

The Influence of Parental Religious Belief and Parental Gender on Gender Disparity in Choice of Discipline among Undergraduate Students in Federal Universities in North West Nigeria

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Abstract- *This study investigated the influence of parental socio-cultural factors on gender disparity in students' choice of academic disciplines in universities in North-West Nigeria. The problem addressed in the study arises from persistent inequalities in male and female participation across fields of study, particularly the underrepresentation of girls in science, technology, engineering, and mathematics (STEM) and the concentration of boys in non-care professions. The study specifically examined how parental religious beliefs, parental gender, parental level of education, and parental occupational background contribute to gendered academic choices among undergraduate students. A descriptive survey research design was employed, and data were collected using a structured questionnaire validated through expert review. The population comprised undergraduate students in selected universities in North-West Nigeria. Findings revealed significant associations between parental socio-cultural factors and students' gendered educational pathways. Parental religious orientation, gender norms, educational attainment, and occupational roles collectively shaped expectations, motivation, and discipline choices of male and female students. Results further showed that these parental influences reinforce gender stereotypes and contribute to unequal participation across academic disciplines. The study concludes that addressing parental socio-cultural constraints is essential to reducing gender disparities and promoting equitable access to diverse fields of study.*

Keywords: *Parental Factors, Socio-Cultural Influences, Gender Disparity, Academic Discipline, Undergraduates, North-West Nigeria.*

I. INTRODUCTION

Background of the Study

Religious influences, parental gender is another socio-cultural factor impacting gender disparity in academic choices. The role of parental gender in shaping academic preferences is multifaceted, influenced by a range of cultural, societal, and familial dynamics. Research suggests that the roles and expectations assigned to different genders within the family can significantly affect children's perceptions of gender norms and their subsequent decisions regarding academic disciplines. Parental gender roles and expectations play a crucial role in reinforcing or challenging traditional gender norms, which in turn affects the academic choices of their children (Serbin, Stack, Kingdon, & Ruttle, 2013). Studies have shown that parental attitudes and behaviors towards gender roles, particularly in educational and career domains, can shape children's beliefs about their capabilities and interests (Leaper, Farkas, & Brown, 2012). For example, according to the authors, parents may inadvertently reinforce stereotypes by encouraging certain subjects or career paths based on their perceptions of gender-appropriate roles. This may contribute to the perpetuation of gender disparities in traditionally male or female-dominated fields. Moreover, parental involvement and support in education can vary based on gender, with research indicating that fathers often provide more encouragement and support for their sons in STEM (Science, Technology, Engineering, and Mathematics) fields compared to their daughters (Hill, Corbett, & St. Rose, 2010). This difference in parental support can influence children's self-efficacy and aspirations in specific disciplines as reported by the authors.

However, parental gender can influence the children, historically fathers have been seen as primary breadwinners and their career choices may influence their children's perceptions of suitable career paths. Research by Hegewisch and Hartmann (2014) found that fathers' occupations significantly influenced their daughters' career aspirations. Fathers may unintentionally reinforce gender stereotypes by encouraging sons toward traditionally masculine fields and daughters towards feminine ones. Papanastasiou (2020) highlights the role of fathers in perpetuating gendered expectations, affecting subject choices. They can actively support and encourage their children's academic pursuits, regardless of gender norms, which can help mitigate gender disparities in subject choices. Also, Su and Rounds (2015) emphasize the importance of paternal support in fostering career development.

Similarly, Mothers often serve as primary caregivers and may influence their children's educational aspirations through their own experiences and encouragement. Mothers' beliefs about gender roles were associated with their children's career choices. They may also hold gendered expectations, although they might be more inclined to support their children's choices irrespective of gender (Else-Quest et al, 2010). The authors further suggests that, mothers may subtly transmit gender stereotypes to their children by way of nurturing them right from cradle. Similarly, maternal support and encouragement are crucial in shaping children's academic and career aspirations (Wang & Sheikh-Khalil, 2014).

However, it's essential to note that the influence of parental gender on gender disparity in the choice of discipline may vary depending on numerous factors such as socio-cultural context (such as parental level of education, income, religious beliefs, and gender) and individual family dynamics.

Given the foregoing, the disparity in the choice of discipline based on parental sociocultural factors might have negative influences on the students, whether males or females and the society at large. The reason is that students who do not have the intellectual abilities and capabilities to study science courses such as medicine, engineering, and mathematics among others may end up performing poorly in the course and they may drop out. But if eventually they manage to graduate as doctors or

engineers, those in medicine may administer the wrong drugs/injections to their patients, thereby killing them or endangering their lives. Those in engineering and mathematics may do wrong calculations and measurements which might lead to buildings collapsing and so many others as is even happening now.

Religious influences, parental gender is another socio-cultural factor impacting gender disparity in academic choices. The role of parental gender in shaping academic preferences is multifaceted, influenced by a range of cultural, societal, and familial dynamics. Research suggests that the roles and expectations assigned to different genders within the family can significantly affect children's perceptions of gender norms and their subsequent decisions regarding academic disciplines. Parental gender roles and expectations play a crucial role in reinforcing or challenging traditional gender norms, which in turn affects the academic choices of their children (Serbin, Stack, Kingdon, & Ruttle, 2013). Studies have shown that parental attitudes and behaviors towards gender roles, particularly in educational and career domains, can shape children's beliefs about their capabilities and interests (Leaper, Farkas, & Brown, 2012). For example, according to the authors, parents may inadvertently reinforce stereotypes by encouraging certain subjects or career paths based on their perceptions of gender-appropriate roles. This may contribute to the perpetuation of gender disparities in traditionally male or female-dominated fields. Moreover, parental involvement and support in education can vary based on gender, with research indicating that fathers often provide more encouragement and support for their sons in STEM (Science, Technology, Engineering, and Mathematics) fields compared to their daughters (Hill, Corbett, & St. Rose, 2010). This difference in parental support can influence children's self-efficacy and aspirations in specific disciplines as reported by the authors.

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On the other hand, if they are studying art and humanities-related courses, like accounting, music, philosophy, education, etc., they might eventually

graduate in the field of education against their interest, and they might equally not do well or achieve highly because of loss of interest and values; and those graduates might in one way or another impart wrong knowledge to the young children who are leaders of tomorrow because they did not graduate in their area of interest. This might most likely lead to destroying the foundations of their future educational pursuits. Therefore, there is a need to close the gender gap by making efforts to address gender disparity in choice of discipline and career paths which may include promoting equal access to education, freedom of parental preferences in the choice of discipline for their wards, creating employment opportunities, increasing the representation of women in leadership positions and challenging gender stereotypes and biases. Such efforts are critical for creating a more equitable and just society for all individuals, regardless of gender. Based on this backdrop, this study sought to examine the influence of parental socio-cultural factors on gender disparity in the choice of discipline among undergraduates in federal universities in North-West, Nigeria.

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?

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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 religious belief on gender disparity in the choice of discipline among undergraduates in universities
- ii. Find out the influence of parental gender on gender disparity in the choice of discipline among undergraduates in universities.

Research Questions

The following research questions guided the study.

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

Hypotheses

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

H0₁: There is no significant mean difference in parental religious belief and gender disparity in the choice of discipline among undergraduates in universities

H0₂: There is no significant mean difference between parental gender and gender disparity in the choice of discipline among undergraduates in universities

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.

Theoretically, this theory is considered significant because the findings of the study helped to explain the functionality of the theoretical postulations of Beauvoir's theory of dualism. This theory is of great

significance because in the study area which is north-west Nigeria, the dominance of men over women on various issues including education is so conspicuous to the extent that women are treated as inferior. This study when published would enlighten the public on the negative power of gender stereotypes that it is not just in the mind but affects education as well; hence, this research study would be hinged on Beauvoir's theory of Dualism.

Practically, the findings of this study would be of immense benefit to parent, the government, ministry of Education, counselors, sociologists of education, non-governmental organizations, and future researchers. This study can be highly beneficial to parents by shedding light on how their sociocultural beliefs and practices influence their children's choice of academic disciplines, particularly regarding gender disparities. The findings can help parents become more aware of the unconscious biases and cultural norms that may limit their daughters' educational opportunities. By understanding these influences, parents can make more informed decisions that support their children's true interests and potential, rather than steering them towards traditional or gender-stereotyped fields of study.

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.

III. REVIEW OF EMPIRICAL STUDIES

Studies on parental religious belief and gender disparity in choice of discipline

Gaspard, Dicke, Flunger, Schreier, Häfner, Trautwein and Nagengast (2015) investigated the influence of parental religious background on gender disparities in academic course selection, specifically focusing on STEM fields. The study used a cross-sectional survey design with a sample of 2,000 undergraduate students from five major universities in a diverse metropolitan

area. The primary objective was to understand how parental religious beliefs shape students' course selections and contribute to gender-based disparities. Data were collected using a comprehensive questionnaire and follow-up interviews. The questionnaire gathered demographic data, information on parental religious background, gender, and chosen fields of study. The follow-up interviews provided deeper insights into the role of parental religious beliefs in shaping educational decisions. The findings indicated significant gender disparities influenced by parental religious background. Students from conservative religious backgrounds were more likely to adhere to traditional gender roles, with female students being less inclined toward STEM fields compared to their male counterparts. Conversely, students from more progressive religious backgrounds displayed more balanced gender representation in their academic choices, showing less influence of traditional gender norms. The study also highlighted shifts in the characteristics of students pursuing STEM fields, demonstrating that parental religious beliefs either reinforce or challenge gender-based academic preferences. While traditional explanations for gender disparities in STEM remain relevant, the research identified new patterns and determinants affecting students' interest in and selection of STEM majors.

This study, which examines the impact of parental religious background on gender disparities in the choice of academic disciplines among undergraduate students in federal universities in Northwest Nigeria, provides a broader perspective by extending the focus from STEM to a variety of disciplines. Unlike Gaspard's et al study, which is limited to STEM fields and conducted in a specific metropolitan context, this research explores how parental religious beliefs influence gender disparities across a wider range of academic fields in a distinct cultural and geographic setting. By expanding the scope to include multiple disciplines, this study addresses the gap in understanding how parental religious beliefs affect gender disparities in academic choices beyond STEM fields. This approach allows for a more comprehensive analysis of how religious beliefs impact students' decisions across various academic disciplines and emphasizes the need for culturally specific interventions to promote gender equity in educational choices.

Sax, Lehman, Jacobs, Kanny, Lim, Monje-Paulson and Zimmerman (2017) investigated the impact of parental religious background on gender disparities in the choice of academic courses, focusing on a broad range of academic fields. This cross-sectional study utilized a sample of 648 undergraduate students from four public universities in a diverse metropolitan area. The research aimed to explore how parental religious beliefs influence students' course selections and the persistence of gender disparities in academic choices. Data were gathered through a structured questionnaire, which included items on students' demographic information, parental religious background, gender, perceived parental and societal expectations, and chosen fields of study. The study also incorporated in-depth interviews to provide qualitative insights into the influence of parental religious beliefs on educational decisions. The findings revealed that parental religious background significantly affects students' course selections, with varying levels of gender disparities observed across different religious contexts. Students from more conservative religious backgrounds often faced stronger gender-based expectations, leading to traditional gendered academic choices. For instance, female students from such backgrounds were more likely to be discouraged from pursuing certain fields, while male students were encouraged toward those fields. In contrast, students from more progressive religious backgrounds exhibited less pronounced gender disparities in their course selections. The study highlighted that parental religious beliefs contribute to the persistence of gender stereotypes, which influence students' academic preferences and career aspirations. Gender differences in course selection were mediated by the religious values imparted by parents, affecting both motivation and perceived suitability of various fields of study.

This study, which explores the influence of parental religious background on gender disparity in the choice of disciplines among undergraduate students in federal universities in Northwest Nigeria, extends the research by broadening the focus from specific fields to a wider array of academic disciplines. While Sax et al. concentrated on understanding religious influences within a specific cultural and academic context, this research aims to provide insights into how religious beliefs affect gender disparities across various disciplines in different geographic and cultural settings. By expanding the scope to include multiple disciplines, this study addresses the gaps in

understanding how parental religious background influences gender disparities in educational choices. This broader perspective allows for a more comprehensive analysis of how religious beliefs impact students' decisions across a range of academic fields and highlights the need for culturally specific interventions to promote gender equity in educational choices.

Schleifer and Chaves (2017) investigated the impact of parental religious background on gender disparities in academic course selection across various fields, including social sciences and arts. Utilizing a cross-sectional survey design, the study involved 1,500 high school students from ten diverse schools in a metropolitan area. The researchers employed a structured questionnaire to gather data on students' demographics, parental religious background, gender, and academic choices. The questionnaire assessed students' value beliefs about different academic areas, including intrinsic, attainment, utility, and cost values. Semi-structured interviews provided qualitative insights into how parental religious beliefs influenced students' academic decisions. The study revealed that parental religious background significantly affects students' value beliefs and subsequent academic choices. Students from conservative religious backgrounds displayed more traditional gender norms, resulting in lower intrinsic and attainment values for various academic fields among female students compared to their male counterparts. Conversely, students from progressive religious backgrounds exhibited more balanced value beliefs and a wider range of academic choices. Confirmatory factor analyses confirmed that the factor structure of value beliefs was consistent across genders, although significant gender differences were noted in certain value facets. Schleifer and Chaves's study highlights the role of parental religious beliefs in shaping students' value perceptions and gender-based academic choices. The findings suggest that religiously influenced value beliefs contribute to gender disparities in academic fields. The study advocates for targeted educational interventions to address these religiously influenced value beliefs and promote gender equity by challenging traditional religious stereotypes.

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extends this understanding by focusing on a different cultural and geographic context. While Schleifer and Chaves concentrated on high school students and various fields including social sciences and arts, this research aims to cover a broader spectrum of academic disciplines within a specific regional setting. This broader scope allows this study to address gaps in the literature by examining how parental religious beliefs affect gender disparities across multiple disciplines beyond the traditional focus of STEM and social sciences. By providing a culturally specific perspective, this research contributes to a more comprehensive understanding of how religious beliefs impact academic choices and helps in developing targeted interventions to promote gender equity in diverse academic fields.

Sharif, Ahmad and Sarwar (2019) investigated the role of parental religious background in shaping gender disparities in academic course selection among high school and college students. The study employed a longitudinal design, analyzing data from the General Social Survey panel to examine how religious beliefs and gender norms influenced students' academic decisions over time. The sample consisted of 2,000 students from diverse educational institutions, capturing a wide range of religious backgrounds. Data collection methods included structured questionnaires and follow-up interviews, providing comprehensive insights into the demographic characteristics, parental religious backgrounds, gender, and academic choices of the participants. The study found that parental religious background significantly affects students' academic choices, with notable differences in gender-based preferences across various fields. Students from conservative religious backgrounds were more likely to adhere to traditional gender norms, which led to distinct disparities in course selection, particularly in fields like social sciences and arts. Conversely, students from progressive religious backgrounds exhibited more balanced choices, indicating less influence from traditional gender norms. The analysis highlighted the nuanced impact of parental religious beliefs, suggesting that these beliefs shape students' perceptions of and attitudes toward different academic fields. The findings of Sharif et al. (2019) provide a valuable framework for understanding the broader sociocultural factors influencing academic choices, similar to the focus of the current study on parental sociocultural factors and gender disparity in academic discipline choice. Both studies highlight

the significant role of parental background in shaping students' academic trajectories, with a particular focus on how these influences manifest differently across genders.

Studies on parental gender and gender disparity in choice of discipline

Uzoma (2002) conducted a study to examine the factors associated with gender disparity in the choice of academic disciplines among undergraduate students in Nigerian universities, with a particular focus on the influence of parental gender. This study aimed to explore how parental gender roles and expectations impact the academic choices of male and female students and to identify strategies for achieving gender equity in this context. The research employed a descriptive survey design, with a sample of 1,200 participants (600 parents and 600 students) drawn from six federal universities across Nigeria. The study utilized a combination of simple random sampling and multi-stage random sampling procedures. Guided by five research questions and two null hypotheses, data were collected using the Gender Disparity Discipline Choice Assessment Scale (GDDCAS) to assess the causes of gender disparity in discipline choice, and the Gender Equity Strategies in Discipline Choice Scale (GESDCS) to evaluate strategies for promoting gender equity in academic discipline selection. The research questions were answered descriptively using mean and standard deviation, while the hypotheses were tested using t-tests to compare the means of the samples. The findings revealed that parental gender significantly influences the choice of discipline, with socio-cultural factors such as traditional gender roles, parental expectations, and societal norms playing a critical role in shaping the academic paths of male and female students. The study also highlighted that fears related to the impact of certain disciplines on gender roles, cultural beliefs, and concerns about marriage prospects for female students were key factors contributing to gender disparity in discipline choice. Furthermore, the study identified that achieving gender equity in discipline selection requires targeted interventions by both governmental and non-governmental organizations to challenge these entrenched gender norms. This study is related to the current research in its exploration of gender disparity in academic choices but differs in its specific focus on parental gender as a determining factor. Additionally, the design, methodology, location, and respondents of Uzoma's study vary

from those of the present study, providing a broader context for understanding the complex dynamics at play.

Salman, Yahaya, and Adewara (2011) conducted a study examining the influence of gender and spatial patterns on students' enrollment in Mathematics Education in Nigerian universities. The primary objective was to identify areas of gender disparity and spatial deficiencies in enrollment, which could then inform the development of strategies to enhance the teaching and learning of Mathematics and ultimately improve enrollment rates in Mathematics Education programs. Data for the study were collected from six universities, randomly selected from each of the six geopolitical zones of Nigeria. Both descriptive and inferential statistical methods were employed to analyze the data. The findings revealed significant gender and spatial differences in enrollment for Mathematics Education, highlighting a notable gender disparity with fewer female students enrolling in this discipline compared to their male counterparts. Additionally, the study uncovered regional variations in enrollment patterns, suggesting that certain areas of the country are more affected by these disparities than others. This study is relevant to the current research on the influence of parental gender on gender disparity in the choice of discipline among undergraduate students, as it similarly explores gender as a critical variable affecting academic choices. However, the studies differ in their specific focus, with Salman et al. examining enrollment in a particular discipline (Mathematics Education) and the influence of regional factors, while the current study is broader in scope, focusing on how parental gender influences overall discipline choice among undergraduates. Moreover, the methodology, design, location, and respondents differ, providing distinct insights into the multifaceted issue of gender disparity in Nigerian higher education.

Abdu-Raheem (2012) study investigated the influence of gender on secondary schools students' academic performance in South-West, Nigeria. The finding of 2003/2004 to 2007/2008 West African School Certificate Examinations (WASCE) were collected on English Language, Mathematics, Biology, Chemistry, Physics, Economics, Geography, Government, Yoruba, Christian Religious Studies and French from 10 Secondary Schools selected from 5 States in Nigeria. The samples consisted of 2,305

students. Stratified random sampling was used to select 2 schools from each state. Purposive sampling was used to collect the WASCE finding of students sampled. Chi-Square was used to test the 5 hypotheses raised. The findings of the study revealed that, male and female students performed equally in English language. Males performed better than females in Mathematics, Science and Social Science while females also did better than males in Arts except in Yoruba. The above study is related to the present study in terms of the variables of choice of Discipline and Gender. But differs in terms of area, methodology, research design, and location.

Kennedy (2012) conducted an empirical investigation into the enrollment patterns of Business Education students at the Federal College of Education, Okene, Kogi State. The primary aim of this study was to analyze enrollment trends in Business Education from the 2002/2003 to the 2011/2012 academic sessions. The study was guided by four research questions and two hypotheses. A case study research design was employed, and a proportionate stratified sampling technique was used to select 80 respondents from the population. Data were collected using a questionnaire titled 'Analysis of Factors Influencing Business Education Students' Enrollment Questionnaire (AFIBESEQ)'. The questionnaire was validated by experts from the University of Benin (UNIBEN) and tested for reliability using the test-retest method, yielding a coefficient of 0.79. The instrument was administered by the researcher and a research assistant. Data analysis was performed using the Statistical Packages for Social Sciences (SPSS), with Mean, Standard Deviation, and t-test statistics. One of the key findings was a significant difference between the perceptions of male and female Business Education students regarding factors influencing enrollment patterns at the Federal College of Education, Okene. This indicates a gender disparity in how various factors affect enrollment decisions. This study is pertinent to the current research on the influence of parental gender on gender disparity in discipline choice among undergraduate students, as both studies address the impact of gender on educational choices. However, Kennedy's research focuses specifically on Business Education and the factors influencing enrollment patterns, whereas the current study examines broader parental influences on gender disparity across various disciplines. The methodologies, research designs, and study locations

differ, providing distinct perspectives on gender-related educational disparities. Adeyemi (2013) conducted a study on the Social Factors Influencing Undergraduate Females to Study Mathematics and Physics. This study explored the influences of socializers (e.g., parents, teachers, peers, and counselors) on university female students' decisions to pursue careers in mathematics-related disciplines. Data were collected through interviews and focus group meetings from six female students in the second to final year from mathematics and physics departments at a mid-size university in Canada. The findings indicate that females made their decisions to pursue careers mainly out of genuine interest in mathematics and science and that influences from parents and teachers came through encouragement and support, provision of positive learning experiences, and/or by being role models. The study is related to the present ongoing study in terms of one of the variables which is social factors and also undergraduate students. But it varies in the area of methodology, population and also location.

Mohammad (2013) study was carried out to find the career choices of students at the secondary level. A sample of 200 students was drawn randomly from 12 secondary schools of district Srinagar within the age range of 16 plus. The selected sample comprised of arts and science streams. Chatterji's Non-Language Preference Record was administered to collect the data. Besides, parental education as one of the variables was also taken into consideration. Data was subjected to statistical treatment by applying percentages and 't' values. The results revealed some significant differences on the basis of gender and parental education in various career choices of the subjects under investigation. This study is related to the present study in the aspect of the dependent variables. But differs in the areas of the independent variables, design, respondents and area.

Eyo and Edet (2013) conducted a quasi-experimental study to investigate the influence of gender on the occupational preference of senior secondary school students in Cross River State, Nigeria. The sample consisted of 450 respondents, 225 males and 225 females randomly selected from 2 sampled schools, one school sample formed the experimental group and one the control group. A well constructed questionnaire was used for data collection, one null hypothesis was formulated and tested at 0.05 level of significance using the chi-square statistical test. The

finding of the study revealed that gender has a significant influence on students' occupational preferences. It also showed the traditional norms that believe gender to be a barrier to what an individual can do. This study is similar in terms of the variables but differs in design, area, and scope.

Adeyemi and Akpotu (2014) wrote on Gender analysis of student enrolment in Nigerian universities. The paper analysed the trend and pattern of gender enrolment in Nigerian Universities between 1989 and 1997. It critically examined the gender disparity in university enrolment generally, as well as among some selected disciplines and the country's geo-political zones. The analysis revealed that a gap existed between females and males in university enrolment with lower female enrolment in all aspects of the Universities. Specifically, there was a wide gap in the sciences and science-based disciplines and also between the Northern and Southern zones with higher female enrolment in the south than the north. Both studies are similar in terms of the variable enrolment pattern but differ in the aspects of methodology, design, location, and respondents.

Otieno and Ndayambaje (2015) study determined the extent to which gender and area of specialization are related to students' enrolment in undergraduate degree programmes by the platform in Public Universities in Kenya. The researchers considered the cases of Moi University, Kenyatta University, and Nairobi University. The study used secondary data collected from the registration offices of the respective universities for the academic years 2003/2004 and 2004/2005. These data were presented in the form of text and tables. The analysis undertook majorly the quantitative pathway using percentages and Chi-Square. The overall findings have shown a discrepancy in students' enrolment per gender and area of specialization and hence lead to the rejection of the stipulated null hypotheses. Both studies are similar in the variable gender but are different in the areas of methodology, design and also location.

Collins (2016) explored the relationship between gender stereotyping and the enrollment pattern of students at F.C.E., Kano. The study aimed to assess how gender stereotyping affects students' decisions about their academic disciplines. The sample included 364 N.C.E. students, with 234 males and

132 females, drawn from five different schools within the college. Data were collected using documented enrollment records and a questionnaire titled "Students' Stereotypical Attitudinal Scale." The study addressed three research questions and tested three null hypotheses using tables, percentages, chi-square, and t-tests for analysis. The findings indicated a significant gender disparity favoring males in both school and course enrollment. It also revealed that students' gender stereotyping influenced their choice of academic disciplines. Although this study shares some variables with the present research, it differs in its focus, design, and location. The current study specifically examines the influence of parental gender on academic discipline choices among undergraduates in North Western Nigeria.

Novrina (2016) study aimed to determine the effects of gender stereotyping on the career choices of the students of Ramon Magsaysay Technological University for the School Year 2012 -2013. The researchers established the following working hypotheses; (1) gender stereotyping has no significant effect in the career choices of students; and (2) there is no significant difference in the perception of respondents towards the effects of gender stereotyping on the career choices of students when grouped according to sex variables. This study made use of the descriptive type of research. This is used to determine the effects of gender stereotyping in the career choices of students at Ramon Magsaysay Technological University. The researchers made use of frequency, percentage, weighted arithmetic mean, and t-test as statistical tools in interpreting the data collected. The ten (10) indicators resulted in a weighted mean equivalent to 3.66 qualitatively interpreted as Agree which implies that respondents perceived essential factors such as skills, interests, abilities, aptitudes, family income, and job placement instead of peer influence, parents' choice, and gender stereotyping. The reviewed study is similar in the aspects of the variables but varies in the aspects of design, methodology, location, and respondents.

Jawaher (2016) study explores women's views and attitudes towards traditionally masculine subjects in higher education in a Saudi Arabian context. It investigates the factors that influence women's subject choices. It also addresses the implications of limited subject choices in women's experiences in higher education. The study adopted an inquiry

approach to understand women's experiences with their educational choices. The study was conducted at two universities located in two major cities in Saudi Arabia. The data in this study were collected through interviews with women. Snowball sampling was used to recruit 100 female students and lecturers. The findings of this study demonstrate how the internalization of gender norms and gender stereotypes shapes women's views and attitudes towards these subjects. It also shows how patriarchal structures influence women's subject choices and how such influences vary depending on the father. Women who come from traditional families are more likely to accommodate the patriarchal influences, whilst those who come from non-traditional families are more likely to bargain or negotiate with the patriarchal system. This study reveals how fathers' influences on women's education differ according to their attitudes towards Ikhtilat. The study addresses the sensitivity of the Ikhtilat issue in the Saudi context and how the prohibition of Ikhtilat has shaped women's experiences in Saudi higher education. It shows how women exercise their agency through bargaining, resisting, and negotiating with the patriarchal system. Furthermore, it identifies factors that influence women's subject choices and how these factors differ among women. The study is similar but differs in the design and area.

Ushie and Edinyang (2018) study examined gender inequality among Social Studies students in Cross River State College of Education, Akamkpa. To achieve the purpose of this research work, one objective and one research question were raised and one hypothesis was formulated to guide the study. Literature was reviewed based on the purpose of the study. The study employed ex post facto research design. The population of the study comprised thousand, six hundred twenty (1,620) second-year Social Studies students' 2016/2017 academic session in Cross River State College of Education, Akamkpa. An accidental sampling technique was used in selecting two hundred (200) students as a sample. The collected data was analyzed using an independent t-test. The result revealed a significant difference between male and female students of Social Studies admitted to Cross River State College of Education, Akamkpa. The study recommended that the government should make a policy to encourage female students to have access to education to bridge the gap of gender inequality among students in tertiary institutions.

Chaudhry and Rahman (2019) investigated the impact of gender inequality in education on rural poverty in Pakistan using Logit regression analysis on primary data sets. It is concluded that gender inequality in education harms rural poverty. The empirical findings suggest that the female-male enrolment ratio, female-male literacy ratio, Female-male ratio of total years of schooling, female-male ratio of earners, and education of household heads have a significant negative impact on rural poverty. The findings indicate that household size and female-male ratio (members) have a strong positive association with the probability of poverty. The inverse relation between variables of gender inequality in education and rural poverty suggests that education provides more employment opportunities and rejects poverty in developing countries like Pakistan. Both studies are related in terms of one of the variables which is gender inequality. However, they differ in terms of methodology, research design, and also area of study.

Mwaura (2020) examined the impact of gender on career aspirations among secondary school students, utilizing Self-Determination Theory and Social Cognitive Theory as the theoretical framework. Conducted in Nairobi County, Kenya, the study focused on 397 Form Four students who were registered to sit for the KCSE exam in 2017 at public secondary schools. Data were collected using piloted questionnaires that assessed career aspirations. The study employed a correlational research design, with data analyzed using the Statistical Package for Social Sciences (SPSS) for both inferential and descriptive statistics. Analysis was conducted qualitatively and quantitatively, guided by the study's objectives, with Chi-Square tests performed at a 0.05 significance level. The findings revealed a significant gender difference in career aspirations ($X^2 = 9.31$, $df = 2$, $P = 0.019$, $P < 0.05$), indicating that gender significantly influences students' career goals. The study highlighted the need for educational stakeholders to create environments that mitigate gender gaps and stereotypes in career choices and suggested promoting flexibility in career aspirations. Further research was recommended to explore additional determinants such as cognitive factors, social structures, and parental and teacher characteristics. While this study shares similarities with the current research in terms of examining gender-related variables, it differs in methodology, respondent group, and geographical location, as the

present study focuses on the influence of parental gender on the choice of discipline among undergraduates in North Western Nigeria.

Jude (2020) study investigated the influence of gender, location and parental factors on career choice of senior secondary school students in Delta and Edo States. Four research questions and four hypotheses guided the study. The study adopted an ex-post facto research design. A total of 1,200 students participated in the study. Multi-stage sampling procedure was used to draw the sample from the two states. A self-developed instrument was used for data collection. The instrument had a test-retest reliability coefficient of 0.64. The data obtained were analysed using chi-square (χ^2) statistics at 0.05 alpha level. The findings revealed that there was a significant relationship between gender and career choice; and between the socio-economic status of parents and the career choice of senior secondary school students. The study, however, showed that there was no significant relationship between parental education and career choice; and between location of schools and career choice of senior secondary school students. It is similar in the aspect of the instrument and some variables. But differs in the aspects of area and respondent.

Saleh (2021) study examined the impact of gender stereotypes and factors related to family background, university criteria, and the main factors influencing students' academic choices at the University of Debrecen. The research question was: what is the impact of gender stereotypes and demographic factors on students' academic choices? The research relied on a qualitative approach. 12 qualitative interviews were conducted with international students at undergraduate and postgraduate level. The research used semi-structured interviews with five main blocks of questions. The dimensions explored included the following: 1. introduction and context of the interviewee, 2. gender stereotypes, 3. family background, 4. university characteristics, 5. factors motivating academic selection. After data collection, the transcripts were analysed using an open coding method, which involved line-by-line and word-by-word analysis. This helped to identify the most important factors influencing students' academic choices. The socio-educational role of the family, the scholarship Stendium Hungaricum, the facilities and services of the university, the geopolitical academic location, the UNIDEB ranking, the quality

of life and study, the scholarships, the realistic, materialistic goals of future life, and the impact of gender stereotypes expressed by the students (as a product of society, choice and belief, the liberal generation) influenced the academic choice of the international students at the University of Debrecen. The reviewed study is similar to the present in the areas of the variables but varies in the aspects of methodology, respondents and area.

Akinlolu (2022) examined the role of gender stereotypes as a predictor of career choices of students in construction. A survey of 229 conveniently sampled students, enrolled in construction-related programmes was conducted. The objectives of the study are to measure the relationship between gender stereotypes and career choice behaviour, and to measure the effect of gender and socio-economic status on how gender stereotypes influence student's career choices. The Mann-Whitney U and Kruskal-Wallis test were used to test for significant differences between gender and socio-economic status (SES) groups. Akinlolu (2022) Results show that, as opposed to men, women seem to perceive gender stereotypes as having more influence on their career choices than men. The study finds statistically significant differences in gender stereotypes among the low and medium socio-economic groups. This study is similar but differs in the aspects of design, methodology, and area.

Angwaomaodoko (2023) studied the Influence of Gender on Career Choice in Academics. The study aims to examine how gender affects students' academic achievement and career targets or choices in Nigerian colleges. The sample of this study consisted of 261 final-year students in various universities across Nigeria. Data was collected using questionnaires featuring questions on academic accomplishments and other pertinent information. The results of the study indicated that male students had a slightly higher overall CGPA score compared to female students; and as regards career aspirations, more female students were inclined to study art and management-related courses while more males were found in engineering and technology-based courses. The research found that gender difference does not significantly affect students' academic success in Nigerian colleges. Instead, the research discovered that students' perceptions of gender had a substantial influence on their career aspirations. The study recommends that promoting freedom in choosing

careers is likely to steer students toward other professions that are completely at odds with their gender preferences. The study is similar to some variables but varies in methodology and area.

IV. 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.

V. RESULTS

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

Research Question 3: What is the influence of religious belief on gender disparity in choice of discipline among undergraduate students in universities?

Table 5: mean and standard deviation scores of the influence of religious belief on gender disparity in choice of discipline.

	N	\bar{X}	Std. Deviation
Christianity	139	22.96	4.21

Islam	243	23.28	4.04
Traditional	11	22.82	3.46
Others	3	26.33	4.04
Total	396	23.18	4.08

Data on table 5 revealed that parents who practice other religions have mean and standard deviation scores of 26.33 and 4.04, those who practice Islam have mean and standard deviation scores of 23.28 and 4.04 while those parents who are Christians have mean and standard deviation scores of 22.96 and 4.21 and the least are parents who practice traditional religion that have mean and standard deviation scores

of 22.82 and 3.46 respectively. This shows that parents who practice other religions influenced gender disparity more, followed by those parents who practice Islam, those parents who are Christians and the least are parents who practice traditional religion. See figure 4 below for graphical interaction of the parental religious belief on gender disparity in choice of discipline in universities

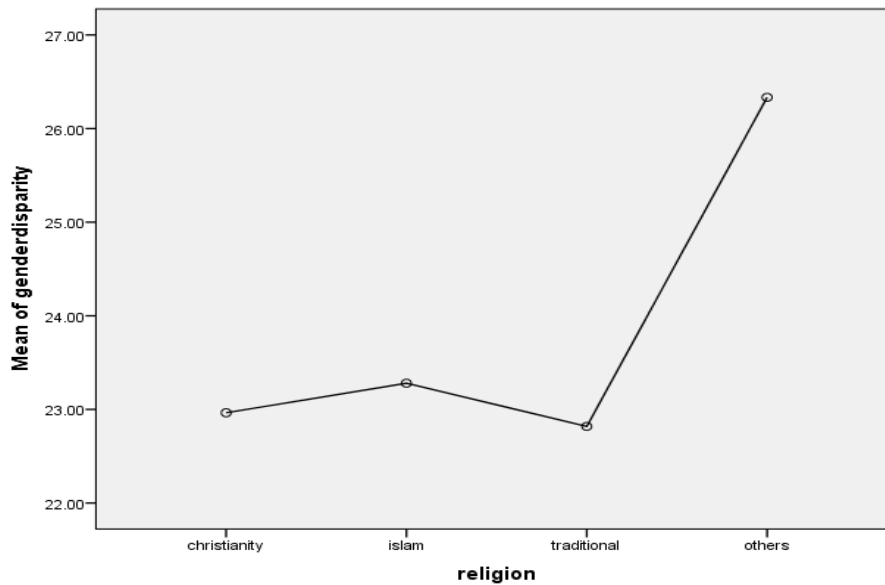


Figure 4: graphical representation of the influence of parental religious belief on gender disparity in choice of Discipline.

The graph shows that parents who practice other religions influenced gender disparity more followed by those parents who practice Islam, those parents who are Christians and the least are parents who practice traditional religion.

Hypothesis 3: Religious belief does not significantly influence gender disparity in choice of discipline in universities.

Table 6: One Way Analysis (ANOVA) of the influence of religious belief on gender disparity in choice of discipline.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	40.176	3	13.392	.802	.493
Within Groups	6548.094	392	16.704		
Total	6588.270	395			

Data on Table 4 reveals that ANOVA value is $F(2,391) = .802, p(.493) > .05$. The result shows that the hypothesis is failed to be rejected because the significant value of .493 is greater than the alpha value of 0.05. Therefore, parental religious belief

does not significantly influence gender disparity in choice of discipline in universities.

Research Question 4: What is the influence of Parental Gender on gender disparity in choice of discipline in universities?

Table 7: Mean and standard deviation scores of the influence of parental gender on gender disparity in choice of discipline.

Gender	N	\bar{X}	Std. Deviation
Male	216	23.43	3.68
Female	180	22.88	4.52

Data on Table 7 shows that male parents have mean and standard deviation scores of 23.43 and 3.68 while their female counterparts have mean and standard deviation scores of 22.88 and 4.52 respectively. The result shows that parents gender influenced gender

disparity in choice of discipline in universities lightly in favour of the male parents than the female parents.

Hypothesis 4: Parental gender does not significantly influence gender disparity in choice of discipline in universities.

Table 8: T-test analysis of the influence of gender on gender disparity in choice of discipline

Gender	N	Mean	Std. Deviation	Df	T	Sig	Decision
Male	216	23.43	3.68	394	1.32	.19	Not significant
Female	180	22.88	4.52				

The data in Table 8 indicate a t-calculated value of 1.32 with a degree of freedom of 394. The hypothesis was not rejected because the significance value of 0.19 exceeds the alpha level of 0.05. This result suggests that parental gender does not have a significant influence on gender disparity in the choice of discipline in universities.

VI. SUMMARY OF THE FINDINGS

1. Parents who practice other religions influenced gender disparity more, followed by those parents who practice Islam, than those parents who are Christians and the least are parents who practice traditional religion. The hypothesis showed that parental religious belief does not significantly influence gender disparity in the choice of discipline among undergraduate students in universities
2. The result shows that parents' gender influenced gender disparity in the choice of discipline in universities lightly in favour of male parents than female parents. The hypothesis showed that parental gender does not significantly influence gender disparity in the choice of discipline in universities.

VII. DISCUSSION OF FINDINGS

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

1. Religious belief and gender disparity in choice of discipline in universities
2. Parental gender and gender disparity in choice of discipline in universities

Parental Religious Belief and Gender Disparity in the Choice of Discipline in Universities

The findings from this study revealed that parents who practice religions other than Islam, Christianity, or traditional beliefs had the most significant influence on gender disparity in the choice of disciplines at universities. This was followed by parents practicing Islam, those practicing Christianity, and, lastly, parents adhering to traditional religions. Despite this observed influence, the hypothesis testing indicated that parental religious beliefs do not significantly influence gender disparity in the choice of academic disciplines at the university level. These findings stand in contrast to those reported by other researchers. For instance, Sax et al. (2017) found that parental religious background significantly affects students' course selections, contributing to gender disparities in academic choices. Their study highlighted that students from more conservative religious backgrounds often face

stronger gender-based expectations, which lead to traditional gendered academic choices. For example, female students from these backgrounds were more likely to be discouraged from pursuing certain fields, while male students were often steered towards them. This contrasts with the findings of the present study, where no significant influence of parental religious beliefs on gender disparity was observed, suggesting that in the context of Nigerian universities, other factors may outweigh religious beliefs in shaping academic choices. Similarly, Gaspard (2015) reported significant gender disparities influenced by parental religious background, particularly in STEM fields. The study found that students from conservative religious backgrounds were more likely to adhere to traditional gender roles, with female students being less inclined towards STEM fields compared to their male counterparts. Conversely, students from progressive religious backgrounds showed more balanced gender representation in their academic choices. This finding, which underscores the role of religious beliefs in reinforcing or challenging gender norms, differs from the current study, which found no significant impact of religious beliefs on gender disparities in discipline choice. This discrepancy suggests that the influence of religion on academic choices may vary depending on the cultural and societal context, with Nigerian students possibly experiencing different dynamics in their decision-making processes.

Schleifer and Chaves (2017) also emphasized the role of parental religious background in shaping students' value beliefs and academic choices. Their study showed that students from conservative religious backgrounds displayed more traditional gender norms, leading to lower intrinsic and attainment values for various academic fields among female students compared to their male counterparts. This influence of religious beliefs on value perceptions and subsequent academic choices was found to contribute significantly to gender disparities. However, the current study did not find a significant relationship between parental religious beliefs and gender disparity in academic discipline choices, indicating that in the Nigerian context, religious influence may be less pronounced or overshadowed by other sociocultural factors.

While previous studies consistently highlight the significant impact of parental religious beliefs on gender disparities in academic choices, the present

study suggests that this influence may not be as significant in the context of Nigerian universities. The findings imply that other factors, such as economic conditions, societal expectations, and possibly cultural influences, may play a more dominant role in shaping gender disparities in academic discipline choices in Nigeria. This suggests the need for further research to explore these additional factors and their interplay with parental religious beliefs in different cultural contexts.

Parental Gender and Gender Disparity in the Choice of Discipline in Universities

The result shows that parents' gender influenced gender disparity in choice of discipline in universities lightly in favour of the male parents than the female parents. However, the hypothesis showed that parental gender does not significantly influence gender disparity in the choice of discipline in universities. The findings of this study are similar to Collins, (2016) findings which revealed that male parents tend to influence gender disparity in the choice of discipline. Eyo and Edet's (2013) findings revealed that gender has a significant influence on students' occupational preferences. It also showed the traditional norms that believe gender to be a barrier to what an individual can do.

However, the findings of Akinlolu (2022) showed that, as opposed to men, women seem to perceive gender stereotypes as having more influence on their career choices than men. Both parents either male or female tend to show less concern about giving the child irrespective of his /her gender the chance to choose a discipline. This might be attributed to how parents of today tend to pamper their wards too much unlike parents of those days. But some children tend to follow in the footsteps of their parents. Meaning that if a father is on a given career the male child tends to follow his path. Likewise, the girl also follows the path of her mother. However, in most circumstances now children tend to move away from the choice of their parents.

VIII. CONCLUSION

From the findings of the study, it can be deduced that parental socio-cultural factors like parental religious belief, and parental gender 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 religious beliefs, and gender, do 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. Parents should avoid displaying indifferent attitudes toward their children's academic decisions, focusing instead on supporting their interests and intellectual strengths regardless of gender.

IX. 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.

X. 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.

XI. 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, four research questions were used and four 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 were tested using ANOVA (regression output) at a 0.05 level of significance. Hypothesis 2 was tested using t-test. 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; religious beliefs do not influence gender disparity in choice of discipline in universities; Parental gender does not influence gender disparity in choice of discipline in universities. Also, the results of the four 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, there are no significant differences between religious belief and gender disparity in choice of discipline among undergraduates in universities, there is no significant difference between parental gender 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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