

# The Influence of Parental Level of Education and Parental Level of Income on Gender Disparity in Choice of Discipline among Undergraduate Students in Federal Universities in North West Nigeria

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*Abstract- This study examined the influence of parental socio-cultural factors on gender disparity in students' choice of academic disciplines in universities in North-West Nigeria. Persistent differences in male and female participation across fields of study particularly the lower representation of females in science and technology programmes motivated the investigation. The study focused on how parental religious beliefs, educational background, gender roles, and occupational practices shape students' academic pathways and reinforce gendered patterns of enrolment. A descriptive survey research design was employed. Data were collected using a structured and validated questionnaire administered to undergraduate students across selected universities in the region. Findings indicated that parental socio-cultural factors significantly contribute to students' gendered academic decisions. Parental beliefs about gender, religious expectations, educational attainment, and occupational identities were found to influence students' perceived abilities, preferred career paths, and academic discipline choices. The study concludes that socio-cultural dynamics within households continue to reinforce gender stereotypes, thereby sustaining the imbalance in male-female participation across academic disciplines. Addressing these parental influences is essential for promoting equitable access and reducing gender-based educational disparities.*

**Keywords:** Gender Disparity, Parental Socio-Cultural Factors, Academic Discipline, Higher Education, Nigeria, Enrolment Patterns.

## I. BACKGROUND OF THE STUDY

Gender disparity in the choice of academic disciplines among undergraduates has become a growing concern in Nigeria's federal universities, particularly in the Northwest region. Despite efforts to promote gender equality in education, significant differences persist in the fields chosen by male and female students. This disparity raises critical

questions about the underlying factors influencing these choices. One of the key concerns is the role of parental sociocultural factors, which may be subtly shaping students' academic decisions, reinforcing traditional gender roles, and limiting opportunities for women in certain disciplines. This research seeks to explore and understand the extent to which these parental influences contribute to the ongoing gender imbalance in academic choices.

Gender is a universal concept that transcends all cultures, classes, ages, races, religions, and national borders. It is a cultural and social construct that shapes and interprets the roles, behaviors, relationships, expressions, expectations, status, and obligations associated with what each culture deems appropriate for males and females based on their biological sex (Nwosu, Oforka & Okolo, 2013). Gender is a cultural paradigm established by society to differentiate the roles, behaviours, and emotional characteristics between males and females (United Nations, 2011). In the context of this study, gender means the expectations, behaviors, attitudes, and roles prescribed by culture for individuals such as males and females in society. These gender roles and expectations of parents, families, and societies about their children and individuals in the society breed gender disparity and discrimination in all aspects of people's lives, be it in education, politics, health, economics, workplace labour market, or choice of discipline among others.

Gender disparity is a widespread issue that affects many aspects of society, including education, employment, healthcare, and politics (Liblik, Dhali, Kipkorir, Avanthika, Manan & Gaman, 2022). Gender disparity refers to differences or unequal treatment meted out to men and women with regards

to access to resources, power, status, education, and well-being that are always in favour of men and often institutionalized by law, justice, social and cultural norms (European Institute for Gender Equality-EIGE, 2016). In the context of this study, gender disparity refers to the unequal treatment or representation of individuals based on being male or female in various facets of life including choice of discipline.

The choice of discipline in school refers to the decision that students make when selecting their field of study. It is a fundamental decision because it determines the subjects and courses they will focus on during their educational journey, which can shape their future career paths and areas of expertise. This choice typically occurs in higher education institutions such as colleges and universities. The selection of a discipline can be influenced by personal interests, career goals, family expectations, societal influences, or individual passions (Smith & Johnson, 2022). Furthermore, according to Julie (2021), the choice of discipline refers to the academic field or subject area in which an individual chooses to focus their studies and research. In this study, the choice of discipline encompasses the selection of an academic discipline, field of study, subject area, or area of specialization. This choice may be shaped by personal values and beliefs, social norms, and family and parental influences. These factors play a crucial role in guiding decisions toward Science or Arts-related courses, often influenced by the gender of the child. Parental socio-cultural factors, such as income level, education level, religious beliefs, and parental gender, are key considerations in this process.

## II. STATEMENT OF THE PROBLEM

Education is a critical tool for individual and societal development, and it should be accessible to everyone, regardless of gender, race, religion, or creed, to ensure the holistic advancement of society. Despite this, there is a growing global concern about gender disparity in the choice of academic disciplines, with certain fields being deemed more appropriate for one gender over another. In particular, girls are often underrepresented in STEM fields, while boys are more prevalent in these areas, despite some fields where girls may have a comparative advantage. This issue is especially pronounced in the Northwest geopolitical zone of Nigeria, where the researcher has observed a notable imbalance. There are more female

students in various disciplines without significant gender segregation in universities in the Southeast region compared to the Northwest. This discrepancy raises serious concerns about the potential for girls in the Northwest to be excluded from contributing fully to socio-economic development. Despite numerous efforts by the government and non-governmental organizations to address gender disparity in academic choices, the issue persists. The underlying problem appears to be related to parental socio-cultural factors, which may significantly influence the gender disparity in academic disciplines at the university level. This situation motivates the need for a comprehensive investigation into how these socio-cultural factors affect gender-based choices in higher education. Therefore, the central question of this study is: What is the influence of parental socio-cultural factors on gender disparity in the choice of discipline among undergraduates in federal universities in Northwest Nigeria?

## III. PURPOSE OF THE STUDY

The general purpose of the study is to determine the influence of parental socio-cultural factors on gender disparity in the choice of discipline among undergraduates in federal Universities in North - West, Nigeria Specifically, the study seeks to:

- i. Find out the influence of parental level of income on gender disparity in the choice of discipline among undergraduates in universities.
- ii. Determine the influence of parental level of education on gender disparity in the choice of discipline among undergraduates in universities.

## IV. RESEARCH QUESTIONS

The following research questions guided the study.

- i. What is the influence of parental level of income on gender disparity in the choice of discipline among undergraduates in universities?
- ii. What is the influence of parental level of education on gender disparity in the choice of discipline among undergraduates in universities?

## V. HYPOTHESES

The following null hypotheses were formulated to guide the study and each was tested at 0.05 level of significance.

H0<sub>1</sub>: There is no significant mean difference between parental level of income and gender disparity in the choice of discipline among undergraduates in universities.

H0<sub>2</sub>: There is no significant mean difference between parental level of education and gender disparity in the choice of discipline among undergraduates in universities

## VI. SIGNIFICANCE OF THE STUDY

The study has both theoretical and practical benefits. The theoretical significance is anchored on Beauvoir's Theory of Dualism propounded in (1972). This theory emphasizes the specific ways in which the natural, social, political, and religious traditions have created a mystified world where impossible and conflicting ideas of femininity produce an ideology of women's "natural" inferiority to justify patriarchal domination. Thus, the focus of this study is on how parental socio-cultural factors such as parental level of income, parental level of education, religious belief, and parental gender influence gender disparity in choice of discipline.

## VII. SCOPE OF THE STUDY

The geographical scope of this study covered all the federal universities in North Western, Nigeria, particularly full-time undergraduate students. The states in this zone comprise seven states and they are as follows: Kaduna, Kano, Katsina, Kebbi Jigawa, Sokoto, and Zamfara States respectively. The population scope of the study was level 200 undergraduate students. The content scope focused on the parental socio-cultural factors such as parental income, parental level of education parental religious belief, and parental gender. The content scope also covered gender disparity in the choice of discipline.

## VIII. REVIEW OF EMPIRICAL STUDIES

This section is concerned with a review of empirical studies specifically, in the areas of, parental income and gender, parental level of education and gender, religious belief and gender, and gender and gender

disparity in the choice of discipline. It also examined how related and how relevant they are to the present study.

Studies on parental level of income and gender disparity in choice of discipline

Erola, Jalonon and Lehti (2016) investigated how parental socioeconomic status, including income and education, influences gender disparities in the choice of academic discipline at the tertiary level. Their study employed a comprehensive dataset of 29,282 students from Finnish registers, analyzing students' field choices regarding their parents' socioeconomic characteristics education, occupational class, and income at various stages of the student's lives (ages 0–4, 5–9, 10–14, 15–19, 20–24, and 25–29 years). Using three-level random effects linear regression models, the study decomposed family-level variance in academic choices by parental status measures. The findings highlighted that parental education was the most significant factor explaining variance in academic choices, whereas parental income had the least explanatory power. Notably, fathers' status characteristics accounted for about half of the variance in children's academic outcomes, while mothers' status explained slightly less. The impact of these parental indicators remained relatively stable over time, with mothers' education showing the greatest influence during infancy and fathers' education becoming more prominent in early adulthood. In contrast, the influence of parental income alone was found to be negligible throughout the observation period.

This study shares the focus on parental influences on academic choices but extends the investigation to include the impact of parental religious background on gender disparity. Erola et al.'s research provides a foundation for understanding how socioeconomic factors shape academic choices, yet it primarily addresses parental education and income, without exploring the role of religious background. This represents a gap that this study aims to fill by examining how religious beliefs, alongside other sociocultural factors, affect gender disparities in course selection. While Erola et al. provide insights into the relative significance of parental education and income, their study does not consider the potential influence of parental religious beliefs, which can also play a crucial role in shaping students' academic decisions. This research seeks to bridge this gap by incorporating parental religious background

into the analysis, thereby offering a broader perspective on how various sociocultural factors, including religion, contribute to gender disparities in academic choices. By focusing on Northwest Nigeria, this study also provides contextual insights that differ from the Finnish context of Erola et al.'s research, enhancing the relevance and applicability of these findings to different sociocultural environments.

Kazi and Akhlaq (2017) conducted an empirical study examining how parental income levels influence gender disparities in the choice of academic courses at the tertiary level. Utilizing a quasi-experimental design, the research focused on a sample of 2,000 undergraduate students from three major public universities in Ontario, Canada. The study aimed to explore how parental income affects students' decisions to pursue various fields of study, particularly noting the underrepresentation of women in high-income potential fields. Data were collected through structured surveys and academic records, with detailed questionnaires administered at the start and end of the academic year, complemented by official university records. The analysis employed descriptive statistics, logistic regression, and difference-in-differences (DiD) methodology to assess the impact of parental income on gender-specific academic choices. The findings revealed a significant gender disparity in the choice of high-income potential majors, such as economics and engineering, which was influenced by parental income levels. Specifically, students from higher-income families, particularly males, were more likely to select majors associated with higher future earnings. In contrast, female students from lower-income backgrounds were more inclined towards fields with traditionally lower earning potential. The study also included an intervention where students were exposed to successful alumni narratives, which resulted in an 8-percentage point increase in the likelihood of female students majoring in economics, compared to a baseline of only 9 percent.

This research on the influence of parental religious background on gender disparity in course selection builds upon the findings of Kazi and Akhlaq by adding a new dimension to the exploration of sociocultural influences on academic choices. While their study provides insight into how parental income affects gender disparities in high-income fields, it does not address the impact of parental religious

beliefs. This study aims to fill this gap by investigating how religious background, alongside parental income and other sociocultural factors, affects gender disparities in the choice of academic disciplines among undergraduate students in federal universities in Northwest Nigeria. By incorporating parental religious background into the analysis, this research seeks to offer a more comprehensive understanding of the various sociocultural factors influencing academic decisions. This approach provides valuable insights into how religious beliefs might interact with gender and socioeconomic factors to shape students' course choices, thereby addressing a significant gap in the existing literature and expanding the scope of understanding in this area.

Buchmann and DiPrete Thomas (2018) conducted a study examining the influence of parental income levels on gender disparities in the choice of academic disciplines at the tertiary level. Their research, which utilized a cross-sectional survey design, focused on two main questions: the impact of parental income on students' academic choices and gender-based differences in these choices. The study involved a sample of 431 students from three public universities in Bialystok, Poland, and employed a structured questionnaire to collect data on demographic backgrounds, parental income levels, academic choices, and risk propensity. Data analysis through descriptive statistics, chi-square tests, and logistic regression revealed a significant correlation between parental income and the selection of prestigious fields such as law or medicine. Additionally, the study highlighted gender trends, with women predominantly choosing humanities and social sciences and men inclined towards technical and scientific fields. The study was interpreted through cultural capital, monopolization, and rational choice theories. This study shares similarities with Buchmann et al. in that both investigate gender disparities in academic choices and consider parental influence. Like their study, this study employs quantitative methods to analyze data, focusing on how sociocultural factors affect academic decisions.

However, there are notable gaps in Buchmann et al.'s research. Their study primarily concentrates on parental income, which limits the scope of sociocultural factors explored. In contrast, this research broadens this scope to include various sociocultural dimensions, such as parental religious background, which may have additional implications

for gender disparities in course selection. Moreover, the geographical context of Buchmann et al.'s study of Poland may not fully reflect the sociocultural dynamics present in Northwest Nigeria. This research addresses this gap by focusing specifically on this region, providing insights that are more relevant to the local context. Additionally, Buchmann et al.'s study does not delve deeply into other sociocultural factors beyond parental income. This study, however, aims to explore a broader range of sociocultural influences, offering a more comprehensive analysis of how these factors, including religious beliefs, affect gender disparities in academic choices. By incorporating a wider range of sociocultural factors and focusing on the Nigerian context, this study seeks to fill these gaps, providing a different understanding of the influences on gendered academic decisions. This approach allows for a richer analysis of how parental sociocultural factors shape academic choices, contributing valuable insights into the field.

Porter and Serra (2020) conducted an empirical study that investigates how parental income levels influence gender disparities in the choice of academic courses at the tertiary level, with a focus on STEM (Science, Technology, Engineering, and Mathematics) fields. Using a cross-sectional design, the researchers analyzed detailed administrative data from 15,000 Ontario high school students and combined this with university admission data from the province's centralized system. The study utilized structured surveys and administrative records to collect information on high school courses, parental income, university applications, and eventual course enrollments. Descriptive statistics, logistic regression, and structural equation modeling were employed to analyze the data and assess the relationship between parental income, gender, and course selection. The findings highlighted that the gender gap in STEM enrollment is primarily mediated through an index of STEM readiness, which is significantly influenced by high school coursework in math and science. The study revealed that differences in STEM readiness, rather than major selection among those who are ready, account for most of the gender disparity in STEM entry. The gap in STEM readiness was found to be linked to two main factors: the proportion of students with the necessary high school prerequisites for STEM programs and the overall rate of university entry. Notably, the analysis indicated that the disparity in STEM readiness is not attributed to a significant

difference in prerequisites acquired by male and female students but rather to the lower university entry rates among non-science-oriented males. This research on the influence of parental religious background on gender disparity in course selection provides an important extension to the findings of Porter and Serra. While their study emphasizes STEM readiness and parental income's impact on gender disparities, it does not consider the role of parental religious background. This represents a gap that this study aims to address by incorporating religious background as a socio-cultural factor influencing academic choices.

By exploring how parental religious beliefs intersect with gender to affect course selection, this research seeks to provide a broader understanding of the factors shaping educational pathways beyond just socioeconomic influences. This approach not only fills a notable gap in the literature but also enhances the understanding of how diverse sociocultural factors, including religious background, impact gender disparities in academic choices.

Card and Payne (2021) explored the impact of parental income levels on gender disparities in the choice of academic disciplines at the tertiary level using data from the High School Longitudinal Study of 2009 (HSL:09). This empirical study employed a cross-sectional design, analyzing a diverse sample of 29,282 students to assess how parental income, gender, and socioeconomic status affect academic aspirations. The data were collected through structured surveys that provided detailed insights into students' academic choices, parental income, and demographic factors. The analysis involved descriptive statistics, logistic regression, and interaction effects to examine how disparities in course selection intersect with gender, race/ethnicity, and parental income. The results revealed that students from lower-income families, particularly females, Black, Hispanic, and low SES students, were less likely to choose, persist in, and develop an interest in high-prestige and STEM (Science, Technology, Engineering, and Mathematics) fields. In contrast, White boys from higher-income backgrounds were more likely to exhibit higher rates of interest and commitment to these fields. The study highlighted a significant disparity in the selection and persistence in high-prestige courses, driven by parental income and compounded by gender and racial/ethnic factors.

This study expands upon this by investigating the role of parental religious background in influencing gender disparities in academic choices. While Card and Payne (2021) provide valuable insights into how parental income and socioeconomic status impact academic aspirations, their focus does not extend to the influence of religious beliefs. This represents a gap that this research addresses by examining how parental religious background, in addition to socioeconomic factors, affects gender disparities in course selection. The empirical findings of Card and Payne's study underscore the importance of socioeconomic factors in academic choices but do not account for the potential role of parental religious beliefs. By incorporating religious background into this analysis, this study aims to provide a more comprehensive understanding of how various sociocultural factors, including religion, shape gender disparities in academic choices. This approach not only fills a gap in the literature but also offers new insights into how different dimensions of parental influence interact to affect students' educational pathways.

Studies on parental level of education and gender disparity in choice of discipline

Guo, Parker, Marsh and Morin (2015) investigated the impact of parental education levels on gender disparities in academic course selection, specifically focusing on social science fields. Their study employed a cross-sectional survey design with a sample of 1,500 secondary school students aged 13 to 16 from four public high schools in a metropolitan area. Data were collected through structured questionnaires and semi-structured interviews to assess students' knowledge, perceptions, and self-efficacy related to social sciences. The analysis, which utilized descriptive statistics and multiple regression, revealed that students with highly educated parents generally held more positive views of social science subjects and exhibited greater self-efficacy, leading to a higher likelihood of pursuing these courses. In contrast, students from lower-educated backgrounds were more likely to have negative stereotypes about social sciences, which decreased their chances of choosing these fields. The study underscores the significant role of parental education in shaping students' academic choices and advocates for interventions to improve perceptions of social science subjects. In comparison, this study on the influence of parental religious background on gender disparity in course selection explores a

different dimension of parental impact. While Guo et al. focused on educational background, this research examines how parental religious beliefs affect academic discipline choices, particularly addressing gender disparities. Both studies recognize the crucial role of parental influence but differ in the type of influence considered in education versus religion.

This study addresses several gaps in Guo et al.'s research. Firstly, while Guo et al. highlight the role of parental education, this study extends this understanding by exploring the impact of parental religious background. This adds a new layer to the analysis of how various parental influences shape academic choices. Secondly, Guo et al. primarily discuss gender disparities in the context of education, whereas this study delves into how religious beliefs contribute to these disparities. This broader perspective offers a more comprehensive view of the sociocultural factors affecting gendered academic decisions. By focusing on religious background, this research fills a critical gap by providing insights into how different aspects of parental influence intersect with gender and academic choices, enriching the understanding of factors that drive gender disparities in educational paths.

Van der Vleuten, Jaspers, Maas and Van der Lippe (2016) conducted an empirical study exploring the impact of parental education levels on gender disparities in the choice of academic courses at the tertiary level. The research employed a cross-sectional survey design, targeting 432 undergraduate students from two public sector universities in Lahore, Pakistan. The study aimed to uncover how parental education influences career choices, with a particular focus on gender differences. The data collection employed a mixed-methods approach, using both a structured questionnaire and in-depth interviews. The questionnaire collected quantitative data on students' demographics, parental education levels, chosen fields of study, and perceived influences on their career decisions. In-depth interviews provided qualitative insights into the motivations and pressures influencing students' academic paths. The analysis utilized descriptive statistics, chi-square tests, and thematic analysis to identify patterns and significant relationships. The findings revealed that parental education plays a crucial role in shaping students' course choices, with a significant gender disparity. Students with parents holding higher educational qualifications were more

likely to pursue prestigious and high-income fields such as medicine and engineering. This tendency was more pronounced among male students, while female students from similar educational backgrounds were often directed toward humanities and social sciences. The study also noted the secondary influence of peers, media, and personal interests compared to parental education, as well as the perception among many students, especially at the Master's level, that external pressures significantly influenced their career decisions.

This research on the influence of parental religious background on gender disparity in course selection builds on the findings of Van der Vleuten et al. by introducing an additional sociocultural factor parental religious background. While their study emphasizes the impact of parental education on academic choices, this research extends this understanding by examining how religious beliefs might also affect students' decisions. This approach provides a new perspective on how different dimensions of parental background influence gender disparities in academic fields, addressing a gap in the existing literature and contributing to a more different understanding of the sociocultural factors affecting educational choices.

Van Tuijl and Van der Molen (2016) conducted an empirical study exploring the influence of parental education levels on gender disparities in academic course choices among tertiary-level students. The study employed a cross-sectional survey design with a sample of 1,200 undergraduate students from three major public universities in a Western country. The research aimed to understand how parental education impacts students' academic track decisions, focusing particularly on gender differences and the persistence of traditional gender roles. Data were collected using a structured questionnaire that included comprehensive information on students' demographics, parental education levels, chosen fields of study, and perceptions of gender roles. The questionnaire also assessed students' motivations and perceived societal expectations influencing their academic choices. The analysis involved descriptive statistics, logistic regression, and chi-square tests to identify significant patterns and relationships. The findings indicated a significant association between parental education and students' course choices, revealing notable gender disparities. Students with higher-educated parents were more likely to pursue

non-traditional academic tracks. Specifically, female students from highly educated backgrounds were more inclined to enter STEM fields, challenging traditional gender norms. In contrast, male students from similar educational backgrounds were more likely to adhere to conventional male-dominated fields such as engineering and technology. The study observed a shift in gendered educational paths, with an increasing number of female students surpassing male students in higher education attainment and entering fields traditionally dominated by men. Nonetheless, some persistence of traditional gender roles was noted, particularly among male students who continued to favor conventional courses.

This study on the influence of parental religious background on gender disparity in course selection builds on these findings by introducing a new dimension of sociocultural influence. While Van Tuijl et al. focus on parental education and its impact on gendered academic choices, this research examines how religious background affects these decisions. This approach addresses a gap by exploring an additional sociocultural factor, offering insights into how various aspects of parental background beyond education contribute to gender disparities in academic fields. This broader perspective can help identify further differences in how parental background influences educational choices and gender disparities.

Van Bavel, Schwartz and Esteve (2018) conducted an empirical study examining the impact of parental education levels on gender disparities in the choice of academic courses among secondary school students. This longitudinal survey involved 1,062 adolescents aged 15 and 16 from various secondary schools, aiming to understand how parental education influences students' educational track choices. The study particularly focused on the internalization of gender expectations and their effects on students' competence beliefs, occupational values, and subject preferences. Data collection utilized a structured questionnaire administered at two points in time, gathering information on students' gender ideology, perceived competence in various subjects, occupational aspirations, and current subject preferences, alongside parental education levels. Analysis was performed using multinomial path models, revealing that parental education significantly impacted educational choices with notable gender differences. For boys, higher parental

education levels were associated with a stronger adherence to traditional gender roles, influencing their choice of stereotypically male-dominated fields like science and technology. In contrast, girls' academic choices were influenced more subtly by parental education. Although higher parental education affected girls' competence beliefs, particularly in math and science, it did not always lead to gender-stereotypical choices. Instead, girls with higher parental education were more likely to explore a broader range of subjects, indicating less rigid adherence to gender expectations. Van Bavel et al.'s findings highlight the crucial role of parental education in shaping adolescents' educational paths and the reinforcement of gender disparities in certain academic tracks. Their study emphasizes the need to address these disparities by promoting gender equity and challenging traditional gender ideologies.

This study on the influence of parental religious background on gender disparity in course selection extends this research by introducing an additional sociocultural factor religious background. While Van Bavel et al. focus on parental education and its effects on gendered academic choices, this research aims to explore how religious beliefs influence these decisions. This approach addresses a gap in understanding how different dimensions of parental background, beyond education, contribute to gender disparities in academic fields, offering a broader perspective on the sociocultural factors affecting students' educational choices.

Kollmayer, Schober and Spiel (2018) investigated how parental education levels influence gender disparities in the choice of academic courses, specifically within the Arts courses. This longitudinal study used a nationally representative sample of 370 Australian youths aged 15, drawn from a comprehensive database. The research aimed to understand how parental education impacts students' educational pathways and gender differences in course selection. Data were collected through structured surveys and academic records, focusing on students' self-concept in arts subjects, the intrinsic value placed on these subjects, prior academic achievements, and eventual course choices. The study employed a mixed-methods approach, including regression analysis and path modeling, to analyze the relationships between parental education, motivational beliefs, and educational outcomes. The findings revealed that higher parental education

levels significantly affect students' choices in the Arts. Specifically, students with more educated parents had a stronger self-concept and greater intrinsic value in arts subjects, which positively influenced their likelihood of pursuing advanced arts courses. The study also highlighted that prior achievements in reading negatively impacted the selection of advanced arts courses due to its influence on motivational beliefs about the Arts. Gender differences in course selection were observed, with variations in motivational beliefs and prior academic performance playing a mediating role. Notably, the processes affecting educational choices were similar for both genders. The research underscores the importance of addressing the impact of parental education on students' motivational beliefs and self-concept to mitigate gender disparities in Arts course selection.

In contrast, this study on the influence of parental religious background on gender disparity in course selection extends this understanding by exploring a different side of parental influence. While Kollmayer et al. focused on parental education, this research investigates how parental religious beliefs affect academic choices, particularly in the Arts, and how these beliefs contribute to gender disparities. This study fills several gaps identified in Kollmayer et al.'s research. Firstly, it expands the scope from parental education to parental religious background, offering a new perspective on how different parental influences shape academic choices. Secondly, while Kollmayer et al. explored motivational beliefs and prior academic achievement in the Arts, this study addresses how religious beliefs intersect with gender and influence academic decisions. This broader approach provides a deeper understanding of the sociocultural factors impacting gendered educational choices and enriches the analysis of factors driving disparities in Arts education.

## IX. METHODS

This chapter presents the description of the procedure of the study concerning the design of the study, area of the study, population of the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

### Design of the Study

This study adopted an Ex- post facto research design. The design according to Nworgu (2015) is a non-experimental research technique in which pre-existing groups are compared with some dependent variables. The design seeks to establish the causal-comparative between the criterion variables and the predictor variables. The design is appropriate for this study because the researcher is interested in establishing the influence of parental socio-cultural factors on gender disparity in the choice of discipline in universities.

### Area of the Study

The area of the study is the North West Geo-political zone of Nigeria which comprises seven States and they are as follows; Kano, Kaduna, Katsina, Kebbi, Jigawa, Sokoto, and Zamfara States respectively. The states in the zone share many features in common, the majority of the people are farmers, cattle rearers, or traders. Most of the population in this area practices Islam and belongs to the Hausa-Fulani ethnic group. The climate is typically dry with cooler temperatures at night. This region was selected for the study due to its noticeable gender disparity in the choice of academic disciplines at universities, which remains insufficiently addressed (NUC, 2019). It shows that there is not much progress achieved so far on the issue of parity in the aspect of choice of discipline in North West, Nigeria. This means that there is wide gender disparity in the choice of discipline in favour of the males in federal universities in northwestern, Nigeria.

North-west Nigeria is bordered to the north by the vast expanse of the Sahel region, characterized by semi-arid landscapes and transitioning into the sahara desert further north. This boundary extends from the southern edge of the Sahara desert to the northernmost reaches of the Nigerian territory. To the west, Northwest Nigeria is demarcated by the international border with Niger, a neighboring country. This boundary spans from the northernmost point where Nigeria meets Niger near the town of Maradi, extending southward to where it meets the northern boundary of Nigeria's western neighbor, Sokoto State. The eastern boundary of Northwest Nigeria is defined by the transition into the central regions of Nigeria, characterized by states such as Kebbi, Zamfara, and Katsina. This boundary extends from where Northwest Nigeria meets the central states around Sokoto and Kebbi, and it continues

eastward until it reaches the dividing line with the Northeast region. Finally, the southern boundary of Northwest Nigeria is marked by the states of Kano and Jigawa, which are situated to the southeast of the region. This boundary extends from where Northwest Nigeria meets these states near Katsina and Jigawa, and it continues southward until it meets the northern boundary of Nigeria's central region.

Womanhood and domestication in this area are so culturally integrated that it is impossible to remove domestication from women in North Western Nigeria in respect of their family, age, educational background, and civilization even though the Federal Government of Nigeria in her National Policy on Education recommended equal educational opportunities for all citizens irrespective of sex. This informed the choice of this area for the research study.

### Population of the Study

The population of the study consists of 25,758 (17,382 males and 8,376 females) year two (200L) full-time undergraduate students of federal universities in the north-west, Nigeria for the 2019/2020 academic year (National University Commission, 2019). See Appendix B, page 123. The schools are conventional universities that offer various courses and they are owned by the federal government of Nigeria. Meaning that the federal government funds and manages the universities. Mostly the students in these institutions are citizens of Nigerians that mostly come from nooks and crannies of the country but with few foreigners that also study there. The universities are as follows: Ahmadu Bello University, Zaria (Kaduna State), Bayero University, Kano (Kano State), Federal University, Birnin Kebbi (Kebbi State), Federal University Dutse (Jigawa State), Federal University, Dutsinma (Katsina state), Federal University, Gusau and Usmanu Danfodio University, Sokoto respectively.

Level 200 students were selected for this study because they are relatively new to university life, having spent one academic session interacting with their peers. This interaction provides them with insight into how parental socio-cultural factors might have influenced their choice of discipline based on gender. As a result, they are expected to offer honest and relevant information about their academic choices.

#### Sample and Sampling Technique

The sample for this study is 400 (year two undergraduates). This sample size was determined using Taro Yamen (1967) sampling technique formula (See Appendix C, page 124). A multistage sampling procedure was adopted to arrive at the sample size. In the first stage, the researcher adopted the simple random sampling technique to draw four (4) federal universities out of the seven (7) universities in the North-West Zone.

In the second stage, two departments science that is Mathematics and Computer Science were drawn while two departments from Arts departments that is English and Economics were all purposively sampled from the four universities to make up 16 departments. This sampling technique was purposively done in such a way because these four departments are offered in the four sampled universities for the uniformity of the data from the respondents who share the same characteristics. In the third stage, a disproportionate stratified random sampling technique was employed. This involved selecting 25 students from each of the 16 departments within the sampled schools, resulting in a total sample of 400 second-year undergraduate students (see Appendix D: page 125).

#### Instrument for Data Collection

The instrument for data collection in this study is the Socio-Cultural Factors and Gender Disparity in Choice of Discipline Questionnaire. The instrument was designed by the researcher and it has two sections. Section A consists of demographic information of the respondents such as parental income level, parental education level, religious belief, and parental gender, and section B with 8 items that elicited information on perceived gender disparity in choice of Discipline. The response options of parental socio-cultural factor instrument are scored on a 4-point rating scale: Strongly Agree (SA) --- 4 Points, Agree (A) --- 3 points, Disagree (D) --- 2 points and Strongly Disagree (SD) ---1 point. Thus, the maximum obtainable score on the cluster is 32 marks while the minimum obtainable score is 8 marks (see Appendix A: page 120)

#### Validity of the Instrument

The instrument was face-validated by three experts. Two experts in the Department of Educational Foundations (Sociology of Education Unit), and one expert in the Department of Science Education

(Measurement and Evaluation unit) all from the Faculty of Education, University of Nigeria, Nsukka. The experts were requested to look at the items on the instrument in terms of clarity of language, the instrument's appropriateness, and adequacy of items in addressing the problem of the study. Comments, suggestions and criticisms made independently by the experts helped the researcher to modify and produce the final instrument.

#### Reliability of the Instrument

To establish the internal consistency reliability of the instrument, a trial testing was conducted by the researcher as 30 copies of the questionnaire were administered to 200 level undergraduate students at Sule Lamido University, Kafin Hausa in Jigawa State. This university is a state which is outside the scope of the research. This is because 200-level students in this institution share similar characteristics with the research sample. The internal consistency of the instrument was assessed using Cronbach's Alpha statistical method, which yielded a coefficient of 0.80. This result indicates that the instrument demonstrated a high level of reliability, as Cronbach's Alpha is commonly used to evaluate the consistency of responses across multiple items within a questionnaire or test. A coefficient of 0.80 signifies that the items on the instrument reliably measure the same underlying construct and they are polythomously scored.

#### Method of Data Collection

The instrument was administered by the researcher with the help of four research assistants using the direct delivery and retrieval method (DDRM). The researcher and the research assistants traveled to the four sampled federal universities in the four states in North Western Nigeria to distribute and collect the questionnaires upon completion by the respondents. The four states are Kano, Kaduna, Kebbi, and Jigawa state respectively. The research assistants were instructed on the modalities for the distribution and retrieval of the copies of the questionnaires from the respondents. The idea is to ensure proper completion and a high return rate of the questionnaires. The researcher and assistants administered 400 copies and were able to collect back only 396 copies representing a 99% return rate. The four copies of the instrument that were not included were not returned by the respondents.

Method of Data Analysis

The researcher subjected the data to statistical analysis using Statistical Package for Social Sciences (SPSS) version 23. The four research questions were answered using mean and standard deviation. Hypotheses 1, 2, and 3 were tested using One-Way ANOVA due to their categorical variables having three levels, while Hypothesis 4 was tested with a t-test, appropriate for variables with two levels. Both tests were conducted at a 0.05 level of significance. In addressing the research questions, items with a mean score below 2.50 were considered unacceptable, while those with a mean score of 2.50

or above were accepted. The null hypothesis was rejected if the p-value was less than 0.05; otherwise, it was not rejected.

X. RESULTS

The results were presented in line with the research questions and the null hypotheses that guided the study.

Research Question 1: What is the influence of parental level of income on gender disparity in the choice of discipline among undergraduate students in universities?

Table 1: Mean and standard deviation of the influence of parental level of income on gender disparity in choice of discipline

	N	$\bar{X}$	Std. Deviation
N50,000 and Below	101	23.3564	3.48018
N51,000 – N100,000	127	22.9134	4.09805
Above N100,000	168	23.2738	4.40971
Total	396	23.1793	4.08401

Data in Table 1 revealed that parents with an income level of below 50 thousand have mean and standard deviation scores of 23.36 and 3.48 respectively, and those with an income level of one hundred thousand and above (above #100,000) have mean and standard deviation scores of 23.27 and 4.41 respectively. While those parents with income levels of fifty-one

thousand (#51,000) to hundred thousand (#100,000) have mean and standard deviation scores of 22.91 and 4.09 respectively. See figure 2 on page 87 for the graphical interaction of the parental income level on gender disparity in the choice of discipline among undergraduate students in universities.

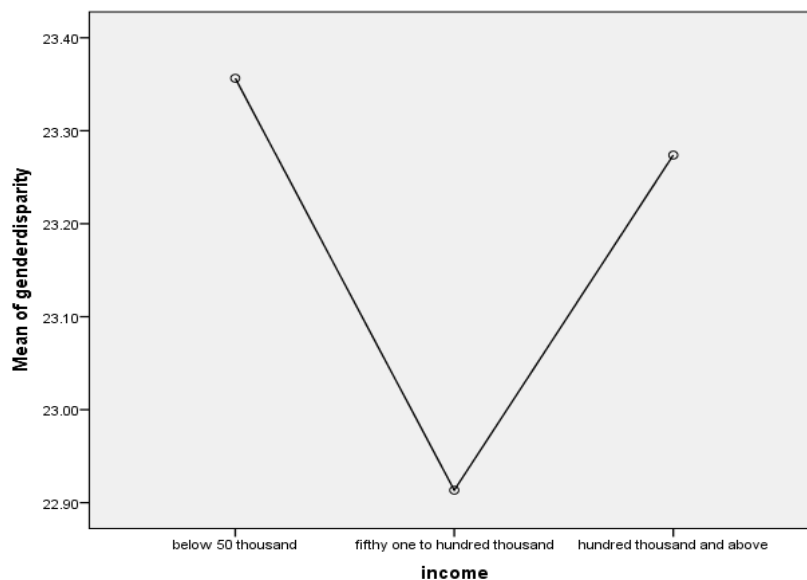


Figure 1: graphical representation of the influence of parental income on gender disparity in choice of discipline

The graph above showed that parents who have income value of #50,000 (fifty and below) have the highest point in the graph and influenced the gender disparity in choice of discipline in universities followed by those who have

income value of #100,000 and above (one hundred thousand and above) and least are those parents with income value of #50,000 to #100,000 respectively.

Hypothesis 1: parental level of income does not significantly influence gender disparity in choice of discipline among undergraduate students in universities.

Table 2: One Way Analysis (ANOVA) of the influence of parental level of income on gender disparity in choice of discipline.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13.650	2	6.825	.408	.665
Within Groups	6574.620	393	16.729		
Total	6588.270	395			

Data on Table 2 reveals that ANOVA value is  $F(2,393) = .408$ ,  $p(.665) > .05$ . The result shows that the hypothesis is not rejected because the significant value of .665 is greater than the alpha value of 0.05. Therefore, parental level of income does not significantly influence gender disparity in choice of

discipline among undergraduate students in universities.

Research Question 2: What is the influence of parental level of education on gender disparity in choice of discipline in universities?

Table 3: Mean and standard deviation on the influence of parental level of education on gender disparity in choice of discipline.

	N	$\bar{X}$	Std. Deviation
Phd	36	22.97	4.29
BSC	197	23.08	3.93
OND	26	22.31	4.24
SSCE	56	23.93	3.38
OTHERS	81	23.27	4.72
Total	396	23.11	4.11

Data on table 3 show that parents with SSCE have the highest influence on gender disparity in choice of discipline in universities with mean and standard deviation scores of 23.93 and 3.38 followed by parents who have other educational qualifications that are not formal with mean and standard deviation of 23.27 and 4.72. Then followed by parents who have BSC (first degree) with mean and standard deviation scores of 23.08 and 3.93. Followed by parents that have Ph.D with mean and standard

deviation scores of 22.97 and 4.29 and finally, parents with OND have mean and standard deviation scores of 22.31 and 4.24 respectively. The finding shows that parents with SSCE have the highest influence on gender disparity in choice of discipline in universities followed by parents who have other educational qualifications that are not formal, parents that have BSC, parents who have Ph.D and parents with OND respectively.

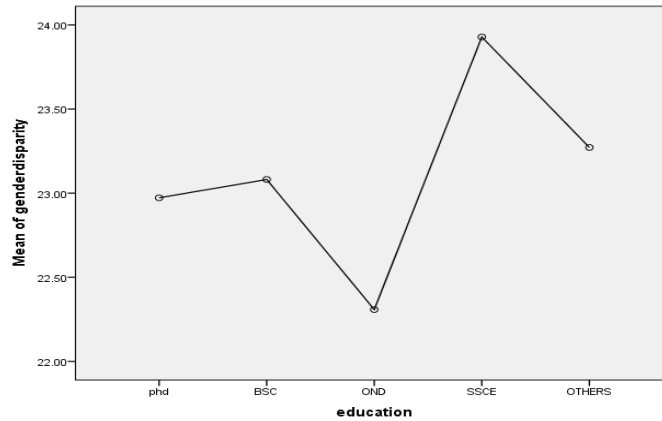


Figure 3: graphical representation of the influence of parental level of education qualifications on gender disparity in the choice of discipline

The graph above explains that parents with SSCE have the highest influence on gender disparity in choice of discipline in universities followed by parents who have other educational qualifications

that are not formal, parents that have BSC, parents who have Ph.D and parents with OND respectively. Hypothesis 2: Parental level of education does not significantly influence gender disparity in choice of discipline in universities.

Table 4: One Way Analysis (ANOVA) of the influence of Parental level of education on gender disparity in choice of discipline.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	55.320	4	13.830	.828	.508
Within Groups	6532.950	391	16.708		
Total	6588.270	395			

Data on Table 4 reveals that ANOVA value is  $F(2,391) = .828, p(.508) > .05$ . The result shows that the hypothesis is failed to be rejected because the significant value of .508 is greater than the alpha value of 0.05. Therefore, parental level of education does not significantly influence gender disparity in choice of discipline in universities.

#### XI. SUMMARY OF THE FINDINGS

1. The finding shows that parents who have an income value of #50,000 (fifty thousand naira and below) have the highest point in the graph and influenced the gender disparity in choice of discipline in universities followed by those who have an income value of #100,000 and above (one hundred thousand naira and above) and least are those parents with income value of #51000 to #100,000 (fifty-one thousand to one hundred thousand naira) respectively. The hypothesis showed that parental income level does not significantly influence gender disparity in the choice of discipline among undergraduate students in universities.

2. The finding shows that parents with SSCE have the highest influence on gender disparity in the choice of discipline in universities followed by parents with other educational qualifications that are not formal, parents that have BSC, parents who have Ph.D's and parents with OND respectively. The hypothesis showed that parental level of education does not significantly influence gender disparity in the choice of discipline among undergraduate students in universities.

#### XII. DISCUSSION OF FINDINGS

The discussion of the findings was done along the following sub-themes:

1. Parental level of income and gender disparity in choice of discipline in universities
2. Parental level of education and gender disparity in choice of discipline in universities

Parental Level of Income and Gender Disparity in the Choice of Discipline among Undergraduate Students in Universities

The findings of this study suggest that parental income does influence gender disparity in the choice of academic disciplines among university students, but not in a straightforward manner. Specifically, the data indicated that parents with the lowest income bracket (N50,000 and below) had the most significant impact on the gender disparity in discipline choice, while those in the middle-income range (N51,000 to N100,000) had the least influence. Interestingly, parents in the highest income bracket (above N100,000) also showed a considerable influence, though not as pronounced as those in the lowest income group. The hypothesis testing further indicated that parental income level does not significantly influence gender disparity in discipline choice at universities. These findings support and diverge from previous research in several ways. For instance, Buchmann et al. (2018) found a significant correlation between parental income and the choice of prestigious academic fields, with higher parental income levels linked to a greater likelihood of students selecting high-status disciplines like law and medicine. Their study also identified clear gender trends, with women favoring humanities and social sciences, while men gravitated toward technical and scientific fields. This contrasts with the present study, where the direct influence of income on gender disparity in discipline choice was found to be insignificant. Similarly, Erola et al. (2016) explored the broader spectrum of parental socioeconomic status, including income and education, and found that while parental education was a critical factor in determining academic choices, parental income played a negligible role. This finding supports the result of the current study, where income alone was not a significant predictor of gender disparity in academic discipline choice. However, Erola et al. highlighted the complex interplay between different aspects of parental socioeconomic status, which could suggest that while income may not directly influence discipline choice, other related factors such as parental education and occupational class might. Card and Payne (2021) also highlighted the significant impact of parental income on academic aspirations, particularly in high-prestige and STEM fields. They noted that students from lower-income families, especially females and minorities, were less likely to pursue or persist in these fields, in contrast to their counterparts from higher-income backgrounds. This reinforces the notion that income does play a role in shaping academic trajectories, but the present study suggests that this influence may

vary depending on the specific context and demographics of the student population.

While previous studies have generally emphasized the role of parental income in shaping gender disparities in academic discipline choice, the findings of this study indicate a more detailed relationship. Parental income does influence gender disparity, but its impact may be mediated by other factors, such as the socioeconomic context, cultural expectations, and the availability of resources. The insignificant influence of parental income found in this study suggests that interventions aimed at reducing gender disparities in academic disciplines may need to focus more on addressing underlying cultural and educational factors rather than purely economic ones.

#### Parental level of Education and Gender Disparity in the Choice of Discipline in Universities

The findings of this study reveal that parents with SSCE (Senior Secondary Certificate Examination) exert the most influence on gender disparity in the choice of academic disciplines at universities, followed by parents with non-formal educational qualifications, BSc degree holders, Ph.D. holders and OND (Ordinary National Diploma) holders, respectively. Despite this influence, the hypothesis testing indicated that the level of parental education does not significantly influence gender disparity in the choice of disciplines among university students. The findings of this study with those of other studies highlight both similarities and differences. For instance, Van der Vleuten et al. (2016) found that parental education plays a crucial role in shaping students' course choices, with significant gender disparities emerging. Their study demonstrated that students with highly educated parents were more likely to pursue prestigious and high-income fields, such as medicine and engineering, with this trend being more pronounced among male students. In contrast, female students from similar educational backgrounds were often guided towards humanities and social sciences. This contrasts with the current study, where the educational level of parents, including those with higher qualifications like Ph.D.s, did not show a significant impact on gender disparity in discipline choice.

Van Bavel et al. (2018) also highlighted the significant influence of parental education on educational choices, particularly noting how higher parental education levels reinforced traditional

gender roles among boys, steering them toward male-dominated fields like science and technology. Their longitudinal study on adolescents suggested that parental education significantly affects the internalization of gender expectations, impacting students' subject preferences and occupational values. This reinforces the idea that parental education can play a role in perpetuating or challenging traditional gender norms, a nuance that the present study did not find to be statistically significant in the context of Nigerian universities. Similarly, Van Tuijl et al. (2016) explored how parental education influences gender disparities in academic choices among tertiary-level students and found a significant association between higher parental education and a propensity for students to pursue non-traditional academic tracks. Interestingly, they observed that female students from highly educated backgrounds were more likely to enter STEM fields, challenging traditional gender norms, while male students from similar backgrounds adhered to conventional fields like engineering and technology. This shift in gendered educational paths contrasts with the present study's findings, where parental education level, regardless of its degree, did not significantly influence gender disparity in academic discipline choices.

While previous studies consistently found that parental education significantly influences students' academic choices and the persistence of gender disparities, the current study suggests that in the context of Nigerian universities, this influence may be less pronounced. The findings imply that other factors beyond parental education level, such as cultural expectations, societal norms, and perhaps economic constraints, may play a more dominant role in shaping gender disparities in academic discipline choices. This suggests the need for further research to explore these additional factors and their interplay with parental education in different sociocultural contexts.

### XIII. CONCLUSIONS

From the findings of the study, it can be deduced that parental socio-cultural factors like parental income, parental level of education, are not significant factors that can influence gender disparity in the choice of discipline among undergraduate students in universities in North West, Nigeria. Even though parents are instrumental in the overall wellbeing of

their children it seems more underlying factors might be responsible for the problem of Gender disparity in choice of Discipline. This without doubt might be responsible for the unequal representation of the female child in subject specializations like science and other disciplines which deprive them of contributing immensely towards societal development.

#### Contributions to Knowledge

The study has revealed that parental sociocultural factors, such as income, education level not significantly influence gender disparity in the choice of disciplines among undergraduate students in universities in North Western Nigeria. Therefore, parents must become more actively involved in various aspects of their children's education, including addressing gender disparities in discipline choices.

#### Educational Implications

The findings of the study have a lot of implications for the Government, parents, students, teachers, and society at large. The findings of the study revealed that parental level of income does not significantly influence gender disparity in the choice of Discipline. This therefore means that the students irrespective of their Gender should work very hard to avail themselves the equal opportunities to have higher education as well as choose a course of discipline of their interest that will enable them to excel academically to contribute positively to the development of the society.

The study's findings also indicated that parental education level does not significantly influence gender disparity in the choice of disciplines between male and female students. This highlights the importance for teachers to dispel this misconception and ensure that they provide equal education to all students, regardless of gender. Failing to do so can have detrimental effects on the overall development of science and technology, which is essential for achieving sustainable development in any country.

The society should be instrumental in ensuring that there is no specific course for a particular gender. This means that the issue of stereotyping in the aspect of the choice of discipline should be discarded to give equal opportunities based on one's abilities.

#### XIV. RECOMMENDATIONS OF THE STUDY

Based on the findings of the study, the following recommendations were made by the researcher:

1. **Promote Parental Involvement:** Since the study revealed that parental sociocultural factors such as income, education level, and religious beliefs do not significantly influence gender disparity in the choice of disciplines, it is crucial to encourage parents to actively engage in their children's education. This involvement should go beyond mere financial support to include guidance and encouragement in pursuing disciplines that align with their children's interests and abilities, rather than adhering to traditional gender roles.
2. **Educator Training and Awareness:** Teachers and educational stakeholders should receive training to eliminate gender biases in the classroom. Since the study found no significant impact of parental education on gender disparity in academic choices, teachers must focus on providing equal opportunities and encouragement to all students, irrespective of gender. This is particularly important in science and technology fields, where gender stereotypes can hinder progress and innovation.
3. **Curriculum Development:** Educational institutions should consider revising their curricula to include components that challenge gender stereotypes and promote gender equality in academic and career choices. This could involve integrating lessons on gender equity, showcasing diverse role models, and encouraging both male and female students to explore a wide range of disciplines, especially in STEM fields.
4. **Policy Interventions:** Policymakers should develop and implement policies that support gender equity in education. This includes creating initiatives that target the underlying social and cultural factors contributing to gender disparities in academic choices. Such policies could involve awareness campaigns, scholarships, and mentorship programs aimed at encouraging female students to pursue traditionally male-dominated fields and vice versa.
5. **Parental Education Programs:** Given the findings, it is recommended that community-based programs be established to educate parents on the importance of supporting their children's

academic interests rather than conforming to gender-based expectations. These programs should emphasize that academic success is driven by interest and intellectual ability, not by gender, and should provide parents with the tools to guide their children effectively.

6. **Further Research:** It is recommended that further research be conducted to explore other potential factors influencing gender disparity in the choice of disciplines. While the current study focused on sociocultural factors, future studies could investigate psychological, environmental, and institutional influences to provide a more comprehensive understanding of the issue.

#### XV. SUGGESTIONS FOR FURTHER STUDIES

Based on the findings and limitations of the current study, the following suggestions for further research are proposed:

1. **Future studies** should investigate the psychological factors that may influence gender disparity in the choice of academic disciplines. This could include examining students' self-efficacy, motivation, interests, and perceptions of gender roles, as well as how these factors interact with parental influences.
2. **Additional research** is needed to explore how institutional factors, such as school policies, teacher attitudes, and educational environments, contribute to gender disparities in academic choices. Studies could also focus on how different school settings (urban vs. rural) or types of institutions (public vs. private) impact these disparities.
3. **Further studies** could delve deeper into the specific attitudes, beliefs, and expectations of parents regarding gender roles and how these impact their children's academic and career choices. Understanding these nuances could provide a more detailed picture of the dynamics at play.
4. **Impact of Peer Influence:** Future research could examine the role of peer influence in shaping students' academic choices and how this interacts with parental and gender factors. Understanding the peer dynamics could offer additional insights into addressing gender disparities in educational choices.

## XVI. SUMMARY OF THE STUDY

The study investigated the influence of parental socio-cultural factors on Gender Disparity in the choice of Discipline among undergraduates in federal universities in Northwest Nigeria. To guide the study's four purposes, two research questions were used and two null hypotheses were formulated. From the review of related literature, the concept of parent, culture, socio-cultural, gender disparity, choice of Discipline, and university education with theoretical review as well as empirical studies were dealt with. An ex-post facto research design was used for the study. The population of the study consisted of all 25,758 (17,382 males and 8,376 females) two hundred level (200L) 2019/2020 session full-time undergraduate students of federal universities in northwest, Nigeria. The sample size for the study was 396 full-time undergraduate students. Multistage sampling was adopted in drawing the sample for the study. One instrument was used to collect pertinent data for the study. The instrument was face-validated by three experts. Two experts in the Department of Educational Foundations (Sociology of Education Unit), and one expert in the Department of Science Education (Measurement and Evaluation unit) all from the Faculty of Education, University of Nigeria, Nsukka. To determine the reliability of the instrument the researcher administered the instrument to 30 undergraduate students at Sule Lamido University, Kafin Hausa in Jigawa State.

The internal consistency of the instrument was determined using the Cronbach Alpha statistical method and a reliability coefficient value of 0.80 was obtained. Cronbach Alpha reliability method was used because the instrument was polytomously scored. The data obtained for the study were analysed using Statistical Package for Social Sciences (SPSS) version 23. The research questions were answered using mean and standard deviation with graphs. Formulated Hypotheses 1 and 2 were tested using ANOVA (regression output) at a 0.05 level of significance. The findings of the study were: parental level of income does not influence gender disparity in choice of discipline in universities; parental level of education does not influence gender disparity in choice of discipline in universities. Also, the results of the two null hypotheses are as follows: there are no significant differences between parental income and gender disparity in choice of discipline among undergraduates in universities, there are no

significant differences between the parental level of education and gender disparity in choice of discipline in universities. Based on the findings, the study recommends that parents should actively engage in their children's educational decisions without bias based on gender, focusing on interests and abilities instead. Teachers should work to eliminate gender biases in the classroom to foster equal opportunities for all students. Educational institutions should implement policies that promote gender equity, and policymakers should develop interventions to address sociocultural barriers contributing to gender disparities in academic disciplines.

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