). This measure was considered justifiable as it aimed to support war-affected women and address historical inequalities. At the time of its introduction, women faced considerable disparities compared to men in education, empowerment, and employment opportunities. From an equity perspective, the women's quota was viewed as a fair means of addressing these disparities, especially for female students from low-income backgrounds, who were underrepresented in certain valuable fields like law (Morley & Lugg, 2009).

However, the context has evolved, and women in Bangladesh have made significant progress in terms of empowerment and educational attainment. In some fields, such as medical institutions, women's participation has exceeded that of men. As a result, some individuals now question the necessity of the women's quota, arguing that it may contradict the principles of meritocracy (Hossain & Khan, 2015). It is crucial to acknowledge that not all individuals benefiting from the quota system lack merit; some quota recipients may also be highly

meritorious. This complexity adds nuance to the ongoing debate surrounding the continued relevance and effectiveness of the women's quota in present-day Bangladesh (Ferdous, 2017).

#### Freedom Fighters Quota

The freedom fighters' quota, which accounts for 30 percent of the total reserved quotas in Bangladesh, has been a subject of debate and controversy (Ferdous, 2017). While it was initially introduced to recognize and support those who fought for the country's independence in 1971, concerns have arisen regarding its continued relevance and fairness.

One significant criticism of the freedom fighters' quota is that it benefits the children and even grandchildren of the original freedom fighters, many of whom are no longer alive (Ferdous, 2017). This has led to questions about the logical basis for extending the benefits of the quota to subsequent generations. Critics argue that this practice may limit the opportunities for meritorious students who could otherwise benefit from the available educational and employment opportunities (Islam, 2014).

Furthermore, defining and identifying eligible freedom fighters has been a complex and controversial issue. The lack of a precise definition and clear criteria for determining the status of a freedom fighter has given rise to interest groups vying for inclusion in this category (Yasmin, 2010). For instance, individuals who provided various forms of support during the war, such as shelter, food, or information, have sought recognition as freedom fighters. Dishonest practices have also emerged, where wealthy individuals attempt to buy certificates claiming their affiliation with freedom fighters through bribery, even though they did not actively participate in the war for independence (Yasmin, 2010).

The lack of transparency and potential corruption associated with the freedom fighters' quota have fueled public dissatisfaction with the quota system as a whole (Jackman, 2020). Many students and citizens in Bangladesh have expressed their opposition to the quota system, calling for its reformation (Ferdous, 2017). They argue that the system may be manipulated by unscrupulous individuals to secure preferential treatment for their offspring in education and government job opportunities.

In conclusion, the freedom fighters' quota in Bangladesh has become a contentious issue due to concerns about its fairness, transparency, and potential for corruption. The ongoing debates surrounding this quota highlight the importance of re-evaluating its relevance and effectiveness in achieving its original objectives (Jackman, 2020). Efforts to address the challenges related to transparency and fairness in the allocation of quotas could contribute to a more equitable and meritocratic higher education system in Bangladesh.

## 2.3.2 Corruption

Corruption is a pervasive issue in various sectors, including education, in Bangladesh (Zafarullah & Siddiquee, 2001). This prevalence of corruption raises concerns about the extent to which merit alone is sufficient for gaining admission to reputable universities or accessing higher education in the country. Corrupt practices have been observed at different levels within Bangladeshi higher education, encompassing the political, administrative, and classroom levels (Knox, 2009). The allocation of a significant budget by the Bangladesh government to the education sector has, unfortunately, also led to an increase in corrupt activities within this domain (Bhuiyan, 2008).

At the political level, corrupt transactions often involve hidden monetary exchanges, wherein educational institutions offer bribes to officers in the education ministry to obtain necessary documentation and approvals for accreditation, even if they do not meet all the required criteria (Bhuiyan, 2008). As a result, the universities that fail to meet the necessary standards receive accreditation through corrupt means, subsequently admitting students who may not necessarily have met the merit-based criteria for admission. Additionally, affluent students may bribe officials responsible for exam questions to obtain exam papers in advance, providing them with an unfair advantage in the assessment process. Consequently, this corrupt system creates barriers for meritorious students to secure admission to universities, as their chances are diminished by the presence of corruption-driven practices that favor students with financial resources.

Corruption, thus, poses a potential hindrance to the meritocratic process in Bangladeshi education (Knox, 2009). The study seeks to investigate the extent to which corruption acts as a barrier for students in accessing and studying at universities in Bangladesh.

#### 2.3.3 Nepotism

Nepotism, a form of corruption, extends beyond financial transactions and encompasses the use of connections to secure advantages in university admissions (Meyer et al., 2013). This silent corruption is prevalent in Bangladeshi higher education and often manifests through private tutoring services offered by teachers for additional remuneration (Bhuiyan, 2008). Paying pupils who receive these extra tutoring services may gain unfair advantages, such as receiving short suggestions or even question papers in advance, thereby undermining the meritocratic principles of fair competition (Joshi & Smith, 2012).

Such nepotistic practices may result in unequal access to university education, as meritorious students could be hindered by these corrupt practices during the admission and selection

processes (Joshi & Smith, 2012). This unfair treatment contradicts the principle that the most deserving students should have access to the best educational opportunities to maximize talent utilization (Mijs, 2015). Consequently, many talented students become demotivated in a system where nepotism is pervasive, potentially leading to their talents being wasted, and thus, depriving Bangladesh of valuable resources for societal development (Bhuiyan, 2008).

It is important to acknowledge that the issue of nepotism is complex and may not be entirely uniform in its impact on the meritocracy within Bangladeshi higher education. Further examination and analysis are necessary to better understand the extent and implications of nepotistic practices and their influence on equity and meritocracy in the educational system

#### 2.3.4 Political Power

The influence of politics on higher education in Bangladesh is often negative, as politicians wield significant power and may act with impunity, evading accountability even when involved in corrupt practices (Patwary, 2011). Student politics, which should ideally contribute positively to the academic environment, has become a matter of concern, with students engaging in political activities from college to university life. However, the prevailing corruption among politicians has tainted student politics and led to adverse consequences (Knox. 2009).

Among the various student political parties in Bangladesh, Chhatra League holds a prominent position and is affiliated with the leading political party, Awami League (Patwary, 2011). Being closely linked to the ruling party and the prime minister, members of Chhatra League can enjoy privileges that facilitate illegal activities on campuses. Such activities include granting admission to students without proper entrance exams and influencing teachers and officials to provide favorable grades to their party members (Zafarullah & Siddiquee, 2001). This form of student politics could easily be associated with violence and illegal financial gains, with student leaders involved in manipulating tenders, trading university seats, and facilitating admissions in exchange for significant monetary rewards (Patwary, 2011).

This pervasiveness of corruption and the powerful influence of student political parties, especially those affiliated with the ruling party, create a challenging environment for establishing meritocracy in higher education. The system becomes inherently difficult to uphold principles of fair competition and equitable opportunities when nepotism and corruption permeate student politics, hindering the realization of a truly meritocratic educational landscape in Bangladesh.

# 2.3.5 Disparities in Bangladeshi Higher Education

The presence of disparities in the Bangladeshi higher education system may pose significant challenges to achieving meritocracy in the country (Ahmed, 2021). These disparities encompass a range of factors, including differences between urban and rural areas, unequal access to education, income-based divisions, gender-based disparities in participation, shortage of qualified teachers in rural regions compared to urban areas, and structural inequalities among various types of higher education institutions in Bangladesh. If these disparities persist and remain unaddressed, they may contribute to the perpetuation of social inequalities (Sadovnik, 2008), hindering the establishment of a truly meritocratic system in the country.

The variations in opportunities and resources between urban and rural areas, coupled with gender-based disparities and economic divisions, could create an unequal educational landscape (Ahmed, 2021). The lack of access to quality education in rural areas, particularly in terms of shortages of educational institutions, may further exacerbate the disparities (Ehsan, 2021). This unequal educational system might contradict the principles of meritocracy, which advocate for justice and equal opportunities based on individual merit and capabilities. If the prevalence of multiple and distinct disparities in the higher education sector persists, it could hamper the realization of a genuinely meritocratic environment in Bangladesh.

#### Gender

Gender discrimination continues to be a possibility in Bangladeshi higher education, as highlighted by research by Ferdaush and Rahman (2011). Despite progress in addressing gender disparities in education, there may still be instances where female students face barriers and discrimination, limiting their access to educational opportunities and hindering the establishment of a fully meritocratic and equitable system. The persistence of gender-based discrimination in higher education could undermine the principles of fairness, equity, and equal opportunities that meritocracy seeks to uphold.

# City vs Village

In Bangladesh, significant disparities exist between urban and rural areas, particularly in terms of access to education and technological resources (Rabbani & Chowdhury, 2014). Rural students face considerable challenges as they have limited access to educational facilities, including poor Internet connectivity and inadequate computer resources. Unlike their urban counterparts, many students in rural areas do not have access to the Internet at all, which hinders their ability to benefit from digital learning resources and opportunities.

These disparities have become even more pronounced during critical situations, such as the Covid-19 pandemic, where the shift to online education has posed significant challenges for students in rural areas who lack the necessary technology for effective remote learning (Rizvi & Lingard, 2009). The absence of accessible technology and educational resources further widens the gap between urban and rural students, making it unrealistic to expect equal educational opportunities for all.

Moreover, the shortage of qualified teachers in rural educational institutions, caused in part by the lower salaries offered in these areas, also contributes to the unequal access to education (Ahmed, 2021). Many qualified educators prefer to work in urban institutions where better remuneration is available, leaving students in rural areas at a disadvantage in terms of the quality of teaching they receive.

In addition to these challenges, the prevalence of early marriages among female students in rural areas further hinders their access to education (Ahmed, 2021). Early marriages often force young girls to abandon their education, limiting their participation in the meritocratic process and perpetuating gender disparities in access to higher education opportunities.

The significant gap in literacy rates between villages and cities, with literacy rates in villages recorded at 68.4% and in cities at 80.2% in 2010 according to Ahmed's (2021) study, highlights the pronounced barriers faced by rural students in accessing quality education. To foster a more meritocratic higher education system in Bangladesh, it is imperative to address these disparities and ensure equal access to education for students across all regions of the country.

# Social Class and Different Types of Educational Institutes

In Bangladesh, the pursuit of higher education is impacted by social class and the types of educational institutes available, leading to significant disparities in access and opportunities. A just and equitable policy should ensure that students have access to higher education based on merit rather than financial ability (Meyer et al., 2013). Unfortunately, the reality is that access to education in the country is often determined by household income, resulting in many students from low-income backgrounds being unable to pursue higher education (Ahmed, 2021).

The presence of extreme income inequality in Bangladesh exacerbates the disparities in education, particularly in higher education (Joshi & Smith, 2012). Tertiary education, being costly, remains out of reach for many students from low-income groups. This situation hampers the establishment of a meritocratic and equitable society where talent and promise determine educational opportunities rather than financial means (Power, 2012).

Moreover, the perpetuation of economic inequalities challenges the notion of meritocracy as a means to address these disparities (Liu, 2011). Students from wealthier backgrounds tend to have better access to higher-standard schools, creating a disadvantage for those from low-economic backgrounds (Mijs, 2015). This perpetuates an unequal education system that does not prioritize merit and potential but instead favors those with financial advantages.

For a genuinely meritocratic society, it is crucial to address the unequal distribution of educational opportunities and break the cycle of disadvantage (Mijs & Savage, 2020). However, many individuals from low-income groups may internalize the notion that their fate is predetermined by their socio-economic status, undermining the principles of meritocracy and equal opportunities (Mijs & Savage, 2020).

Another aspect contributing to the lack of meritocracy in Bangladeshi higher education lies in the variation in the quality and availability of educational institutions. Public universities in Bangladesh, though demanding, have limited seats, resulting in fierce competition among numerous meritorious candidates (Jabunnesa & Islam, 2021). The shortage of seats in public universities means that many deserving students are unable to secure a place in top-ranked institutions, hindering their academic and professional growth.

On the other hand, private universities offer better facilities and resources but come with exorbitant fees, making them unaffordable for students from low socio-economic backgrounds (Sarkar & Hossain, 2016). This disparity in educational opportunities based on institutional differences and income brackets further undermines the idea of meritocracy in higher education (Breen & Goldthorpe, 1999).

Addressing financial constraints and lack of access to coaching is essential to foster a more equitable and meritocratic higher education system (Meyer et al., 2013). By allocating more budgetary support for talented students from low-income backgrounds, the government can create a fairer educational landscape and ensure that equal opportunities are provided to all students, irrespective of their financial circumstances. This approach will be a significant step towards building a meritocratic and equitable society in which education is a true pathway to success and social mobility.

#### 2.4 Awareness (AWN)

Awareness of equity and meritocracy is crucial in understanding and promoting the equitable and meritocratic nature of Bangladeshi higher education. It plays a significant role in creating a fair and inclusive educational environment. When students, educators, policymakers, and stakeholders are aware of the principles of equity and meritocracy, they can actively work toward eliminating biases, barriers, and unfair practices within the system. Awareness helps in

identifying and addressing disparities based on gender, socioeconomic status, and other factors that hinder equal access and opportunities in higher education (Crewe, 2005). Additionally, awareness may foster a culture of transparency, accountability, and ethical decision-making, ensuring that selection processes and resource allocation are based on merit rather than personal connections or political influence.

Breen & Goldthorpe (1999) emphasized the importance of awareness in promoting equity and meritocracy in higher education. They argued that by raising awareness about the principles of equity and meritocracy, educational institutions and stakeholders can actively contribute to creating an environment where all individuals have equal opportunities to access and succeed in higher education. Awareness campaigns, workshops, and educational programs can help disseminate information and encourage discussions about the significance of equity and meritocracy in the higher education system.

#### 2.5 Impact of Barriers (IOB)

The barriers present in the Bangladeshi higher education system have a significant impact on its equitable and meritocratic nature (Kono et al., 2017). The implementation of women's quotas and freedom fighters' quotas aims to promote gender equality and recognize the contributions of individuals involved in the liberation war (Yasmin, 2010). However, the strict implementation of these quotas has raised concerns about their impact on merit-based selection and the qualifications of admitted students. Corruption and nepotism within the system undermine the principle of meritocracy, as they result in unfair practices, favouritism, and the allocation of resources based on personal connections rather than qualifications (Knox, 2009). Political power and interference can compromise the selection processes and decision-making in higher education institutions, deviating from the meritocratic ideal (Patwary, 2011). Disparities between urban and rural areas in terms of educational resources and opportunities create barriers for students from rural areas, affecting their access to higher education. Socioeconomic disparities and different types of educational institutes also contribute to inequities, as students from privileged backgrounds often have better access to resources and educational opportunities (Archer, 2000).

According to Yasmin (2010), the strict implementation of women quotas and freedom fighters quotas has raised concerns about their impact on merit-based selection in Bangladeshi higher education. Corruption and nepotism within the system have been identified as major obstacles to the establishment of a meritocratic environment (Zafarullah & Siddiquee, 2001). The influence of political power in higher education institutions has been a topic of concern, as political interference can compromise the selection processes and decision-making ((Patwary, 2011). Disparities between urban and rural areas in terms of educational resources and

opportunities have been highlighted as significant barriers for students from rural areas (Ahmed, 2021). Socioeconomic disparities and different types of educational institutes have been recognized as factors contributing to inequities in access to higher education (Ahsan & Burnip, 2007a).

However, it is essential to note that while these barriers have negative implications for the equitable and meritocratic nature of higher education in Bangladesh, further research is needed to comprehensively assess their impacts. It is possible that some of these barriers, when addressed effectively, may lead to positive outcomes or unintended benefits for certain groups of students. For instance, the implementation of quotas could enhance diversity and representation within higher education institutions, potentially creating a more inclusive and equitable learning environment. Additionally, efforts to combat corruption and nepotism could lead to fairer admission and resource allocation processes, promoting meritocracy and equal opportunities for all students.

# 2.6 Equity and Meritocracy (EQM)

Equity and meritocracy (EQM) are crucial aspects of higher education systems, aiming to provide equal opportunities for all students based on their abilities and achievements. Existing literature highlights the significance of EQM in promoting social justice, reducing inequalities, and fostering a fair and inclusive educational environment.

Studies have emphasized the importance of equity in higher education, focusing on equal access and opportunities for students from diverse backgrounds (Ahmed, 2021; Archer, 2007; Boyle et al., 2014; Breen & Goldthorpe, 1999; Brint & Karabel, 1989; Burke, 2016; Clancy & Goastellec, 2007; Crewe, 2005; Marginson, 2011; Tan, 2018). McCowan (2015) discusses the need for equitable policies and practices to address socioeconomic disparities and ensure that students from disadvantaged backgrounds have a fair chance to pursue higher education. They argue that equity in higher education contributes to social mobility and reduces inequality in society.

Meritocracy, on the other hand, emphasizes the selection and advancement of individuals based on their merit, skills, and abilities rather than social backgrounds or privileges. Liu (2016) argue that a merit-based system promotes fairness and rewards individual achievements, fostering a competitive and high-performing academic environment. However, it is important to ensure that meritocracy is not based solely on academic performance but also considers diverse talents and abilities.

Several studies have examined the relationship between equity and meritocracy, highlighting the need to strike a balance between the two principles. Mijs & Savage (2020) discuss the

challenges of balancing equity and meritocracy in higher education. They argue that while equity initiatives are important to address historical disadvantages, they should not compromise merit-based selection processes. The authors suggest that a combination of affirmative action policies and merit-based criteria can create a more inclusive and meritocratic system.

Furthermore, research has explored the impact of factors such as quota systems, corruption, and political influence on equity and meritocracy in higher education. Yasmin (2010) examines the effects of quota systems on equity in the context of higher education in Bangladesh. They argue that while quota systems aim to increase access for underprivileged groups, they can also lead to unintended consequences and challenges in maintaining meritocracy. The study highlights the need for continuous evaluation and improvement of quota policies to ensure a balance between equity and meritocracy.

In summary, existing literature emphasizes the importance of equity and meritocracy in higher education. EQM ensures equal access and opportunities for students from diverse backgrounds and rewards individual achievements based on merit. Striking a balance between equity and meritocracy is essential to create a fair and inclusive higher education system.

#### 2.7 Research Framework

The research framework (Figure 2.1) presented in this study encompasses the following factors: Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), and Impact of Barriers (IOB). These factors are interconnected and mutually influencing, ultimately shaping the students' equity and meritocracy (EQM) within the higher education system in Bangladesh.

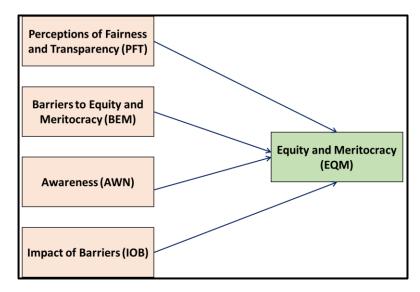


Figure 2.1. Research Framework

# 2.8 Chapter Summary

In summary, this chapter offers a comprehensive and introductory exploration of the relevant literature pertaining to the present study's research objectives. It commences by presenting a broad overview of the existing research landscape, thereby laying the groundwork for a more intricate examination of the five key factors under investigation: Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM). Through a systematic review of prior studies, the author synthesizes substantial evidence to substantiate the discourse surrounding these factors. As a result, the chapter contributes to establishing a robust scholarly foundation that underpins the subsequent research framework.

# 3. Chapter 03: Research Methodology

#### 3.1 Introduction

This chapter delineates the research methodology employed in this study, providing a structured and detailed insight into the various components that shape the investigation. Initially, the research method is introduced, laying down the foundational approach guiding the study. Subsequently, the chapter delves into the sampling design, an essential aspect encompassing the study population, sampling location, sample size, and sampling technique. This detailed approach ensures the robustness of the study, allowing for nuanced insights into the research question. This chapter then proceeds to outline the data collection procedures and data analysis techniques employed in this study. The latter serves as a roadmap for subsequent chapters, offering an overview of the analytical agenda designed to extract meaningful insights from the data. Through the application of suitable statistical or qualitative analysis methods, the study aims to identify relevant patterns, trends, or relationships in alignment with the research objectives.

#### 3.2 Research Method

Quantitative research methods were used in this study to investigate the research objectives concerning the meritocracy and equity of the Bangladeshi higher education system. This method involves collecting and analyzing numerical data to identify patterns, trends, and statistical relationships, allowing for a systematic examination of a large sample size and statistically significant conclusions.

In this study, quantitative research methods facilitated a comprehensive and objective assessment of the factors influencing equity and meritocracy in the higher education system in Bangladesh. Structured questionnaires were utilized to collect standardized data from 409 participants, ensuring a representative sample. The data enabled statistical analysis to identify significant trends, patterns, and relationships.

Creswell and Creswell (2018) stress the importance of quantitative research methods in exploring cause-and-effect relationships and making generalizations from a sample to a larger population. Similarly, Sekaran and Bougie (2017) underscore the benefits of quantitative research methods in providing objective and replicable data.

Quantitative research methods offer several advantages for this study. They allow for the measurement and comparison of variables related to meritocracy and equity, facilitating the generalizability of findings. By employing a sufficiently large sample size and random

sampling techniques, the study ensures that the results can be applied to the broader population of Pre-university students, university students, and university graduates in Bangladesh.

In conclusion, the application of quantitative research methods serves as a systematic and reliable approach to exploring the research questions concerning the meritocratic and equitable nature of the Bangladeshi higher education system, providing evidence-based insights through numerical data, statistical analyses, and objective conclusions.

## 3.3 Sampling Design

#### 3.3.1 Study Population

The study population for this research encompasses three specific categories that contribute to a comprehensive understanding of barriers to equity and meritocracy within Bangladesh's higher education system.

Pre-university students, who are about to complete their Higher Secondary School Certificate (HSC) or have recently done so, offer unique insights that might predominantly reflect anticipated barriers and assumptions related to university admission procedures. Their perspectives, positioned at the brink of higher education, provide valuable anticipatory viewpoints.

University students, currently enrolled in various institutions across Bangladesh, add a layer of complexity with their real-time understanding of the challenges and opportunities within the system. Their first-hand experiences reveal the current state of equity and meritocracy and are shaped by their ongoing encounters with the education system.

Finally, university graduates contribute retrospective insights based on their complete journey through the system. Their reflections offer a comprehensive view of the barriers faced, the successes achieved, and the intricacies of navigating the higher education landscape in Bangladesh.

The selection of these three groups is strategic, aiming to capture a broad and varied range of perspectives. Pre-university students bring anticipatory viewpoints, while university students offer current experiences, and university graduates provide historical context and reflection. Together, these categories form a rich tapestry of insights and experiences that contribute to a nuanced understanding of the extent to which the higher education system in Bangladesh promotes or hinders equity and meritocracy.

Creswell and Creswell (2018) underscore the importance of selecting participants who have direct experience within the study's context. By embracing the insights of HSC students,

enrolled university students, and graduates, this study aims to capture a broad spectrum of perspectives. Their unique experiences contribute valuable insights into how the higher education system in Bangladesh fosters or hinders meritocracy and equity.

In summary, by including these three groups—pre-university students, university students, and university graduates—the study forms a rich, interconnected perspective. The combination of anticipatory views, current experiences, and reflective insights creates a diverse and nuanced understanding of the challenges and opportunities associated with equity and meritocracy in higher education in Bangladesh.

#### 3.3.2 Sampling Location

The sampling location for this study included students from diverse regions such as major cities, small towns, and villages in Bangladesh. This intentional variation in locations aimed to obtain a wide array of participants that represent different geographical contexts within the Bangladeshi higher education system.

Creswell and Creswell (2018) highlight that involving participants from various locations offers insights into the experiences of individuals from different sociocultural backgrounds, thereby contributing to a thorough understanding of the factors influencing equity and meritocracy across diverse settings. By encompassing participants from cities, towns, and villages, the study captures subtle differences in educational experiences and barriers.

Sekaran and Bougie (2017) also underscore the significance of geographical diversity in sampling to ensure the generalizability of research findings. This diversity enhances the external validity of the study and allows for a more comprehensive understanding of the broader population.

In summary, the inclusion of participants from varied locations not only enriches the data but also provides a more complete perspective on the challenges and barriers faced by pre-university students, university students, and university graduates across different educational settings within Bangladesh.

### 3.3.3 Sample Size

The sample size for this study was determined to be 409 participants, adhering to statistical sampling principles and the desired precision level. The selection of an appropriate sample size is vital in research, influencing the reliability and generalizability of the outcomes.

Creswell and Creswell (2018) underline the necessity of sample size determination, emphasizing the need to balance the acquisition of reliable results with the minimization of data collection costs and resources. A larger sample size usually enhances the study's precision and statistical power, facilitating more accurate population inferences.

Sekaran and Bougie (2017) affirm the importance of sample size in quantitative research, cautioning that an insufficient sample may lead to imprecise and biased outcomes. They advocate for sample size determination based on factors such as precision level, population variability, and confidence level required in the findings.

Guided by Guilford and Fruchter's (1973) assertion that the minimum scientifically acceptable sample size for survey research with a population of 10,000 or more is 384, the study's exact and estimated sample size was 384, calculated using the formula:  $N = z^2pq/d^2$ . In this context, 409 participants were considered suitable, considering the target population characteristics and desired precision level.

Ensuring an adequate sample size, this study sought to augment the reliability and validity of the research outcomes and broaden the findings' generalizability. This approach is congruent with Guilford and Fruchter's (1973) recommendations, considering the study population's diversity, variability, and characteristics, even if the exact population size remains unknown. A more substantial sample helps minimize sampling errors and better captures population variability, leading to accurate estimations.

In summary, the carefully determined sample size of 409 participants contributes to the study's reliability, generalizability, and statistical robustness, striking a balance between precision, representativeness, and resource efficiency. It represents a critical component in understanding barriers to achieving equity and meritocracy in Bangladeshi higher education.

#### 3.3.4 Sampling Technique

For this study, a simple random sampling technique was utilized, ensuring that each member of the target population had an equal chance of being selected. This method minimizes bias in participant selection, contributing to a more representative sample and improving the generalizability of the findings.

Creswell and Creswell (2018) affirm the significance of random sampling in quantitative research, noting that it enhances statistical inference and the study's external validity. The random selection process allows for the assumption that the sample is representative of the broader population, strengthening the confidence in generalizing the findings.

Sekaran and Bougie (2017) further underscore the merits of simple random sampling, emphasizing its straightforward nature and its capacity to provide an unbiased population representation. The method helps reduce the likelihood of systematic biases that might result from other sampling strategies. It is especially valuable when the target population is relatively homogenous, such as pre-university students, university students, and graduates from Bangladeshi universities, as it enables the selection of participants mirroring the population's traits.

By leveraging simple random sampling, this research aimed to obtain a representative sample from the target population of pre-university students, university students, and those in the workforce after graduation. This technique ensures that the gathered data accurately mirrors the attributes, viewpoints, and experiences of individuals within the population under study.

#### 3.4 Research Instrument / Questionnaire Items

The research instrument for this study consisted of a questionnaire developed uniquely for the research context rather than adopting from existing education studies. The questionnaire was designed through a meticulous process, encompassing consultation with Bangladeshi university teachers, dialogue with the research supervisor, and an in-depth review of relevant literature.

For the construct of Perceptions of Fairness and Transparency (PFT), eight items were created, six aimed at fairness and two at transparency. This distinction was made as fairness, more than transparency, is central to assessing the meritocratic and equitable nature of Bangladeshi higher education.

Nine items were formulated to measure Barriers to Equity and Meritocracy (BEM) by adhering to established guidelines. This construct was given particular emphasis as it directly pertains to the first research question.

The constructs of Awareness (AWN) and Impact of Barriers (IOB) were derived with reference to existing studies, resulting in two items for awareness and four for the impact of barriers, each adapted to the specific context of this research.

Six items were developed for the construct of Equity and Meritocracy (EQM) through consultation with local university teachers, ensuring their pertinence to the Bangladeshi higher education landscape.

It should be noted that while the questionnaire items were slightly reworded for different educational groups, the content remained consistent.

The questionnaire predominantly employed a 5-point Likert scale for most items, ranging from "1=Strongly Disagree" to "5=Strongly Agree," with "3=Neutral" as the midpoint. However, some questions necessitated unique response options to more accurately gauge participants' perceptions, demanding careful consideration in result interpretation. In the Perception of Fairness and Transparency (PFT) section, participants were prompted to evaluate the transparency and fairness of university admissions in Bangladesh, using a scale from "Not at all transparent/fair" to "Very transparent/fair," and a midpoint of "Not sure." Similarly, in the Awareness section, a scale from "Very unaware" to "Very aware" was utilized, with "Neutral" as the midpoint, to assess awareness of inequalities or barriers to meritocracy in Bangladeshi higher education.

In relation to the Impact of Barriers section, the questionnaire inquired about the degree to which these barriers affected participants' academic or professional outcomes, employing response options ranging from "Very positively impacted" to "Very negatively impacted," with "No Impact" as the midpoint. Additionally, questions regarding the influence of these barriers on participants' perceptions of the higher education system in Bangladesh utilized the same scale. Lastly, to assess the perceived difficulty of securing employment post-university in Bangladesh, response options ranged from "Very easy" to "Very difficult," with a neutral midpoint. These variations in the Likert scale allowed for a nuanced understanding of participants' opinions, tailoring the instrument to the specific inquiries of the study.

The utilization of a varied Likert scale facilitated a nuanced understanding of participants' views, offering valuable insights into transparency, fairness, awareness, and barriers in the Bangladeshi higher education context.

The questionnaire's development was a cumulative effort, amalgamating inputs from various sources to ensure its relevance and appropriateness to the specific research goals and context. Although prior studies and literature were consulted, the instrument was an original product of the researcher's synthesis of expert discussions, dialogues, and comprehensive literature review.

Table 3.1. Questionnaire Items

### Variables &

**Items** 

#### Perceptions of Fairness and Transparency (PFT)

1. To what extent do you agree that the education system in Bangladesh is fair and merit-based?

- 2. To what extent do you agree that Bangladeshi higher education institutions are providing an environment for students to compete on the basis of merit?
- 3. To what extent do you agree that the university admission process in Bangladesh should be based solely on merit?
- 4. How transparent do you think the university admission process is in Bangladesh?
- 5. How fair do you think the university admission process is in Bangladesh?
- 6. To what extent do you agree that students from privileged backgrounds are more likely to be admitted into a university and complete higher education in Bangladesh?
- 7. To what extent do you agree that students from lower economic backgrounds are less likely to be admitted into a university and complete higher education in Bangladesh?
- 8. To what extent do you agree that other factors such as financial need or social background should also be considered during university admission in Bangladesh?

#### Barriers to Equity and Meritocracy (BEM)

- 1. To what extent do you agree that the lack of access to coaching/tutoring is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 2. To what extent do you agree that financial constraint is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 3. To what extent do you agree that gender discrimination is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 4. To what extent do you agree that discrimination based on social class is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 5. To what extent do you agree that unequal admission criteria are a barrier to getting admission into a university and completing higher education in Bangladesh?
- 6. To what extent do you agree that quota is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 7. To what extent do you agree that corruption is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 8. To what extent do you agree that nepotism is a barrier to getting admission into a university and completing higher education in Bangladesh?
- 9. To what extent do you agree that political influence is a barrier to getting admission into a university and completing higher education in Bangladesh?

#### Awareness (AWN)

- 1. How aware are you of the inequalities or barriers to meritocracy in Bangladeshi higher education?
- 2. To what extent do you agree that the aforementioned barriers favor certain students over others in securing admission into a university and completing higher education in Bangladesh?

## Impact of Barriers (IOB)

- 1. To what extent do you agree that the aforementioned barriers would benefit you over others in obtaining admission to a university and completing higher education in Bangladesh?
- 2. To what extent have these barriers affected your academic performance or professional success?
- 3. How has the presence of these barriers impacted your view of the higher education system in Bangladesh?
- 4. To what extent do you believe it would be challenging to secure employment after completing a university education in Bangladesh?

## Equity and Meritocracy (EQM)

- 1. To what extent do you agree that increasing transparency and fairness can make university admission and university study in Bangladesh more equitable and merit-based?
- 2. To what extent do you agree that ensuring equal access to coaching/tutoring for all students can make university admission and university study in Bangladesh more equitable and merit-based?
- 3. To what extent do you agree that implementing affirmative action policies to address social and economic inequalities can make university admission and university study in Bangladesh more equitable and merit-based?
- 4. To what extent do you agree that abolishing quotas can make university admission and university study in Bangladesh more equitable and merit-based?
- 5. To what extent do you agree that eradicating corruption and nepotism can make university admission and university study in Bangladesh more equitable and merit-based?
- 6. To what extent do you agree that restricting political influence can make university admission and university study in Bangladesh more equitable and merit-based?

## 3.5 Data Collection Procedures

The data for this study was collected using a questionnaire developed on the Webropol online platform. This platform offered an efficient means of administering the questionnaire and collating responses, in line with the contemporary research trend of employing technology for such purposes. Creswell and Creswell (2018) affirm the growing acceptance of online surveys due to their convenience and capacity to engage a significant number of participants.

Participant recruitment was conducted through social media platforms including Facebook, Messenger, and WhatsApp, aligning with the increasingly common practice of utilizing such channels for research purposes. As noted by Sekaran and Bougie (2017), social media facilitates rapid dissemination of study information, broadens the reach, and allows access to specific target populations. This approach expanded the study's scope and contributed to a more comprehensive understanding of the issues related to Bangladeshi higher education's equity and meritocratic facets.

In summary, the use of the Webropol online platform for questionnaire administration and social media for participant recruitment contributed to a streamlined and effective data collection process. These methods, in accordance with contemporary research practices described by Creswell and Creswell (2018) and Sekaran and Bougie (2017), enabled the attainment of a robust sample size, enhancing the study's analysis.

### 3.6 Data Analysis Technique

## 3.6.1 Descriptive Statistics

Descriptive statistics, vital for summarizing and analyzing data, afford critical insights into the dataset's characteristics, patterns, and trends (Ibrahim et al., 2015; Mishra et al., 2019). In this thesis, these statistics serve to address both the first and second research questions, which explore various barriers to university education in Bangladesh and examine students' perceptions concerning fairness, transparency, and barriers to equity and meritocracy.

The study employs two fundamental descriptive statistics, the mean and standard deviation. The mean represents the data's central tendency, providing insights into the typical or average value among participants. The standard deviation, conversely, measures the dispersion of data points from the mean, quantifying the spread of values (Mishra et al., 2019).

Data were collected using a 5-point Likert scale, and measures such as mean and standard deviation were applied to understand the responses comprehensively. Interpretation of mean scores was categorized into levels ranging from Low (1.00 to 2.00) to High (4.01 to 5.00), as defined by Ibrahim et al. (2015). This categorization elucidates the distribution and intensity of participants' responses.

To explore the first research question, the study will utilize mean and standard deviation to analyze responses to identified barriers, including financial constraints, gender and social class discrimination, and political influence. Examination of the mean values will indicate participants' agreement or disagreement concerning these barriers' presence and impact on higher education in Bangladesh.

For the second research question, the mean value and standard deviation will be employed to analyze students' perceptions regarding fairness, transparency, awareness, and the impacts of barriers on equity and meritocracy. The standard deviation will further enable the identification of variability in students' perceptions, highlighting patterns or trends in their views.

In summary, descriptive statistics, encompassing the mean and standard deviation, offer invaluable insights into students' perspectives on barriers and perceptions related to equity and meritocracy in Bangladeshi higher education (Kallner, 2018). These tools aid in data

organization, summarization, and interpretation, supporting insightful conclusions about the barriers' extent and impact on higher education access, and perceptions of fairness and meritocracy.

### 3.6.2 Construct Reliability

Assessing Assessing construct reliability is pivotal in this research to confirm the accuracy and consistency of the measurement tool used for examining barriers and perceptions concerning equity and meritocracy in Bangladeshi higher education. This assessment strengthens the validity and trustworthiness of the findings, enabling reliable conclusions (Tavakol & Dennick, 2011).

In this regard, Cronbach's alpha, a prominent statistical metric for internal consistency reliability, will be utilized. This measure evaluates the internal consistency within scales or questionnaires, such as those concerning higher education access barriers and students' fairness and transparency perceptions (Bland & Altman, 1997). Cronbach's alpha, denoted as " $\alpha$ " and ranging from 0 to 1, furnishes a comprehensive reliability measure. An  $\alpha$  coefficient between 0.70 and 0.95 is typically deemed acceptable, while coefficients below 0.5 are considered insufficient (Tavakol & Dennick, 2011).

By employing Cronbach's alpha, researchers can discern the correlation and consistency among the scale items, offering insights into the tool's reliability. A high Cronbach's alpha value, generally above 0.70, signifies a robust construct reliability, confirming that the items measure the intended constructs effectively (Akter et al., 2022; Hizam et al., 2023). Conversely, values below 0.70 may call for further examination and potential refinement of the tool (Hair et al., 2019). The interpretation must also consider other factors, such as the number of items and the research context, to ascertain the appropriate reliability level (DeVellis, 2016).

The focus of the research questions on barriers and perceptions related to equity and meritocracy underscores the necessity of construct reliability (Tavakol & Dennick, 2011). Thus, the utilization of Cronbach's alpha is vital to enhance the study's quality and credibility, supporting the instrument's validity, and laying a solid foundation for pertinent interpretations and conclusions (Bland & Altman, 1997). This rigorous evaluation ensures reliable insights into the variable relationships, furthering knowledge and informed decision-making in the realm of Bangladeshi higher education.

#### 3.6.3 Group-Wise Descriptive Statistics

To analyze the variations in students' perceptions regarding fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy in Bangladeshi higher

education across different educational strata, group-wise descriptive statistics will be utilized. Participants are segmented into three specific groups based on their educational levels: "Pre-University Students," "University Students," and "University Graduates."

The objective of the third research question is to explore the distinctions in students' perceptions across these educational categories and to discern the implications these differences might have for the interpretation of equity and meritocracy within the higher education framework. Groupwise descriptive statistical analysis will furnish valuable insights into the distinct viewpoints of each educational level, assisting in the identification of potential patterns or trends.

This analysis will entail the calculation of statistical measures such as the mean and standard deviation for each latent variable, encompassing perceptions of fairness and transparency, barriers, awareness, and the impacts of barriers on equity and meritocracy. These metrics will present an extensive overview of the response distribution within each group, illuminating the degree of concurrence or discordance on various facets pertinent to equity and meritocracy in higher education.

In sum, the application of group-wise descriptive statistics offers an exhaustive and nuanced examination of students' perspectives on equity and meritocracy across different educational stages, contributing to a more refined understanding of the prevailing state of higher education in Bangladesh.

### 3.6.4 One-Way ANOVA and Post hoc-Tukey Test

In this research, the one-way ANOVA and Tukey post hoc test will be implemented to analyze data across three education level groups: "Pre-University Students," "University Students," and "University Graduates." This methodology is justified due to its applicability in comparing means across groups with one categorical independent variable, such as educational level, and a continuous dependent variable representing the variables of interest (PFT, BEM, AWN, IOB, and EQM) (George & Mallery, 2013).

The one-way ANOVA will be used to discern significant differences in means related to equity and meritocracy across the three educational categories, facilitating the exploration of possible disparities (Meng & Sun, 2019). This analysis involves quantifying the variation between and within groups to assess the significance of observed differences (Field, 2013), thereby offering a robust framework for detecting meaningful variations in perceptions and experiences within the higher education system regarding equity and meritocracy.

Further, by evaluating the F-statistic and p-value, the one-way ANOVA enables the identification of any statistically significant differences among the three education-level groups (George & Mallery, 2003). This aids in understanding the impact of educational level on the variables of interest.

Upon identifying significant differences through the one-way ANOVA, the Tukey post hoc test will be employed for multiple comparisons and specific group differences assessment (Abdi & Williams, 2010; George & Mallery, 2013). This subsequent analysis will yield deeper insights into the relationships between education level categories and variables related to equity and meritocracy within the context of Bangladeshi higher education.

The Tukey post hoc test serves to pinpoint specific education level groups that exhibit significant variations in their perceptions and experiences, controlling the family-wise error rate and ensuring comprehensive examination through simultaneous testing of all pairwise comparisons (Zayyad & Toycan, 2018; Ruxton & Beauchamp, 2008). Interpreting the Multiple Comparisons table will facilitate understanding the statistical significance and direction of differences between the groups (Abdi & Williams, 2010).

The utilization of the one-way ANOVA and Tukey post hoc test will support drawing substantive conclusions regarding equity and meritocracy within the Bangladeshi higher education system, enhancing the research's credibility and validity.

#### 3.6.5 Correlation

Correlation, specifically the Pearson Correlation coefficient, is employed in this research to quantify the relationship between two continuous variables within the context of equity and meritocracy in Bangladeshi higher education (Schober et al., 2018). This statistical measure, ranging from -1.0 to 1.0, indicates the strength and direction of the relationship, with values close to 1 or -1 demonstrating a strong association, and 0 indicating no linear connection (Hair et al., 2018).

In this study, Pearson's correlation coefficient is chosen for its robustness in capturing linear relationships, assuming bivariate normal distribution and suitability for variables measured on interval or ratio scales (Hair et al., 2018). Interpretation of the correlation coefficient will be contextual, considering the specific field of study and the research question, with domain-specific knowledge and prior research guiding the determination of meaningful correlation levels (Schober et al., 2018).

Utilizing Pearson's correlation coefficient will enable the investigation of various relationships related to equity and meritocracy within higher education. For instance, exploring correlations

between students' perceptions of fairness and transparency and their awareness of barriers can illuminate institutional influences on students' comprehension of higher education challenges. Similarly, analyzing correlations between perceived barriers and levels of equity and meritocracy may identify factors that disproportionally affect specific student groups, guiding targeted interventions for a more equitable education system.

The correlation analysis, calculated using SPSS-26 software, will strengthen the validity of the findings, facilitating evidence-based conclusions and recommendations towards an inclusive and equitable higher education landscape in Bangladesh (Patten & Newhart, 2017). Through this methodology, insights into the interplay between variables related to equity and meritocracy will be gleaned, contributing to the precision, relevance, and overall robustness of the research.

### 3.6.6 Group-wise Correlations

The group-wise analysis of correlations in this study, conducted across different educational stages including Pre-University Students, University Students, and University Graduates, is instrumental in addressing research question iii. By delineating the unique relationships between key variables within these specific groups, the research reveals how students' perceptions of fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy vary across educational levels. These insights contribute to a nuanced understanding of the current level of equity and meritocracy within the Bangladeshi higher education system, highlighting the implications of these variations and informing targeted interventions and policies.

#### 3.6.7 Regression

In this study on Bangladeshi higher education, regression analysis will be utilized to investigate the relationship between a dependent variable, Equity and Meritocracy (EQM), and four independent variables: Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Impact of Barriers (IOB), and Awareness (AWN). The regression model will yield key metrics such as R, R-square, Adjusted R-square, ANOVA, and Beta values (Seber & Lee, 2003; Hair et al., 2019).

The R-value denotes the correlation coefficient, indicating the strength and direction of the relationship, while R-square reveals the variance in EQM explained by the predictors. Adjusted R-square refines this interpretation by considering the number of independent variables (Hair et al., 2019). The F-statistic within the ANOVA framework will assess the overall significance of the regression model by comparing explained to unexplained variation, and Beta values,

accompanied by t-statistic and p-value, will identify the significance of each independent variable (Uyanık & Güler, 2013; Hair et al., 2019).

The use of regression analysis in this context serves to elucidate the relationships between the selected variables and EQM while allowing for examination within distinct educational levels. The analysis aims to understand both the overall relationship and the significance of individual predictor variables across different groups, identifying specific influences on EQM.

The application of this technique is essential in uncovering the underlying dynamics affecting EQM and providing insights into equity and meritocracy within the higher education system in Bangladesh. The outcomes of the regression analysis will contribute to the formulation of interventions and strategies tailored to enhance EQM, thereby enriching the academic understanding of this phenomenon.

## 3.6.8 Group-wise Regressions

The employment of group-wise regression analysis explores the relationship between Equity and Meritocracy (EQM) and the independent variables (PFT, BEM, AWN, IOB) across distinct educational groups: Pre-University Students, University Students, and University Graduates. This approach directly contributes to answering research question iii, by offering a nuanced understanding of how factors influencing EQM may vary according to educational background. By identifying specific influences within each group and understanding how these relationships differ, this analysis provides insights into the implications of these variations for understanding the current level of equity and meritocracy within the Bangladeshi higher education system. This tailored examination enables the development of more precise and effective strategies to enhance equity and meritocracy within the context of Bangladesh's educational landscape.

## 3.7 Chapter Summary

This chapter presents a comprehensive overview of the approach utilized to carry out this research. The chapter begins by discussing the sampling design. Moving forward, the chapter explores the processes for data collection and outlines the techniques used to effectively engage with the respondents. In addition, the chapter provides detailed explanations of the data analysis techniques employed. Overall, this chapter sets the stage for the subsequent analysis, guiding the author through the logical progression from sampling design to data collection and analysis.

# 4. Chapter 04: Data Analysis and Findings

#### 4.1 Introduction

Chapter 4 offers a rigorous investigation into the intricate barriers and perceptions impacting accessibility to higher education in Bangladesh, employing SPSS-26 for data analysis. Beginning with a comprehensive review of the demographic characteristics of respondents, this foundation paves the way for the subsequent application of descriptive statistics, pertinent to Research Questions 1 and 2, that address challenges related to equity and meritocracy. The chapter then validates the construct's reliability by using Cronbach's alpha. Special emphasis is placed on Research Question 3, using group-wise statistics to identify variations among distinct groups. Here, a one-way ANOVA test is executed to evaluate the influence of educational levels on specific variables (PFT, BEM, AWN, IOB, EQM), supplemented by the Tukey post hoc test to discern variations across various educational strata. The chapter culminates in a comprehensive analysis of relationships between variables, deploying correlation coefficients and regression analysis in concurrence with RQ3. This methodical and cohesive approach discloses the intricacies of equity and meritocracy within the higher education system in Bangladesh. Overall, the chapter's synergy with the research questions highlights its crucial contribution to the academic discourse exploring the multifaceted challenges and perceptions that delineate higher education in Bangladesh.

#### 4.2 Demographic Results

Data for the study was gathered through an online platform called Webropol. A total of 409 responses were obtained for the purpose of data analysis. Initially, the demographic variables including gender, age, occupation, social class, **education level**, study field, study location, and university type were assessed in terms of frequency and percentage distribution.

The demographic results of the study are presented in Table 4.1, which provides an overview of the distribution of respondents across various demographic variables.

Regarding gender, the majority of respondents were male, accounting for 51.8% of the total, while females constituted 48.2%. In terms of age, the age group of 18-25 years old was the largest, comprising 53.8% of the total respondents. The age groups of 26-35, 36-45, and 46 and above constituted 38.9%, 6.8%, and 0.5% of the respondents, respectively. In the occupation category, students were the predominant group, making up 65.0% of the survey participants. Employed individuals in the private sector represented 17.4% of the respondents, while those in the public sector accounted for 5.1%. Self-employed individuals and unemployed respondents constituted 5.1% and 5.6%, respectively, while other occupations made up 1.7%. Regarding social class, the majority of respondents fell into the middle-class category,

comprising 51.3% of the total. Upper-middle-class respondents constituted 20.5%, while the upper class, lower-middle class, and lower class represented 11.5%, 13.9%, and 2.7%, respectively.

The participants in this research were categorized into three distinct groups based on their education level. The first group comprised individuals who were either about to complete or had recently completed their Higher Secondary Certificate (HSC), accounting for 28.9% of the respondents (This group will be mentioned as "Pre-university Students" or (Before)). The second largest group consisted of currently enrolled University Students, representing 33.0% of the participants (This group will be regarded as University Students or ("In")). The majority of respondents (38.1%) had already completed their university education (This group will be regarded as University Graduates or ("Out")). This division based on education level was a focal point of the research, and it served as the basis for conducting various statistical analyses. Group-wise descriptive statistics, Tukey post hoc test, group-wise correlation, and group-wise regression tests were employed to examine and assess the differences, associations, and predictive relationships related to equity and meritocracy variables within each education level group. The significance of education level as a variable was thereby highlighted in the study

Concerning the study field, respondents from the science background were the most prevalent, making up 42.3% of the total. Engineering, business, humanities, social sciences, and other fields accounted for 18.6%, 23.2%, 6.6%, 5.1%, and 4.2% of the respondents, respectively. In terms of study location, the majority of respondents (69.9%) resided in major cities. Respondents from small towns, villages, and abroad represented 15.2%, 5.9%, and 8.3% of the total, respectively. Lastly, the highest percentage of responses came from students at public universities (43.0%), followed by private universities (36.9%) and national universities (19.1%). Other university types accounted for 1.0% of the respondents.

Overall, the demographic results provide an understanding of the distribution of respondents across various categories, enabling researchers to consider the diverse perspectives and experiences of participants in the study. These demographic characteristics are essential for ensuring the representativeness of the sample and enhancing the generalizability of the study findings to the broader population of interest.

Table 4.1. Demographic Result

	Frequency Percentage	
Gender		
Male	212	51.8
Female	197	48.2

Age		
18-25	220	53.8
26-35	159	38.9
36-45	28	6.8
46 and above	2	0.5
Occupation		
Student	266	65.0
Employed in the private sector	71	17.4
Employed in the public sector	21	5.1
Self-employed	21	5.1
Unemployed	23	5.6
Other	7	1.7
Social Class		
Upper class	47	11.5
Upper-middle class	84	20.5
Middle class	210	51.3
Lower-middle class	57	13.9
Lower class	11	2.7
Education Level		
Pre-University Students (Before)	118	28.9
University Students (In)	135	33.0
University Graduates (Out)	156	38.1
Study Field		
Science	173	42.3
Engineering	76	18.6
Business	95	23.2
Humanities	27	6.6
Social Sciences	21	5.1
Other	17	4.2
Study Location		

In a major city	286	69.9
In a small town	62	15.2
In a village	24	5.9
Abroad	34	8.3
Other	3	0.7
University Type		
Public University	176	43.0
Private University	151	36.9
National University	78	19.1
Other	4	1.0

## 4.3 Descriptive Statistics

This section presents an in-depth examination of the central tendencies and variations across several key variables, providing a comprehensive understanding of participants' perceptions and beliefs. The analysis draws on responses from 409 participants to explore their views on fairness and transparency, barriers to equity and meritocracy, awareness of these issues, the impact of the barriers, and their overall perceptions of equity and meritocracy within the context of Bangladeshi higher education. Table 4.2 delineates the descriptive statistics for each variable, offering a holistic overview of the data and forming the foundation for the subsequent discussion and interpretation.

Perceptions of Fairness and Transparency (PFT)

A comprehensive examination of the mean scores within the Perceptions of Fairness and Transparency (PFT) variable reveals a notable agreement on the aspects of fairness and transparency, with scores ranging between 3.47 and 4.04. PFT3 stands out with the highest mean score of 4.04 (SD = 0.986), signifying a strong concurrence with the related statement. In contrast, PFT1 has the lowest mean score of 3.47 (SD = 1.180), indicating relative reservation on that particular item. The remaining items fall within this range, such as PFT4 concerning transparency, with a mean of 3.55 (SD = 1.171), and PFT5 relating to fairness, with a mean of 3.52 (SD = 1.284).

Barriers to Equity and Meritocracy (BEM)

The Barriers to Equity and Meritocracy (BEM) variable, central to the exploration of my first research question regarding the extent of various hindrances for students in accessing and studying in universities in Bangladesh, delineates a broad spectrum of barriers. The mean scores exhibit a range from 2.95 to 3.96. Unexpectedly, BEM3, referring to gender discrimination, has been found to have the lowest mean score of 2.95 (SD = 1.185), thus highlighting it as a less significant barrier compared to others. Conversely, BEM7, associated with corruption, surfaces at the upper end with a mean score of 3.96 (SD = 0.944), emphasizing it as a prominent concern. The data encapsulated in this section critically contributes to understanding barriers such as lack of access to coaching, financial constraints, gender and social class discrimination, unequal admission criteria, quota systems, corruption, nepotism, and political influence in the context of Bangladeshi higher education.

#### Awareness (AWN)

A comprehensive examination of the mean scores within the Awareness (AWN) variable reveals a robust understanding among participants, with scores ranging from 3.83 to 3.97. AWN1, denoted as somewhat aware, stands out with the highest mean score of 3.97 (SD = 0.999), whereas AWN2 has the lowest mean score of 3.83 (SD = 0.830), illustrating variations in the levels of awareness.

### Impact of Barriers (IOB)

A thorough examination of the variable Impact of Barriers (IOB) reveals nuanced perceptions among the study's participants. The mean scores within this variable range between 3.50 and 4.18, suggesting a spectrum of impact that spans from somewhat negatively impacted to very negatively impacted. Of particular significance is the value associated with IOB4, which pertains to the challenges of securing employment upon completion of university education in Bangladesh. This specific element registers the highest mean score of 4.18 (SD = 1.056), underscoring the considerable negative influence of this particular barrier. This finding emphasizes the gravity of employment-related concerns within the context of higher education in Bangladesh, highlighting the profound impact that barriers to employment have on students' perceptions and experiences.

### Equity and Meritocracy (EQM)

Within the Equity and Meritocracy (EQM) variable, a comprehensive evaluation of the mean scores exhibits a generally positive perception of equity and meritocracy, with scores ranging between 3.81 and 4.03. EQM1 receives the highest mean score of 4.03 (SD = 0.848), reflecting strong agreement, while EQM2 has the lowest mean score at 3.81 (SD = 0.928). The remaining

items present consistent agreement, with means close to or above 4.00, signifying a harmonious view of the subject.

Overall, students' perceptions offer valuable insights into the strengths and weaknesses of the existing level of equity and meritocracy in Bangladeshi higher education. Despite the positive perceptions towards equity and meritocracy (EQM) in higher education, it is essential to address the identified barriers and sustain high awareness levels to cultivate a more equitable and meritocratic environment within Bangladeshi higher education institutions.

Table 4.2. Descriptive Statistics for the Items

	N	Mean	Std. Deviation			
	Perceptions of F	airness and Transpa	rency (PFT)			
PFT1	409	3.47	1.180			
PFT2	409	3.51	1.101			
PFT3	409 4.04 0.986					
PFT4	409	3.55	1.171			
PFT5	409	3.52	1.284			
PFT6	409	3.86	0.883			
PFT7	409	3.67	1.060			
PFT8	409	3.64	1.127			
	Barriers to E	quity and Meritocracy	y (BEM)			
BEM1	409	3.62	0.996			
BEM2	409	3.83	0.941			
ВЕМ3	409	2.95	1.185			
BEM4	409	3.30	1.111			
BEM5	409	3.78	0.931			
BEM6	409	3.91	1.036			
BEM7	409	3.96	0.944			
BEM8	409	3.64	1.030			
ВЕМ9	409	3.70	1.002			
		wareness (AWN)	1			
AWN1	409	3.97	0.999			

AWN2	409	3.83	0.830
	Imp	eact of Barriers (IOB)	
IOB1	409	3.50 (Neg Impact)	1.029
IOB2	409	3.72 (Neg Impact)	1.092
IOB3	409	3.83 (Neg Impact)	1.081
IOB4	409	4.18 (very difficult)	1.056
	Equity	and Meritocracy (EQM)	
EQM1	409	4.03	0.848
EQM2	409	3.81	0.928
EQM3	409	3.85	0.801
EQM4	409	3.89	0.980
EQM5	409	3.93	1.001
EQM6	409	4.02	0.931

## 4.4 Construct Reliability

The construct reliability analysis conducted for the questionnaire items revealed satisfactory results, indicating a good level of internal consistency among the different latent variables. As shown in Table 4.3, all latent variables, namely Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM), demonstrated Cronbach's alpha coefficients higher than the recommended threshold of 0.70. This indicates that the items within each construct correlate well with one another, ensuring the reliability of the measurements.

Specifically, the construct "Equity and Meritocracy (EQM)" exhibited the highest level of reliability, with a Cronbach's alpha coefficient of 0.808. This implies that the items within the EQM construct are strongly related and consistently measure the concept of equity and meritocracy.

The attainment of high Cronbach's alpha values for all constructs in the questionnaire signifies that the research has achieved construct reliability. The internal consistency observed in the responses indicates that the questionnaire items are valid and reliable measures of the intended constructs. As a result, the findings obtained from this study can be considered credible and trustworthy, providing valuable insights into the perceptions and attitudes related to equity and meritocracy in higher education.

Table 4.3. Cronbach's Alpha Results

Variables	No. of Items	Cronbach's Alpha
Perceptions of Fairness and Transparency (PFT)	8	0.742
Barriers to Equity and Meritocracy (BEM)	9	0.799
Awareness (AWN)	2	0.710
Impact of Barriers (IOB)	4	0.705
Equity and Meritocracy (EQM)	6	0.808

## 4.5 Overall and Group-Wise Descriptive Statistics

The findings presented in Table 4.4 provide an overview of the mean scores and descriptive statistics for each factor in the model. The respondents' agreement levels with the statements in the questionnaire are assessed through the mean scores.

The construct "Equity and Meritocracy (EQM)" obtained the highest mean score of 3.92, indicating a moderately high level of agreement among the respondents regarding equity and meritocracy in higher education. On the other hand, the construct "Barriers to Equity and Meritocracy (BEM)" received the lowest mean score of 3.63, which also falls within the moderately rated range. This suggests that respondents, on average, expressed a moderate level of agreement with the barriers identified in the context of equity and meritocracy in higher education.

It is important to note that, in the context of a Likert-scale, a mean score of 2.50 is considered the threshold for acceptance, indicating a level at which respondents are generally agreeable (Hair et al., 2018). In this research, the mean values for all variables ranged from 3.63 to 3.92, surpassing the acceptance threshold of 2.50. This indicates that most of the respondents demonstrated agreement with the statements presented in the questionnaire regarding perceptions of fairness and transparency, barriers to equity and meritocracy, awareness, impact of barriers, and the overall concept of equity and meritocracy in higher education.

The standard deviations provided in Table 4.4 show the dispersion of responses around the mean scores. The relatively low standard deviations for all constructs indicate that the responses are clustered closely around the mean, suggesting a consistent level of agreement among the respondents.

Overall, the descriptive statistics and mean scores offer valuable insights into the respondents' perceptions and attitudes related to equity and meritocracy in higher education. The moderately high mean scores for "Equity and Meritocracy (EQM)" indicate a positive outlook on the

concept, while the moderately rated scores for "Barriers to Equity and Meritocracy (BEM)" highlight the presence of perceived obstacles that need to be addressed. These findings contribute to a better understanding of the current state of equity and meritocracy in higher education in Bangladesh.

Table 4.4. Ove	erall Descriptive	Statistics	for the S	Scales
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		PFT	ВЕМ	AWN	IOB	EQM
N	Valid	409	409	409	409	409
	Missing	0	0	0	0	0
Mean		3.66	3.63	3.90	3.81	3.92
Std. Deviation		0.660	0.633	0.809	0.775	0.655

On the other hand, Table 4.5 presents the descriptive statistics for different latent variables based on the participants' education levels, which was the focus of this research, categorizing them into three groups: "Pre-University Students," "University Students," and "University Graduates." Initially, a general agreement and global pattern emerge among the groups, where most mean scores fall within the moderate range for each latent variable.

Overall, across all variables examined, pre-university students consistently manifested the highest mean values among the three educational groups. Conversely, graduate students generally exhibited mean values surpassing those of university students. An exception to this pattern was observed in the domain of awareness, where university students slightly outstripped university graduates in mean value.

In terms of Perceptions of Fairness and Transparency (PFT), all three groups demonstrate relatively similar mean scores, with the "Pre-University Students" group reporting a mean score of 3.71, the "University Students" group reporting 3.55, and the "University Graduates" group reporting 3.70. These scores indicate that participants in all three groups perceive a moderate level of fairness and transparency in the higher education system. It is intriguing that the current university students exhibit a slightly lower mean score, despite having experiences with admission tests and university studies, similar to the university graduates. This difference in perception may warrant further investigation to understand the underlying reasons.

On the other hand, in the case of Barriers to Equity and Meritocracy (BEM), a different pattern emerges. The "Pre-University Students" group reports a significantly higher mean score of 3.82, indicating a relatively higher perception of barriers compared to the other two groups, which have mean scores around 3.55. This finding is noteworthy, as it suggests that

HSC students, who are in the process of completing their education, perceive more barriers toward equity and meritocracy than the current university students and university graduates. The reasons for this difference in perception could be attributed to the HSC students' anticipation of university admission challenges and the uncertainties they face as they transition to higher education.

Awareness (AWN) also shows a relatively consistent pattern, with all three groups reporting mean scores indicating a moderate to relatively high level of awareness. The "Pre-University Students" group demonstrates the highest mean score of 4.08, followed closely by the "University Students" group with a mean score of 3.84, and the "University Graduates" group with a mean score of 3.81. These findings indicate that participants across all education levels possess a relatively high level of awareness regarding equity and meritocracy in higher education.

For the Impact of Barriers (IOB), the analysis reveals a pattern of differentiation among the three groups. The "Pre-University Students" group reports a mean score of 3.93, indicating a substantial perception of barriers, followed by the "University Graduates" with a mean of 3.82, and the "University Students" at 3.67. The standard deviations for these groups are 0.935, 0.704, and 0.678, respectively. This pattern implies that the pre-university students perceive a higher negative impact of barriers, perhaps due to anticipatory anxiety about higher education challenges. University graduates, having faced and potentially overcome these barriers, also report significant impacts, while current university students exhibit a slightly less pronounced perception of these barriers. The reasons behind this variation may require further qualitative research to comprehend fully.

Regarding Equity and Meritocracy (EQM), the groups display a relatively consistent pattern, with mean scores reflecting a moderate perception of equity and meritocracy within the higher education system. The "Pre-University Students" group presents the highest mean score at 3.99 (SD = 0.565), followed closely by the "University Students" group at 3.96 (SD = 0.609), and the "University Graduates" at 3.83 (SD = 0.744). These findings suggest that the perception of equity and meritocracy is relatively stable across different education levels, with slight variations possibly related to different stages of educational engagement.

In summary, the examination of various variables, including Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM), reveals both agreements and contrasts across different education level groups. Notably, the "Pre-University Students" group demonstrates higher perceived barriers (BEM) and the most significant concern about the impact of barriers (IOB). On the other hand, current university students exhibit a slightly lower perception of fairness (PFT) compared to both the HSC students and university graduates. The IOB variable, in particular, shows more pronounced differences among the

groups, whereas the EQM variable manifests a more consistent perception, reflecting a shared understanding of equity and meritocracy. These intricate patterns highlight the complexities of the perceived barriers and merits within the Bangladeshi higher education system. These findings provide valuable insights into the perceptions of different education level groups and emphasize the need for tailored strategies that address the specific concerns and needs of each cohort. Further research and qualitative exploration may be needed to delve into the underlying reasons for these specific patterns and contribute to the enhancement of equity and meritocracy in higher education for all students.

Edu Level Pre-University Students		Univers	sity Students	University Graduates				
N	118		135	135		156		
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation		
PFT	3.71	.693	3.55	.619	3.70	.661		
BEM	3.82	.534	3.54	.622	3.57	.682		
AWN	4.08	.783	3.84	.742	3.81	.866		
IOB	3.93	.935	3.67	.678	3.82	.704		
EQM	3.99	.565	3.96	.609	3.83	.744		

Table 4.5. Categorically Descriptive Statistics of Education Levels

#### 4.6 One-Way ANOVA

The one-way ANOVA test was conducted to examine the impact of educational level on various variables related to higher education. The variables of interest included Perceptions of Fairness and Transparency (PFT), Barriers towards Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM). The study categorized participants into three educational level groups: "Pre-University Students," "University Students," and "University Graduates."

### 4.6.1 Perceptions of Fairness and Transparency (PFT)

The results of the ANOVA test demonstrated significant differences among the three education-level categories for the variable PFT. The F-value of 5.532 with a corresponding p-value of 0.004 indicated that individuals' educational levels influenced their perceptions of fairness and transparency. However, it is essential to note that despite the statistical significance, the mean scores for PFT were relatively similar among all three groups, ranging from 3.55 to 3.71.

## 4.6.2 Barriers to Equity and Meritocracy (BEM)

For the variable BEM, the ANOVA test revealed a statistically significant difference among the education-level categories (F = 8.647, p = 0.000). Notably, participants in the "Pre-University Students" group reported a significantly higher mean score of 3.82 for BEM, suggesting a relatively higher perception of barriers towards equity and meritocracy among this particular group compared to the other two groups.

### 4.6.3 Awareness (AWN)

Regarding the variable AWN, the ANOVA results indicated a statistically significant difference among the three education-level categories (F = 6.091, p = 0.002). The "Pre-University Students" group had the highest mean score of 4.08 for AWN, signifying a relatively higher level of awareness within this group compared to the others.

### 4.6.4 Impact of Barriers (IOB)

The ANOVA test for the variable IOB also yielded a statistically significant difference among the education-level categories (F = 3.549, p = 0.030). Participants' educational backgrounds appeared to influence their perceptions of the impact of barriers, with the "Pre-University Students" group perceiving barriers differently from the other two groups.

#### 4.6.5 Equity and Meritocracy (EQM)

However, for the variable EQM, the ANOVA results indicated no statistically significant difference among the three education-level categories (F = 1.833, p = 0.161). In this case, participants' educational levels did not significantly impact their perceptions of equity and meritocracy, as the mean scores were relatively similar for all three groups.

In summary, the ANOVA test demonstrated that individuals' educational levels played a role in shaping their perceptions of fairness, barriers towards equity and meritocracy, awareness, and the impact of barriers. Statistically significant differences were observed for PFT, BEM, AWN, and IOB, indicating that education level influenced these aspects. However, no significant difference was found for EQM. These findings provide valuable insights into how education level can influence individuals' perceptions within the higher education context, underscoring the importance of considering diverse educational backgrounds when addressing issues related to equity and meritocracy in academia. Further research may delve into the underlying factors contributing to these observed differences.

#### Table 4.6. one-way ANOVA Test

	ANOVA							
		Sum of Squares	df	Mean Square	F	Sig.		
PFT	Between Groups	6.085	2	3.042	5.532	.004		
	Within Groups	223.279	406	.550				
	Total	229.364	408					
BEM	Between Groups	7.404	2	3.702	8.647	.000		
	Within Groups	173.809	406	.428				
	Total	181.213	408					
AWN	Between Groups	12.853	2	6.427	6.091	.002		
	Within Groups	428.347	406	1.055				
	Total	441.200	408					
IOB	Between Groups	4.571	2	2.285	3.549	.030		
	Within Groups	261.481	406	.644				
	Total	266.052	408					
EQM	Between Groups	1.564	2	.782	1.833	.161		
	Within Groups	173.276	406	.427				
	Total	174.841	408					

## 4.7 Post hoc-Tukey Test

The Tukey post hoc test was conducted to explore the disparities in students' perceptions of fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy across different educational levels in Bangladeshi higher education. The three categories considered for this analysis are pre-university students, university students, and university graduates. By focusing on four dependent variables: Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), and Impact of Barriers (IOB), the test provided insights into multiple pairwise comparisons between these educational levels (I, J). The results (shown in Table 4.7) indicate the significant and non-significant comparisons as well as the groups with higher mean values. The analysis paints a comprehensive picture of the distinctions and implications in perceptions and awareness concerning fairness, transparency, barriers, and their impacts on the higher education system in Bangladesh.

Overall, across the evaluated variables of Perceptions of Fairness and Transparency (PFT) and Barriers to Equity and Meritocracy (BEM), the mean differences between pre-university students and both university students and university graduates were consistently significant. For the Awareness (AWN) variable, pre-university students exhibited a significant mean difference with university graduates but not with university students, representing an exception. Meanwhile, the university students and graduates showed a significant mean difference. In the case of Impact of Barriers (IOB), the mean difference was only significant between pre-university students and university students. The mean difference between pre-university students and university graduates were not significant, straying from the general trend. Notably, in all variables, the mean differences between university students and university graduates remained consistently non-significant, except for the Awareness (AWN) variable.

### 4.7.1 Perceptions of Fairness and Transparency (PFT)

Pre-University students registered a mean difference of 0.24648 and 0.28454 respectively compared to university students and graduates, both statistically significant at the 0.05 level (p=0.024 and p=0.005). Conversely, the mean difference between university students and graduates was not significant, at 0.03805 (p=0.900).

## 4.7.2 Barriers to Equity and Meritocracy (BEM)

The investigation into BEM found that pre-university students perceive a negative mean difference in barriers compared to their university counterparts and graduates, at -0.28870 and -0.30352 respectively, both reaching significance at the 0.05 level (p=0.001 and p=0.000). The mean difference between university students and graduates was not statistically significant, at -0.01481 (p=0.980).

## 4.7.3 Awareness (AWN)

In terms of awareness, pre-university students exhibited a non-significant mean difference relative to university students, at -0.00439 (p=0.999), but a significant mean difference compared to graduates, at -0.36729 (p=0.010). The mean difference between university students and graduates was also significant, at -0.36289 (p=0.008).

#### 4.7.4 Impact of Barriers (IOB)

The assessment of the impact of barriers demonstrated a significant mean difference between pre-university students and current university students, at -0.26813 (p=0.023). In contrast, no

perceptible mean differences were observed between pre-university students and graduates, at -0.16449 (p=0.214), or between university students and graduates, at 0.10363 (p=0.516).

In summary, the findings from this nuanced analysis highlight that educational level has a substantial bearing on students' perceptions, awareness, and the impacts concerning fairness, transparency, and barriers to equity and meritocracy within the context of Bangladeshi higher education. The discrepancies illuminated not only enrich our understanding but also emphasize the necessity for tailoring interventions by considering educational levels. These findings, however, are only an introduction to a complex subject matter, and additional studies are warranted to delve into the underlying causes of these differences, thereby contributing to the ongoing discourse on equity and meritocracy in education.

Table 4.7. Tukey Post hoc Test

		Multiple C	omparisons				
Tukey HSD							
Dependent Variable	(I) EducationLevel	(J) EducationLevel	Mean Difference	Std. Error	Sig.	95% Cor Interval	nfidence
			(I-J)			Lower Bound	Upper Bound
PFT	Pre-University Students	University Students	.24648*	.09346	.024	.0266	.4663
		University Graduates	.28454*	.09048	.005	.0717	.4974
	University Students	Pre-University Students	24648 <sup>*</sup>	.09346	.024	4663	0266
		University Graduates	.03805	.08717	.900	1670	.2431
	University Graduates	Pre-University Students	28454 <sup>*</sup>	.09048	.005	4974	0717
		University Students	03805	.08717	.900	2431	.1670
BEM	Pre-University Students	University Students	28870*	.08246	.001	4827	0947
		University Graduates	30352*	.07983	.000	4913	1157
	University Students	Pre-University Students	.28870*	.08246	.001	.0947	.4827
		University Graduates	01481	.07691	.980	1957	.1661

	University Graduates	Pre-University Students	.30352*	.07983	.000	.1157	.4913
		University Students	.01481	.07691	.980	1661	.1957
AWN	Pre-University Students	University Students	00439	.12945	.999	3089	.3001
		University Graduates	36729*	.12532	.010	6621	0725
	University Students	Pre-University Students	.00439	.12945	.999	3001	.3089
		University Graduates	36289*	.12074	.008	6469	0789
	University Graduates	Pre-University Students	.36729*	.12532	.010	.0725	.6621
		University Students	.36289*	.12074	<mark>.008</mark>	.0789	.6469
IOB	Pre-University Students	University Students	26813 <sup>*</sup>	.10114	. <mark>023</mark>	5060	0302
		University Graduates	16449	.09791	.214	3948	.0658
	University Students	Pre-University Students	.26813*	.10114	.023	.0302	.5060
		University Graduates	.10363	.09434	.516	1183	.3255
	University Graduates	Pre-University Students	.16449	.09791	.214	0658	.3948
		University Students	10363	.09434	.516	3255	.1183
*. The mea	n difference is significa	nt at the 0.05 level.		1		1	1

# 4.8 Correlation

A critical component of this study was the examination of correlations among five key variables: Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM). Utilizing Pearson's correlation coefficient and applying SPSS-26 software, the relationships were rigorously analyzed. Table 4.8 encapsulates the overall correlation results, elucidating the complex interrelationships among the aforementioned variables.

The observed positive coefficients, ranging from 0 to +1, reveal positive linear relationships between these constructs, a finding further substantiated by the statistical significance detected at both the 0.01 and 0.05 levels. This statistical rigor underscores the validity and reliability of the observed connections within the research context. The analysis also uncovers specific, significant correlations such as a moderate link between PFT and BEM (r = .133, p < 0.01), and a weaker yet still significant association between PFT and EQM (r = .112, p < 0.05). More striking correlations were identified between AWN and BEM (r = .309, p < 0.01) and IOB and BEM (r = .352, p < 0.01). Most noteworthy is the study's strongest correlation between EQM and BEM (r = .422, p < 0.01), contrasting sharply with the least significant correlation between EQM and PFT.

These findings collectively illuminate the intricate dynamics and multifaceted relationships within the variables, illustrating both the strongest and least connections, and enhancing the academic comprehension of the themes of fairness, barriers to equity, awareness, and impact. The correlations uncovered here will guide future research directions and contribute to the development of interventions in the realm of higher education equity and meritocracy while considering the significant and non-significant relationships identified in the study.

Table 4.8. Overall Correlation Results

Correl	Correlations										
		PFT	BEM	AWN	IOB	EQM					
PFT	Pearson Correlation	1									
BEM	Pearson Correlation	.133**	1								
AWN	Pearson Correlation	.119 <sup>*</sup>	.309**	1							
IOB	Pearson Correlation	.331**	.352**	.156**	1						
EQM	Pearson Correlation	.112 <sup>*</sup>	.422**	.188**	.289**	1					
N	N 409 409 409 409 409										
**. Correlation is significant at the 0.01 level (2-tailed).											
*. Corre	*. Correlation is significant at the 0.05 level (2-tailed).										

#### 4.9 GROUP WISE-CORRELATION

Examining the correlations across the three groups, a clear evolution can be seen, especially in the relationship between PFT and EQM. The unexpected negative correlation in the pre-university phase transforms into a non-significant positive relationship in the university context and becomes significant among graduates. This transition may indicate a growing

alignment between fairness perceptions and equity and meritocracy perceptions as education progresses. The consistent strong relationships between BEM and EQM, and between IOB and EQM, across all stages, underline the enduring connection between barriers, their impact, and concepts of equity and meritocracy.

## 4.9.1 Pre-University Students ("Before")

The most noteworthy significant correlations include a robust positive relationship between BEM and EQM (r = .56\*\*, p < 0.01) and between IOB and EQM (r = .42\*\*, p < 0.01). An unexpected correlation in this group is the negligible and negative relationship between PFT and EQM (r = .01). This negative correlation may signal a misalignment between perceptions of fairness and transparency and equity and meritocracy at this stage.

### 4.9.2 University Students ("In")

The correlation between PFT and BEM (r = .52\*\*, p < 0.01) and between BEM and AWN (r = .39\*\*) are particularly strong, emphasizing perceptions related to barriers and awareness. The unexpected negative correlation between PFT and EQM is absent in this group, replaced by a slight but not significant positive correlation (r = .10).

#### 4.9.3 University Graduates ("Out")

Significant positive correlations include those between BEM and EQM (r = .41\*\*, p < 0.01) and between IOB and EQM (r = .35\*\*, p < 0.01). An unexpected finding is the emergence of a significant positive correlation between PFT and EQM (r = .21\*\*, p < 0.01), contrasting with the negative correlation observed in the pre-university phase.

In summary, the analysis unveils a dynamic interplay of correlations among the key variables across different educational stages. Recognizing these correlations and their evolution can provide valuable insights into the educational journey, potentially informing targeted interventions and educational policies that foster a more equitable and meritocratic environment. The unexpected negative correlation between PFT and EQM in the preuniversity stage, in particular, warrants further exploration, as understanding this anomaly may uncover underlying dynamics that can be addressed to enhance fairness and transparency in education.

Table 4.9 Categorically Correlation Results of Education Levels

Correla	tions			
	PFT	BEM	AWN	IOB

	Before	In	Out	Before	In	Out	Before	In	Out	Before	In	Out
BEM	.37*	.52**	.16*	1								
AWN	.42**	.17*	.17*	.20*	.39**	.27**	1					
ЮВ	.33**	.25*	.35**	.47**	.45**	.40**	.25*	.17*	.19*	1		
EQM	01	.10	.21**	.56**	.35**	.41**	.21*	.28**	.19*	.42**	.31**	.21*
N	118	135	156	118	135	156	118	135	156	118	135	156

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## 4.10 Regression

The regression analysis was conducted to examine the relationship between the predictors (PFT, BEM, AWN, IOB) and the dependent variable (EQM) within three groups based on education level: Pre-University Students, University Students, and University Graduates.

Table 4.10 displays the results of the regression analysis between the independent variables (IOB, PFT, AWN, BEM) and the dependent variable. The obtained R-value of 0.506 denotes a moderate correlation, reflecting a reasonable ability to predict the dependent variable. The R-squared value of 0.256, along with the adjusted R-squared value of 0.248, indicates that around 26% of the variability in the dependent variable is explained by the model. This percentage signifies a modest but relevant level of predictive accuracy.

Table 4.10. Model Summary

Model	Model Summary												
Model	R			Std. Error	Change Statistics								
		Square	Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change				
1	.506ª	.256	.248	.56758	.256	34.682	4	404	.000				
a. Pred	a. Predictors: (Constant), IOB, PFT, AWN, BEM												

In Table 4.11, the ANOVA results further validate the regression model. With a mean square of 11.173 and an F-ratio of 34.682 (p < .000), the statistical significance emphasizes the model's adequacy in explaining the relationship between the variables.

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Table 4.11. ANOVA

ANOVA	ANOVA <sup>a</sup>												
Model		Sum of df Squares		Mean Square	F	Sig.							
1	Regression	44.691	4	11.173	34.682	.000b							
	Residual	130.149	404	.322									
	Total	174.841	408										
a. Depe	a. Dependent Variable: EQM												
b. Predi	ictors: (Constant	t), IOB, PFT, AW	/N, BEM										

#### 4.11 GROUP WISE-REGRESSION RESULTS

The group-wise regression analysis provides a detailed exploration of how the relationship between the predictors (PFT, BEM, AWN, IOB) and the dependent variable (EQM) may differ across three distinct educational groups: Pre-University Students, University Students, and University Graduates. By partitioning the analysis based on education levels, this approach offers a nuanced understanding of how factors influencing EQM may vary according to educational background.

Table 4.12 illustrates the summary of regression models based on three distinct education levels: Pre-University Students, University Students, and University Graduates. The models reveal significant variations in the predictive ability across these groups. For Pre-University Students, the R-square value of 0.352 indicates that approximately 35.2% of the variance in the dependent variable is accounted for by the model (Adjusted R Square = 0.329). In the case of University Students, the model explains around 20.2% of the variation (Adjusted R Square = 0.178). For University Graduates, the model accounts for 18.8% of the variation in the dependent variable (Adjusted R Square = 0.167). These figures highlight the model's differential effectiveness in capturing the relationship between the variables across the different education levels.

Table 4.12. Summary of Models Based on Education Levels

Model Summary					
Education Level	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Pre-University Students	1	.593ª	.352	.329	.46288

University Students	1	.450 <sup>b</sup>	.202	.178	.55191					
University Graduates	1	.434ª	.188	.167	.67929					
a. Predictors: (Constant), IOB, PFT, AWN, BEM										
b. Predictors: (Constant), IOB, PFT, BEM, AWN										

Table 4.13 provides the ANOVA results for the regression models across the three education levels: Pre-University Students, University Students, and University Graduates. The significance values (Sig.) in each case are all less than 0.001, indicating that the models are statistically significant for all education levels.

For Pre-University Students, the F-statistic is 15.342, and the mean square for the regression is 3.287, reflecting that the model significantly predicts EQM, F (4, 113) = 15.342, p < .000.

In the case of University Students, the model shows a significant ability to predict EQM, with an F-statistic of 8.236 and a mean square of 2.509, F (4, 130) = 8.236, p < .000.

For University Graduates, the F-statistic is 8.750, and the mean square for the regression is 4.038, indicating a significant prediction of EQM, F (4, 151) = 8.750, p < .000.

These results consistently affirm the statistical significance of the relationships between the predictors and the dependent variable (EQM) across all three education levels.

Table 4.13. ANOVA (Based on Education Levels)

ANOVA <sup>a</sup>							
Education Level	Mode	1	Sum of Squares	df	Mean Square	F	Sig.
Pre-University Students	1	Regression	13.148	4	3.287	15.342	.000b
		Residual	24.211	113	.214		
		Total	37.359	117			
University Students	1	Regression	10.035	4	2.509	8.236	.000°
		Residual	39.598	130	.305		
		Total	49.633	134			
University Graduates	1	Regression	16.151	4	4.038	8.750	.000b
		Residual	69.676	151	.461		
		Total	85.827	155			

```
b. Predictors: (Constant), IOB, PFT, AWN, BEM
```

c. Predictors: (Constant), IOB, PFT, BEM, AWN

## 4.11.1 Overall Coefficients (All) and Group Wise Analysis

The overall coefficients present a comprehensive understanding of the relationship between the dependent variables (PFT, BEM, AWN, IOB) and the dependent variable EQM across all education levels. Among the predictors, BEM exhibited the strongest positive impact on EQM (Beta = .343, p < .001), followed by AWN (Beta = .162, p = .001) and IOB (Beta = .140, p = .003). PFT, on the other hand, showed a positive but insignificant impact on EQM (Beta = .056, p = .216). This underscores the pervasive influence of BEM across all educational segments, while also revealing a universal lack of significance for PFT.

#### **Pre-University Students (Before)**

In the Pre-University Students group, BEM displayed the most robust association with EQM (Beta = .457, p < .001), followed by IOB (Beta = .186, p = .033). Conversely, PFT and AWN exhibited no significant relationship with EQM (p = .705 and .262, respectively). The strong influence of BEM in this group echoes the overall pattern, while the lack of significance for PFT and AWN sets the stage for comparison with other groups.

#### **University Students (In)**

The pattern within the University Students group closely mirrors that of the Pre-University group. BEM and IOB continued to demonstrate significant impacts on EQM (Beta = .251 and .244, respectively, p < .005), whereas PFT and AWN remained insignificant (p = .668 and .124). A notable difference within this group lies in the greater significance of IOB, positioning it as the most influential predictor in this segment. This subtle shift may hint at a changing dynamic as students progress through their education.

#### **University Graduates (Out)**

The University Graduates group deviated from the patterns observed in earlier groups, with all variables displaying a significant impact on EQM. This includes the notable emergence of PFT as a significant predictor (Beta = .185, p = .031), contrasting with its insignificance in other groups. BEM continued to be the dominant factor (Beta = .404, p < .001), consistent with its overall significance.

Table 4.14. Overall Coefficients and Group-Wise Coefficients (Based on Education Levels)

EQM	All			Before			In			Out		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		3.76	.000		3.72	.000		4.03	.000		3.54	.001
PFT	.056	1.24	.216	029	38	.705	.034	.43	.668	.185	1.98	.031
BEM	.343	7.20	.000	.457	5.22	.000	.251	2.94	.004	.404	4.58	.000
AWN	.162	3.49	.001	.087	1.13	.262	.134	1.55	.124	.229	2.38	.001
IOB	.140	3.02	.003	.186	2.16	.033	.244	3.05	.003	.201	2.28	.002
a. Dependent	a. Dependent Variable: EQM											

### **Comparative Insights**

The above analyses unveil a nuanced interplay among the predictors across different educational levels. While BEM consistently exerts the most substantial influence on EQM, the significance of other variables such as IOB, PFT, and AWN fluctuates among groups. This emphasizes the context-dependent nature of these relationships.

The consistent insignificance of PFT in the earlier educational stages, followed by its emergence as a significant factor among University Graduates, offers an intriguing insight. This may suggest a growing awareness or sensitivity to fairness and transparency as individuals advance in their educational journey.

In conclusion, this comprehensive examination paints a rich picture of the interactions between predictors and EQM, underlining the importance of considering educational stages in understanding these relationships. Future research may delve deeper into why these patterns emerge, shedding further light on the underlying mechanisms that shape perceptions of equity and meritocracy across different educational contexts.

## 4.12 Chapter Summary

Chapter 4 provides a comprehensive description of the data analysis procedures employed in the study using SPSS-26, commencing with an examination of the respondents' demographic characteristics. This investigation is followed by the application of descriptive statistics, including means and standard deviations, to succinctly summarize the dataset. To ensure the internal consistency of the measured concepts, the reliability of the construct was appraised through Cronbach's alpha. Group-wise descriptive statistics were presented to showcase variations among three different groups, and the impact of educational level on the variables of interest was assessed using a one-way ANOVA test. Subsequent to this analysis, the Tukey post hoc test was applied for multiple comparisons between the groups. The chapter also emphasizes

the examination of relationships between variables through correlation coefficients and the employment of regression analysis to estimate these relationships. Overall, this chapter acts as an exhaustive yet concise guide to the various statistical methods and procedures that were strategically utilized to achieve the research objectives.

# 5. Chapter 05: Discussion and Conclusion

#### 5.1 Introduction

In this chapter, an overview of the study's overall results is presented, emphasizing the key findings and their importance. Additionally, the broader implications of these findings are illuminated, considering both theoretical and practical perspectives. This comprehensive assessment offers a deeper understanding of how the study's outcomes can impact the field of education and be applied in real-world situations. By exploring the theoretical implications, the chapter uncovers the study's contribution to existing knowledge and its ability to fill gaps in the literature. Moreover, the practical implications assess how the findings can be implemented in practical contexts. The chapter also critically reflects on the limitations of the study and provides recommendations for future research. Finally, the chapter concludes with the overall findings of the study.

## 5.2 Results Summary

## 5.2.1 Descriptive statistics

The descriptive statistics provide insights across five main variables within the context of Bangladeshi higher education. In Perceptions of Fairness and Transparency (PFT), participants indicated varying levels of agreement, with scores ranging from 3.47 to 4.04. Barriers to Equity and Meritocracy (BEM) brought out diverse perceptions about barriers, with corruption being a major concern (mean score of 3.96) and unexpectedly, gender discrimination viewed as less significant (mean score of 2.95). A close examination of the Awareness (AWN) variable reflected robust understanding, with mean scores clustered around 3.9. The Impact of Barriers (IOB) exposed varying perceptions, particularly in the difficulty of securing employment after completing education (mean score of 4.18), which indicates close to very difficult. Lastly, the Equity and Meritocracy (EQM) variable presented a generally positive view, with mean scores mainly around 4.00.

Addressing Research Question 1, the findings reveal that participants perceive significant barriers to equity and meritocracy in higher education in Bangladesh. The significant barriers include lack of access to coaching (BEM1), financial constraints (BEM2), social class discrimination (BEM4), uneven admission criteria (BEM5), quota systems (BEM6), corruption (BEM7), nepotism (BEM8), and political influence (BEM9). Unexpectedly, the findings of the study indicate that gender discrimination is not perceived as a significant barrier to achieving meritocracy in Bangladeshi higher education. In fact, the presence of quotas for women may be viewed as a mechanism that ensures equity in the system. The study included a well-balanced

sample of respondents, with 51.8% males and 48.2% females, suggesting that both genders might not perceive gender discrimination as a significant hindrance to admission or studying in universities in Bangladesh. This finding opposes the study conducted by Ferdaush and Rahman (2011) on gender discrimination. The findings of this present research highlight the need for targeted interventions to address the most prominent barriers such as lack of access to coaching, financial constraints, social class discrimination, uneven admission criteria, quota systems, corruption, nepotism, and political influence, thereby fostering equity and meritocracy in the Bangladeshi higher education system.

In terms of Research Question 2, students' perceptions of fairness, transparency, barriers, awareness, and impacts of barriers provide insightful information regarding the existing state of equity and meritocracy within the Bangladeshi higher education system. While participants generally perceive the presence of fairness and transparency, there are notable barriers impeding equity and meritocracy. Recognizing and mitigating these barriers is pivotal in creating a more equitable and meritocratic higher education environment in Bangladesh.

These findings collectively paint a complex picture of perceptions and beliefs regarding higher education in Bangladesh. While there's an affirmation of principles like fairness and transparency, the results also uncover contradictions and unexpected insights that may require further exploration. The identification of significant barriers, along with the relative awareness of these issues, provides both challenges and opportunities for fostering a more equitable and transparent educational landscape. The nuanced differences in the perceived negative impact of various barriers underscore the importance of targeted interventions, while the positive perception around equity and meritocracy indicates a harmonious view that can be leveraged. The insights gained emphasize the need for nuanced approaches, tailored policies, and continuous evaluation to ensure that the educational system aligns with the ideals of equity and meritocracy.

### 5.2.2 Construct Reliability

In the construct reliability analysis of the questionnaire items pertaining to the study, satisfactory results were achieved, demonstrating a strong internal consistency across different latent variables. Specifically, all constructs, including Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM), surpassed the recommended Cronbach's alpha threshold of 0.70. The EQM construct exhibited the highest reliability, with a coefficient of 0.808. These high Cronbach's alpha values confirm the research's construct reliability, indicating that the questionnaire items provide valid and reliable measures for the intended constructs. Consequently, this validation ensures the credibility and trustworthiness of the

findings, offering valuable insights into the perceptions and attitudes concerning equity and meritocracy in higher education.

#### 5.2.3 Group-Wise Descriptive Statistics

Across all variables examined, Pre-University Students consistently manifested the highest mean values among the three educational groups, with mean scores of 3.71 for Perceptions of Fairness and Transparency (PFT), 3.82 for Barriers to Equity and Meritocracy (BEM), 4.08 for Awareness (AWN), 3.93 for Impact of Barriers (IOB), and 3.99 for Equity and Meritocracy (EQM). Conversely, University Graduates generally exhibited mean values surpassing those of University Students in all domains, except for Awareness (AWN), where University Students slightly outstripped University Graduates with a mean value of 3.84 compared to 3.81. University Students generally displayed lower mean scores, with 3.55 for PFT, 3.54 for BEM, 3.84 for AWN, 3.67 for IOB, and 3.96 for EQM. University Graduates fell in between, with mean scores of 3.70 for PFT, 3.57 for BEM, 3.81 for AWN, 3.82 for IOB, and 3.83 for EQM.

In response to the third research question, the findings shed light on the extent to which students' perceptions of fairness and transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy in Bangladeshi higher education vary across different educational levels. Specifically, the data suggest that Pre-University Students possess more pronounced perceptions concerning fairness and transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy compared to University Students and University Graduates. This divergence is emblematic of the nuanced differences in experience and anticipation between those (Pre-university Students) yet to face the university admission process and those (University Students and University Graduates) who have already engaged with it. The heightened perceptions among Pre-University Students, potentially driven by anxiety and uncertainty about the impending encounter with the university admission test, translate into higher levels of perceived barriers to equity and meritocracy. In contrast, University Students and Graduates, with their practical experiences in the system, display more moderated views. These variations have significant implications for understanding the current level of equity and meritocracy within the Bangladeshi higher education system. They underscore the need for transparent communication and support structures to guide Pre-University Students through their transition, and they may also prompt targeted interventions to align perceptions more closely with actual practice. This understanding paves the way for promoting a more equitable and transparent higher education in Bangladesh, reflecting the distinct needs and perceptions of different educational cohorts.

### 5.2.4 One-Way ANOVA

The one-way ANOVA analysis conducted to investigate the impact of educational levels on various aspects of higher education revealed notable findings. Significant differences among three educational level groups ("Pre-University Students," "University Students," and "University Graduates") were identified for variables such as Perceptions of Fairness and Transparency (PFT), Barriers towards Equity and Meritocracy (BEM), Awareness (AWN), and Impact of Barriers (IOB). Specifically, the Pre-University Students group demonstrated higher mean scores in perceptions of barriers, fairness, and awareness, suggesting distinct variations across educational levels. However, the variable Equity and Meritocracy (EQM) exhibited no statistically significant differences among the groups, with mean scores remaining relatively similar. The results of the ANOVA test emphasize the influence of education level on shaping perceptions within the context of higher education and call attention to the importance of recognizing diverse educational backgrounds when exploring issues of equity and meritocracy in academia. This highlights the need for further in-depth inquiry to understand the underlying factors contributing to these differences.

### 5.2.5 Tukey post hoc test

The analysis of the Tukey post hoc test directly addresses the third research question, revealing the extent to which students' perceptions of fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy in Bangladeshi higher education vary across different educational levels.

#### Perceptions of Fairness and Transparency (PFT):

Pre-university students' significant mean differences in perceptions of fairness and transparency with both university students and university graduates imply a distinct perspective. The non-significant difference between university students and graduates suggests a shared understanding of fairness and transparency at the university level. This reflects how perceptions evolve through the educational journey, with pre-university students possibly holding idealized views that are moderated by practical experiences at the university level.

#### **Barriers to Equity and Meritocracy (BEM):**

The significant mean differences between pre-university students and both other groups signify heightened perceptions of barriers among those yet to enter university. This could be attributed to their lack of familiarity with the system, anxiety about the unknown, or reflections of societal narratives about the barriers within higher education. The mean difference between university students and graduates was not statistically significant. This could be explained by the fact that

both groups already obtained practical experience in accessing and studying in universities in Bangladesh.

### Awareness (AWN):

The results for the awareness variable were more complex, with significant differences between pre-university students and graduates, and university students and graduates, but not between pre-university and university students. This pattern was different from the general trend and this may reflect a gradual development of awareness through the stages of education, with each level providing different exposures and insights.

#### **Impact of Barriers (IOB):**

The significant mean difference solely between pre-university students and university students could indicate a divergence in how these groups perceive the impacts of barriers. Pre-university students, having not yet faced these barriers, might perceive them differently from those who are currently navigating or have already navigated them.

#### **Consistency Between University Students and Graduates:**

The consistent non-significance between university students and graduates in all variables except awareness underlines a stabilization in perceptions as students move through higher education.

The implications of these variations are multifaceted. They emphasize the need for targeted communication and support at each educational level, addressing the distinct perceptions and concerns of pre-university, university students, and graduates. These insights also invite reflections on how the system educates and communicates issues related to equity and meritocracy, recognizing that different levels of education might require different strategies to foster understanding and trust in the system.

In summary, the findings provide a nuanced understanding of the current level of equity and meritocracy within the Bangladeshi higher education system, illuminating how perceptions, awareness, and the perceived impacts of barriers vary significantly across educational stages. This underscores the importance of taking a tailored approach in policy-making, support provision, and communication to address the unique needs and perceptions of each educational group.

#### 5.2.6 Correlations

The correlation analysis examined the relationships among five key variables: Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM). Utilizing Pearson's correlation coefficient, the study revealed positive linear relationships across these constructs, demonstrating statistical significance at both the 0.01 and 0.05 levels. Notable correlations included a moderate association between PFT and BEM (r = .133, p < 0.01), and stronger correlations between AWN and BEM (r = .309, p < 0.01), IOB and BEM (r = .352, p < 0.01), and particularly EQM and BEM (r = .422, p < 0.01). The weakest link was observed between EQM and PFT. These findings shed light on the complex interconnections among the variables, underscoring the multifaceted relationships within the themes of fairness, barriers to equity, awareness, and impact. Such insights contribute to a nuanced understanding of equity and meritocracy in higher education and will inform future research and interventions in this domain.

#### 5.2.7 GROUP WISE-CORRELATION

The correlation analysis across different educational levels in Bangladeshi higher education reveals a dynamic interplay of relationships among perceptions of fairness and transparency (PFT), barriers to equity and meritocracy (BEM), awareness (AWN), impact of barriers (IOB), and equity and meritocracy (EQM). Key findings illustrate an evolution, particularly in the relationship between PFT and EQM, where an unexpected negative correlation in the pre-university phase shifts to a non-significant positive in the university context, and becomes significant among graduates.

In response to the third research question, these findings highlight that students' perceptions of fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy vary across educational levels, and manifest themselves in intricate correlations.

Pre-University Students ("Before"): The negative relationship between PFT and EQM suggests a misalignment between fairness perceptions and equity and meritocracy at this stage, while a strong positive relationship between BEM and EQM underlines the connection between barriers and concepts of equity.

University Students ("In"): The evolution to a non-significant positive correlation between PFT and EQM, and strong perceptions related to barriers and awareness, may indicate growing complexities in perceptions as education progresses.

University Graduates ("Out"): The emergence of a positive correlation between PFT and EQM, contrasted with earlier stages, might reflect a maturation in understanding the nuances of equity and meritocracy.

These variations across different educational stages have vital implications for understanding the current level of equity and meritocracy within the Bangladeshi higher education system. The complex relationships revealed in this analysis emphasize the need for targeted interventions and educational policies that consider these intricate dynamics, fostering a more equitable and meritocratic environment. The unexpected negative correlation at the pre-university stage, in particular, calls for further exploration to uncover underlying dynamics, thereby offering the opportunity to enhance fairness and transparency at the foundational levels of education.

#### 5.2.8 Regression

The regression analysis conducted on the relationship between predictors (PFT, BEM, AWN, IOB) and the dependent variable (EQM) within three education levels revealed a moderate correlation, with an R-value of 0.506. The model explains approximately 26% of the variability in the dependent variable, as indicated by the R-squared value of 0.256, reflecting a modest but relevant level of predictive accuracy. The ANOVA results, with an F-ratio of 34.682 (p < .000), further validate the model's adequacy in elucidating the relationships between the variables.

#### 5.2.9 GROUP WISE-REGRESSION

The regression analyses conducted across different educational stages in Bangladesh reveal a nuanced picture of how students' perceptions of fairness, transparency, barriers, awareness, and impacts of barriers to equity and meritocracy vary.

For Pre-University Students (Before), strong associations were found between barriers to equity and meritocracy (BEM) and equity and meritocracy perceptions (EQM), as well as between impacts of barriers (IOB) and EQM. Interestingly, no significant relationship was detected between perceptions of fairness and transparency (PFT) and EQM, pointing to a potential misalignment between perceived fairness and equity at this early stage.

When examining University Students (In), BEM continued to have a substantial impact on EQM, and the importance of IOB increased. In a pattern consistent with Pre-University students, PFT remained an insignificant predictor, underscoring that perceptions related to fairness and transparency might not be a critical concern at this middle educational stage.

Among University Graduates (Out), all variables, including PFT, demonstrated significant relationships with EQM. The emergence of PFT as a significant factor is noteworthy, suggesting a growing awareness or sensitivity to fairness and transparency among graduates. Importantly, BEM remained the most influential factor across all educational stages, reinforcing its universal role in shaping perceptions of equity and meritocracy.

Addressing the third research question, it becomes evident that the relationships between students' perceptions related to fairness, transparency, barriers, awareness, and the impacts of barriers on equity and meritocracy are dynamic and context-dependent across different educational levels in Bangladesh. The variation in the significance of PFT across stages may illustrate evolving attitudes toward fairness and transparency. Simultaneously, the consistent, robust influence of BEM emphasizes the critical role that barriers play in shaping perceptions of equity and meritocracy, underscoring the necessity of addressing these barriers at all educational levels. Furthermore, the nuanced differences in other variables like IOB and AWN across groups highlight the multifaceted interplay between these factors and educational stages, necessitating a thoughtful and targeted approach.

The implications of these insights are profound for educational policymakers and practitioners in Bangladesh. The observed variations in perceptions across educational levels call for tailored interventions that address unique challenges and perceptions specific to each stage. The everpresent importance of barriers to equity and meritocracy emphasizes the need for systemic efforts to dismantle these obstacles across the entire educational spectrum. Moreover, the emergence of fairness and transparency as significant factors among graduates highlights a potential opportunity to cultivate these values early in the educational journey. This cultivation could include integrating fairness and transparency into curricula and institutional practices, fostering a more robust alignment with these principles as students advance.

In summary, this analysis uncovers intricate patterns in students' perceptions related to equity and meritocracy, providing a vital roadmap for shaping a more equitable and meritocratic educational environment in Bangladesh. This environment would be attuned to students' evolving needs and perspectives, supporting a more just and inclusive system that resonates with the diverse experiences of students at different stages of their educational journey.

### 5.3 Implications of the Study

### 5.3.1 Theoretical Implications

The present study offers substantial theoretical insights into the understanding of equity and meritocracy within the Bangladeshi higher education system, adding both breadth and depth to existing knowledge.

Complexity and Nuance of Perceptions: The study provides intricate insights into equity and meritocracy in Bangladeshi higher education, including the positive and negative correlations between Perceptions of Fairness and Transparency (PFT) and Equity and Meritocracy (EQM). This adds depth to academic literature.

**Understanding Interconnected Relationships:** Significant correlations among key variables like PFT, Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and EQM highlight the complex nature of perceptions. This nuanced perspective may inform new theoretical models.

**Insights into Specific Relationships**: The differing correlation strengths between variables (e.g., a moderate association between PFT and BEM) provide unique insights into how these elements interact. These discoveries may contribute to more sophisticated theories that acknowledge varying degrees of influence among the variables.

Challenging Existing Perspectives: Unexpected findings, such as the absence of perceived gender discrimination as a significant barrier, contrast with prior research conducted by Ferdaush & Rahman (2011), thereby emphasizing the distinct characteristics of the Bangladeshi educational environment.

**Identifying Core Barriers to Equity and Meritocracy:** A comprehensive array of significant barriers, including lack of access to coaching, financial constraints, social class discrimination, uneven admission criteria, quota systems, corruption, nepotism, and political influence, is identified. This identification offers a comprehensive insight into the factors that hinder equity and meritocracy and contributes to the academic literature by detailing the specific context of Bangladesh.

**Stage-Specific Understanding:** The significant variations found across educational levels add a nuanced comprehension of how perceptions and barriers evolve. These insights can enrich existing theories by recognizing stage-specific influences and stabilization in perceptions during higher education.

### 5.3.2 Practical Implications.

The study offers substantial practical insights that are multifaceted, which could improve the equitable and meritocratic aspect of Bangladeshi higher education.

**Tailoring Educational Strategies:** The study calls for targeted interventions customized to different educational stages, emphasizing the need for fairness and transparency early in the educational journey.

Enhancing Transparency, Fairness, and Support: The findings guide efforts to enhance transparency, fairness, and support structures, particularly during pre-university stages, emphasizing the importance of instilling these values early in the educational journey.

**Guiding Targeted Interventions:** The correlation between variables like EQM and BEM indicates the necessity for policy efforts to reduce barriers, achieving higher equity and meritocracy.

Reliability and Robustness of the Research Tool: High Cronbach's alpha values confirm the internal consistency and reliability of the research tool, supporting its use in different contexts

Addressing Specific Barriers and Impacts: By identifying concrete barriers, including financial constraints and lack of access to coaching, the study provides direction for creating support mechanisms and making systemic changes in the administrative structure and governance of higher education.

Mitigating Discrimination and Uneven Practices: The study presents an opportunity to review and revise admission policies to ensure fairness and inclusivity, such as addressing social class discrimination, uneven admission criteria, and quota systems.

**Basis for Ongoing Monitoring and Assessment:** The complex dynamics among variables like PFT, BEM, AWN, IOB, and EQM emphasize the necessity for continuous assessment, adaptation, and feedback mechanisms. This ensures alignment with the intricate nature of perceptions and barriers within the educational system.

**Informing Communication and Awareness Strategies:** The study guides strategies to align perceptions with actual practices around equity issues.

**Foundation for Future Research:** The robust reliability of the study offers a validated framework for future research, contributing to the broader field of educational research.

#### In Conclusion

The study offers an intricate understanding of perceptions and barriers to equity and meritocracy within the Bangladeshi higher education system. The implications highlight the need for a nuanced, stage-specific approach focusing on fairness, transparency, and barrier removal. The theoretical insights extend existing knowledge, challenging previous perspectives, and contributing to more complex, interconnected models of understanding. In practical terms, the findings present a roadmap towards a more just, inclusive, meritocratic, and responsive educational landscape in Bangladesh, with potential relevance in similar contexts.

#### 5.4 Limitations and Recommendations

While this study offers valuable insights into equity and meritocracy in the Bangladeshi higher education system, several limitations must be acknowledged and corresponding recommendations made. The adoption of a solely quantitative approach may have restricted the depth of understanding of students' perceptions, which could be augmented in future research through a mixed-methods design integrating both quantitative and qualitative methodologies (Creswell & Creswell, 2018). The reliance on questionnaire data may have limited participants' expression of their full thoughts and experiences, a concern that could be addressed by including open-ended questions or employing qualitative methods such as interviews or focus groups (Dörnyei & Griffee, 2010). The variables used in this study were developed specifically by the researcher and may lack scientific validation, so utilizing established and scientifically validated measurement tools in future research is recommended. Additionally, employing longitudinal designs and expanding research to various settings, such as different regions or institutional types, would provide a more multifaceted comprehension of factors influencing perceived equity and meritocracy in diverse educational contexts. By integrating these recommendations, future research can build upon the findings of this study to contribute to a more nuanced and robust understanding of the meritocratic and equitable nature of higher education in Bangladesh.

#### 5.5 Conclusion

In conclusion, the pursuit of equity and meritocracy in higher education is an imperative yet intricate endeavor, particularly in the context of Bangladesh. This thesis has provided a detailed and multifaceted examination of the factors influencing equity and meritocracy within the Bangladeshi higher education system, focusing on students' perceptions across various educational stages.

The research unveiled a complex web of correlations among key variables, such as Perceptions of Fairness and Transparency (PFT), Barriers to Equity and Meritocracy (BEM), Awareness (AWN), Impact of Barriers (IOB), and Equity and Meritocracy (EQM). These interconnections present a nuanced understanding of the perceptions, barriers, and interconnected relationships that exist within Bangladesh's higher education system. The study's theoretical implications offer valuable contributions to the field by challenging existing perspectives and enhancing the depth and complexity of our understanding.

Despite its considerable insights, the study does acknowledge limitations such as the reliance on quantitative methodologies and the need for broader contextual analysis. Future research should aim to employ mixed methods, utilize validated tools, and expand the scope to various educational settings within and beyond Bangladesh. These extensions can help in building a more comprehensive picture of equity and meritocracy in higher education.

The practical implications of this research are manifold and significant. They offer targeted strategies for enhancing transparency, fairness, and support within the educational system, guiding targeted interventions, and addressing specific barriers. The study also calls for continuous assessment and awareness strategies that align with the complex dynamics of perceptions and barriers. These insights present a roadmap towards a more equitable and meritocratic educational landscape in Bangladesh and serve as a foundation for future research and global relevance.

This thesis has explored the intricate realities of equity and meritocracy in Bangladesh's higher education system. It has not only highlighted the barriers and complex relationships but also provided actionable insights and theoretical advancements that have the potential to drive positive change.

The findings present a localized yet universally applicable perspective on the ongoing global challenge of achieving equity and meritocracy in education. They emphasize the need for a nuanced, stage-specific approach focusing on barrier removal, fairness, and transparency.

In navigating the multifaceted challenges of higher education in Bangladesh, this thesis serves as a beacon, guiding the way towards a more inclusive, just, and responsive educational environment. It resonates with the broader goals of sustainable development and social progress, reflecting a steadfast commitment to creating an educational system that recognizes and caters to the diverse needs and backgrounds of students.

In essence, this research represents a significant stride towards understanding and fostering equity and meritocracy in higher education, not only within Bangladesh but as part of the larger

global discourse. It stands as a testament to the complex, nuanced, and vital pursuit of a higher education system that truly embodies the principles of fairness and equal opportunity for all.

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### **Appendices**

# Assessing the Meritocratic and Equitable Nature of Higher Education in Bangladesh: Identifying Barriers and Proposing Strategies for Improvement

Dear Prospective Participant,

Thank you for your interest in participating in my research study as part of my pursuit of a Master's degree in Learning & Education at the University of Turku. The primary objective of this study is to conduct a systematic and rigorous assessment of the meritocratic and equitable nature of higher education in Bangladesh. Specifically, it aims to explore students' perceptions regarding fairness, transparency, barriers, awareness, and the impacts of barriers to equity and meritocracy within the higher education system. The study seeks to provide valuable insights into the current level of equity and meritocracy and examine how these perceptions vary across different educational levels. By doing so, the study aims to contribute to the advancement of an inclusive and merit-based higher education environment that empowers all students to thrive, succeed, and reach their full potential.

In order to achieve this, a survey will be conducted to collect data. Your participation in this questionnaire is highly appreciated, and all information provided will be kept confidential and used solely for the purpose of this research.

This survey will be conducted via the Webropol digital platform, and all data collected will remain anonymous. Identifiable information such as the respondent's name, or email address will not be collected.

If you are willing to participate in this study, please select 'Yes'. If you choose not to participate, please select 'No'.

Link for the privacy statement:

https://docs.google.com/document/d/1PIj8VcBW\_AA7Y629VSTA-

AQksTZ2bZnctyGPCchSvxA/edit?usp=sharing

1. I would like to take part in the study: \*

A. Yes B. No

2. What is your gender? \*

A. Male B. Female C. Other

3. What is your age? \*

A. 18-25

B. 26-35

C. 36-45

D. 46 and above

4. What is your current occupation or field of work? \*

A. Student

B. Employed in the private sector

C. Employed in the public sector

D: Self-employed

E. Unemployed

F. Other (please specify):

### 5. How would you describe your social class background? \*

- A. Upper class
- B. Upper-middle class
- C. Middle class
- D. Lower-middle class
- E. Lower class

#### 6. What is your current educational situation? \*

- A. About to complete HSC or recently completed HSC
- B. Currently enrolled in a University
- C. Already graduated from a University

### 7. A. In which field would you like to continue your study at a university? \*

- A. Science
- B. Engineering
- C. Business
- D. Humanities
- E. Social Sciences
- F. Other (please specify):

### 8. A. Where would you like to complete your future studies? \*

- A. In a major city
- B. In a small town
- C. In a village
- D. Abroad
- E. Other (please specify):

#### 9. A. What type of university would you prefer to enroll in? \*

- A. Public University
- B. Private University
- C. National University
- D. Other (please specify):

# 10. A. How are you preparing for the university admission in Bangladesh? (Select all that apply) \*

- A. Tutoring/Coaching
- B. Self-study at Home
- C. Online Courses/MOOCs
- D. Attending Test Preparation Programs or Workshops
- E. Joining Study Groups
- F. Other (please specify):

# 11. A. To what extent do you agree that the education system in Bangladesh is fair and merit-based? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree
- 12. A. How aware are you of the inequalities or barriers to meritocracy in Bangladeshi higher education? \*
  - A. Very unaware
  - B. Not very aware
  - C. Neutral
  - D. Somewhat aware
  - E. Very aware
- 13. A. To what extent do you agree that Bangladeshi higher education institutions are providing an environment for students to compete on the basis of merit? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 14. A. How transparent do you think the university admission process is in Bangladesh? \*
  - A. Not at all transparent
  - B. Not very transparent
  - C. Not Sure
  - D. Somewhat transparent
  - E. Very transparent
- 15. A. How fair do you think the university admission process is in Bangladesh? \*
  - A. Not at all fair
  - B. Not very fair
  - C. Not Sure
  - D. Somewhat fair
  - E. Very fair
- 16. A. To what extent do you agree that students from privileged backgrounds are more likely to be admitted into a university and complete higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral

- D. Agree
- E. Strongly Agree
- 17. A. To what extent do you agree that students from lower economic backgrounds are less likely to be admitted into a university and complete higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 18. A. To what extent do you agree that the lack of access to coaching/tutoring is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 19. A. To what extent do you agree that financial constraint is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 20. A. To what extent do you agree that unequal admission criteria are a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 21. A. To what extent do you agree that gender discrimination is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree

- E. Strongly Agree
- 22. A. To what extent do you agree that discrimination based on social class is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 23. A. To what extent do you agree that quota is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 24. A. To what extent do you agree that corruption is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 25. A. To what extent do you agree that nepotism is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 26. A. To what extent do you agree that political influence is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree

- 27. A. To what extent do you agree that the aforementioned barriers favor certain students over others in securing admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 28. A. To what extent do you agree that the aforementioned barriers would benefit you over others in obtaining admission to a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- **29.** A. To what extent have these barriers affected your academic performance or professional success? \*
  - A. Very positively impacted
  - B. Somewhat positively impacted
  - C. Neutral/no impact
  - D. Somewhat negatively impacted
  - E. Very negatively impacted
- **30.** A. How has the presence of these barriers impacted your view of the higher education system in Bangladesh? \*
  - A. A. Very positively impacted
  - B. Somewhat positively impacted
  - C. Neutral/no impact
  - D. Somewhat negatively impacted
  - E. Very negatively impacted
- 31. A. How challenging do you believe it would be to secure employment after completing a university education in Bangladesh? \*
  - A. Very easy
  - B. Somewhat easy
  - C. Neutral
  - D. Somewhat Difficult
  - E. Very difficult

- 32. A. To what extent do you agree that university admission in Bangladesh should be based solely on merit? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 33. A. To what extent do you agree that other factors such as financial need or social background should also be considered during university admission in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 34. A. To what extent do you agree that increasing transparency and fairness can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 35. A. To what extent do you agree that ensuring equal access to coaching/tutoring for all students can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 36. A. To what extent do you agree that implementing affirmative action policies to address social and economic inequalities can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree

37. A. To what extent do you agree that abolishing quotas can make university
admission and university study in Bangladesh more equitable and merit-based? *
A. Strongly Disagree
B. Disagree
C. Neutral
D. Agree
E. Strongly Agree
38. A. To what extent do you agree that eradicating corruption and nepotism can
make university admission and university study in Bangladesh more equitable and
merit-based? *

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree
- 39. A. To what extent do you agree that restricting political influence can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 40. B. What is your field of study? \*
  - A. Science
  - B. Engineering
  - C. Business
  - D. Humanities
  - E. Social Sciences
  - F. Other (please specify):
- 41. B. Where is your educational institution situated? \*
  - A. In a major city
  - B. In a small town
  - C. In a village
  - D. Abroad
  - E. Other (please specify):

- 42. B. Which type of university are you currently enrolled in? \*
  - A. Public University
  - B. Private University
  - C. National University
  - D. Other (please specify):
- 43. B. How did you prepare for the university admission in Bangladesh? (Select all that apply) \*
- A. Tutoring/Coaching
- B. Self-study at Home
- C. Online Courses/MOOCs
- D. Attending Test Preparation Programs or Workshops
- E. Joining Study Groups
- F. Other (please specify):
- 44. B. To what extent do you agree that the education system in Bangladesh is fair and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 45. B. How aware are you of the inequalities or barriers to meritocracy in Bangladeshi higher education? \*
  - A. Very unaware
  - B. Not very aware
  - C. Neutral
  - D. Somewhat aware
  - E. Very aware
- 46. B. Do you think Bangladeshi higher education institutions are providing an environment for students to compete on the basis of merit? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 47. B. How transparent do you think the university admission process was in Bangladesh when you applied for admission? \*
  - A. Not at all transparent
  - B. Not very transparent

- C. Not Sure
- D. Somewhat transparent
- E. Very transparent
- 48. B. How fair do you think the university admission process was in Bangladesh when you applied for admission? \*
  - A. Not at all fair
  - B. Not very fair
  - C. Not Sure
  - D. Somewhat fair
  - E. Very fair
- 49. B. Do you think students from privileged backgrounds are more likely to be admitted into a university and complete higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 50. B. To what extent do you agree that students from lower economic backgrounds are less likely to be admitted into a university and complete higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 51. B. To what extent do you agree that lack of access to coaching/tutoring is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 52. B. To what extent do you agree that financial constraint is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral

- D. Agree
- E. Strongly Agree
- 53. B. To what extent do you agree that unequal admission criteria are a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 54. B. To what extent do you agree that gender discrimination is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 55. B. To what extent do you agree that discrimination based on social class is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 56. B. To what extent do you agree that quota is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 57. B. To what extent do you agree that corruption is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree

<b>58.</b>	B. To what extent do you agree that nepotism is a barrier to getting admission
into	a university and completing higher education in Bangladesh? *
A.	Strongly Disagree
B. 1	Disagree

- C. Neutral
- D. Agree
- E. Strongly Agree
- B. To what extent do you agree that political influence is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- B. To what extent do you agree that the aforementioned barriers favor certain students over others in securing admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 61. B. To what extent do you agree that the aforementioned barriers have benefited you in gaining admission to your current university and will continue to benefit you in completing your degree? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree

# 62. B. To what extent have these barriers affected your academic performance or professional success? \*

- A. A. Very positively impacted
- B. Somewhat positively impacted
- C. Neutral/no impact
- D. Somewhat negatively impacted
- E. Very negatively impacted

# 63. B. How has the presence of these barriers impacted your view of the higher education system in Bangladesh? \*

- A. Very positively impacted
- B. Somewhat positively impacted
- C. Neutral/no impact
- D. Somewhat negatively impacted
- E. Very negatively impacted

# **64.** B. How challenging do you believe it would be to secure employment after completing your university degree in Bangladesh? \*

- A. Very easy
- B. Somewhat easy
- C. Neutral
- D. Somewhat Difficult
- E. Very difficult

# 65. B. To what extent do you agree that university admission in Bangladesh should be based solely on merit? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree

## 66. B. To what extent do you agree that other factors such as financial need or social background should also be considered during university admission in Bangladesh? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree

•	that increasing transparency and fairness can ity study in Bangladesh more equitable and
merit-based? *	
A. Strongly Disagree	
B. Disagree	
C. Neutral	
D. Agree	
E. Strongly Agree	

- 68. B. To what extent do you agree that ensuring equal access to coaching/tutoring for all students can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 69. B. To what extent do you agree that implementing affirmative action policies to address social and economic inequalities can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 70. B. To what extent do you agree that abolishing quotas can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 71. B. To what extent do you agree that eradicating corruption and nepotism can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree

### E. Strongly Agree

- 72. B. To what extent do you agree that restricting political influence can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 73. C. What was your field of study? \*
  - A. Science
  - B. Engineering
  - C. Business
  - D. Humanities
  - E. Social Sciences
  - F. Other (please specify):
- 74. C. Where was your educational institution situated? \*
  - A. In a major city
  - B. In a small town
  - C. In a village
  - D. Abroad
  - E. Other (please specify):
- 75. C. Which type of university did you graduate from? \*
  - A. Public University
  - B. Private University
  - C. National University
  - D. Other (please specify):
- 76. C. How did you prepare for the university admission in Bangladesh? (Select all that apply) \*
- A. Tutoring/Coaching
- B. Self-study at Home
- C. Online Courses/MOOCs
- D. Attending Test Preparation Programs or Workshops
- E. Joining Study Groups
- F. Other (please specify):

### 77. C. To what extent do you agree that the education system in Bangladesh is fair and merit-based? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree

# 78. C. How aware are you of the inequalities or barriers to meritocracy in Bangladeshi higher education? \*

- A. Very unaware
- B. Not very aware
- C. Neutral
- D. Somewhat aware
- E. Very aware

# 79. C. Do you think Bangladeshi higher education institutions are providing an environment for students to compete on the basis of merit? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree

# 80. C. How transparent do you think the university admission process was in Bangladesh when you applied for admission? \*

- A. Not at all transparent
- B. Not very transparent
- C. Not Sure
- D. Somewhat transparent
- E. Very transparent

# 81. C. How fair do you think the university admission process was in Bangladesh when you applied for admission? \*

- A. Not at all fair
- B. Not very fair
- C. Not Sure
- D. Somewhat fair
- E. Very fair

- 82. C. To what extent do you agree that students from privileged backgrounds are more likely to be admitted into a university and complete higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 83. C. To what extent do you agree that students from lower economic backgrounds are less likely to be admitted into a university and complete higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 84. C. To what extent do you agree that lack of access to coaching/tutoring is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 85. C. To what extent do you agree that financial constraint is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 86. C. To what extent do you agree that unequal admission criteria are a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree

	C. To what extent do you agree that gender discrimination is a barrier to getting nission into a university and completing higher education in Bangladesh? *
	· · · · · · · · · · · · · · · · · · ·
A	. Strongly Disagree
B	. Disagree
C.	. Neutral
D	. Agree
E.	Strongly Agree

- 88. C. To what extent do you agree that discrimination based on social class is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 89. C. To what extent do you agree that quota is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 90. C. To what extent do you agree that corruption is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 91. C. To what extent do you agree that nepotism is a barrier to getting admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 92. C. To what extent do you agree that political influence is a barrier to getting admission into a university and completing higher education in Bangladesh? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree
- 93. C. To what extent do you agree that the aforementioned barriers favor certain students over others in securing admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 94. C. To what extent do you agree that the aforementioned barriers benefited you over others in securing admission into a university and completing higher education in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 95. C. To what extent have these barriers affected your academic performance or professional success? \*
  - A. Very positively impacted
  - B. Somewhat positively impacted
  - C. Neutral/no impact
  - D. Somewhat negatively impacted
  - E. Very negatively impacted
- 96. C. How has the presence of these barriers impacted your view of the higher education system in Bangladesh? \*
  - A. Very positively impacted
  - B. Somewhat positively impacted
  - C. Neutral/no impact
  - D. Somewhat negatively impacted
  - E. Very negatively impacted
- 97. C. How challenging do you believe it was to secure employment after completing a university education in Bangladesh? \*

- A. Very easy
- B. Somewhat easy
- C. Neutral
- D. Somewhat Difficult
- E. Very difficult
- 98. C. To what extent do you agree that university admission in Bangladesh should be based solely on merit? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 99. C. To what extent do you agree that other factors such as financial need or social background should also be considered during university admission in Bangladesh? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 100. C. To what extent do you agree that increasing transparency and fairness can make university admission and university study in Bangladesh more equitable and merit-based? \*
- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree
- 101. C. To what extent do you agree that ensuring equal access to coaching/tutoring for all students can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 102. C. To what extent do you agree that implementing affirmative action policies to address social and economic inequalities can make university admission and university study in Bangladesh more equitable and merit-based? \*

- A. Strongly Disagree
- B. Disagree
- C. Neutral
- D. Agree
- E. Strongly Agree
- 103. C. To what extent do you agree that abolishing quotas can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 104. C. To what extent do you agree that eradicating corruption and nepotism can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree
- 105. C. To what extent do you agree that restricting political influence can make university admission and university study in Bangladesh more equitable and merit-based? \*
  - A. Strongly Disagree
  - B. Disagree
  - C. Neutral
  - D. Agree
  - E. Strongly Agree