Impact of Sexual Harassment on Women Undergraduates' Educational Experience in Anambra State of Nigeria

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ABSTRACT

Impact of Sexual Harassment on Women Undergraduates' Educational Experience in Anambra State of Nigeria

Sexual harassment in educational settings is a common problem globally. While it is well addressed in college and university campuses in most developed countries of the world through specific policies and mechanisms of enforcement, it remains a taboo topic in African colleges and universities particularly in Nigeria. This study investigated the impact of sexual harassment on women undergraduates in public and private institutions of higher learning in one region of the West African nation of Nigeria, Anambra State. Its purpose was to identify the extent of harassment and to gauge its impact on the academic experience of women undergraduates, especially in terms of the impact of academic field differences.

Astin’s theory of students’ involvement and Douglas and Wildavsky’s Cultural Theory of Risk provided the framework for this study. Astin defined involvement as the amount of physical and psychological energy students devote to their academic experience. The basic element of Astin’s theory is that the more students are involved in their educational formation the more they learn. Astin identified four basic characteristics associated with involvement: (a) physical and psychological energy must be invested in people, tasks, or activities; (b) levels of involvement occur along a continuum, varying in intensity for each student, and differing between students; (c) involvement has both qualitative and quantitative characteristics; (d) the amount of learning and development associated with any education program is directly proportional to the quality and quantity of student involvement in that program.

Douglas argued that individuals associate societal harms with conduct that transgresses societal norms. This tendency, she maintained, plays an indispensable role in promoting certain social structures, by influencing members to developing the tendency to avoid subversive
behaviors and by focusing resentment and blame on those who defy such institutions. Douglas maintained that cultural ways of life and its related prospects can be depicted along two dimensions called group and grid. She postulated that a high group way of life exhibits a high degree of collective control and a low group way of life shows a much lower degree of collective control and a resulting emphasis on individual self-sufficiency. Also, a high grid way of life is characterized by obvious and lasting forms of stratification in roles and authority, whereas a low grid way of life is indicated by a more egalitarian structuring.

The sample for this study was selected from the population of 760 women undergraduates in the fields of science and technology and 2140 women undergraduates in other academic fields that currently enrolled in the 2009-2010 academic year at Nnamdi Azikiwe University, Madonna University, Anambra State University, and Anambra State Polytechnic. The lists of women undergraduates enrolled in the 2009-2010 academic year were accessible through the Head of Departments (HOD) in the sampled institutions.

The study sought to test the following research questions:

1. Are Academic Field; Organizational Variables (Faculty Gender and Student Gender Ratios); Individual Variables (Age and GPA), Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes associated with the Perceived Sexual Harassment experienced by women undergraduates in Anambra State colleges and universities?

2. Are Academic Field, Organizational Variables (Faculty Gender and Student Gender Ratios), Individual Variables (Age and GPA), Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment associated
with the Adjustment to Behavioral Exposure of women undergraduates to potential
sexual harassment in Anambra State colleges and universities?

Sexual Harassment on Campus Survey (SHCS) tool created purposefully for this study
was used to generate the data for the study. The survey questions addressed the four principal
constructs for the study: Behavioral Exposure Index, Culturally-Embedded Gender Stereotypes,
Perceived Sexual Harassment, and Adjustment to the Behavioral Exposure. With SHCS the
study examined how academic field impacted the sexual harassment experienced by women
undergraduates in Anambra States colleges and universities. Due to the cultural beliefs of the
Igbos of Anambra State (which is the setting for the study) that genderized academic fields the
study compared the harassment experiences of women participants in the traditional female
academic fields with those in the traditional male academic fields. The study argued that (1)
academic field; organizational variables (faculty gender and student sender ratios); individual
variables (age and GPA), behavioral exposure index, and culturally-embedded gender
stereotypes are not associated with the perceived sexual harassment experienced by women
undergraduates in Anambra State colleges and universities. Secondly, the study also proposed
that academic field, organizational variables (faculty gender and student gender ratios),
individual variables (age and GPA), culturally-embedded gender stereotypes, behavioral
exposure index, and perceived sexual harassment are not associated with the adjustment to the
behavioral exposure of women undergraduates to the potential sexual harassment in Anambra
State colleges and universities.

Descriptive statistics was conducted on the demographic profile of the research
participants and on each question of the survey variables. Frequency and percentage
measurements were used to explore patterns in the responses to the survey questions. The
Cronbach’s alpha coefficients were used to determine the quality of the survey subscales. Finally, a hierarchical linear regression was used to test the predictive power of the independent variables on the Perceived Sexual Harassment and the Adjustment to the Behavioral Exposure of women undergraduates to the potential harassment behavior of the male faculty and students. Three successive models were tested to determine the best combination of predictor variables for Perceived Sexual Harassment and Adjustment to the Behavioral Exposure scores.

The findings indicated that women undergraduate participants in the traditionally male academic fields experienced behaviors that could be interpreted as harassment “often or very often” while participants in the traditionally female academic fields experienced behaviors that are consistent with harassment mostly “sometimes”. The findings indicated that more than 1 out of 4 (23%) of the participants in the traditionally male fields and 1 out of 7 (14.8%) of the participants in the traditionally female fields have heard inappropriate jokes in front of them often or very often. Also, higher percentages of participants in the male academic fields indicated of hearing inappropriate comments and negative things about their gender, experiencing inappropriate gestures directed to them, heard untrue rumors about them, were spoken to angrily by instructor and peers, spoken about negatively behind back and intentionally excluded from activities. Participants in the traditionally female academic fields are more likely to stand neutral, indicating probably that the participants were afraid of future attacks or punishments. Among all other female dominated fields, participants in the field of Arts are more likely to report themselves as being harassed. Overall, the finding indicated that the likelihood that women undergraduates will report having experienced sexual harassment was determined by the (a) actual exposure to potentially harassing behaviors by faculty and students; (b) their academic performance (GPA) and cultural gender stereotypes held by women undergraduates than age and
institutional characteristics such as academic fields, faculty and student gender ratios. These variables accounted for half of the variance in Perceived Sexual Harassment. On the variable Adjustment to the Behavioral Exposure the hierarchical linear regression was significant at the .05 level, $F(8, 124) = 2.21, p = .03$, and predicted 12.5% of the variance in Adjustment to the Behavioral Exposure. The findings showed that behavioral adjustment to the environmental condition was not well predicted and if perceived harassment was quite predictable, how individuals respond as regards to adjustment of behaviors seems to be less predictable.
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This dissertation marks the beginning of my major educational journey. Like all other journeys, my educational journey would not have been possible without the help, direction, guidance, and support of our great God Jesus Christ, Mother Mary, and some very important people in my life. By God’s grace, Mary’s maternal help, and through all these special people I was equipped with the encouragement, determination, motivation, and confidence necessary in this milestone achievement in my life. I am profoundly grateful for their assistance and I hope someday to give others the same level of support, direction, guidance, encouragement, and motivation that was accorded to me by God, Mother Mary, my mentors, educators, colleagues, friends, and family.

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Most importantly, I could not have achieved this academic milestone without the constant and unending love, care, understanding, support, and prayers of my blood and religious family. Through their continued encouragement and confidence, I was able to endure all the challenges and complete this academic journey. I thank God for giving me wonderful and God-fearing parents, late Mr. Isaiah Okeke and Mrs. Lucy Okeke who taught me that life without God is empty. I profoundly appreciate the love and support I received from my brothers: Late Mr. Francis, Donatus, Ernest, and Chukwuma Okeke. I am equally grateful to my beautiful sisters: Rose, Chinwe, and Chiaka, my nieces and nephews, grandnieces, grandnephews, and cousins. A heartfelt gratitude and appreciation to my brothers and sisters in-law: Mr. Gilbert Ezeikwu and Engr. Emeka Atuegwu, Mrs. Patricia, Chinazu, and Amaka Okeke who helped me tremendously during these years of hard work. I love you all.

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DEDICATION

This dissertation is dedicated to our Eucharistic Jesus and Mary, Mother of Mercy who loved me unconditionally, gave me strength and health to pursue my doctoral education. I also dedicate this dissertation to my late father Mr. Isaiah Okeke and to my mother Mrs. Lucy Okeke, who inculcated in me the importance of education, self-discipline and self-sacrifice, the concept of excellence, the value of hard work, respect for self and others, and the need to be generous in every events of my life. Their unyielding love, encouragement, care and confidence in me, and their enduring determination to see me succeed, formed the basis for my educational aspiration, journey and achievement. It was my parents' support and personal sacrifices assisted by moral and ethical standards that were part of their daily lives, that shaped and defined my life and I will always appreciate it. Although my father did not live to witness my academic accomplishment, I am sure he is rejoicing with me in heaven. To you Mom and Dad, I say, Thank You. I Love You and May God reward you abundantly!

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I am hoping that my academic success will motivate and challenge many people young and old who have the desire to pursue their educational dreams. I am also trusting that through my accomplishment many researchers would be courageous enough to embark in studying issues that concern women especially in the continent of Africa. It is a corporal work of mercy to fight for
those who are marginalized in our society. God is counting on people like us to use our God-given talents and resources to fight crime and corruption in our world so as to make it a safe place for all.
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Chapter I

BACKGROUND OF THE STUDY

Nigeria, one of the countries in the sub-Saharan Africa, was built on the strength of patriarchy. As a patriarchal society Nigerians valued males more than females. Traditional Nigerian society believed males are superior to females and so females are subordinate to males. In some tribes, such as the Igbos of Anambra State, the position of a male child supersedes that of his mother. In fact, gender inequality permeates all aspects of women's existence in Nigeria. Although the Nigerian constitution guarantees women's basic rights, these rights are not granted due to cultural, religious, or economic pressures.

Tradition ascribes roles for each gender to play in the traditional Nigerian society. Though women play multiple roles their only recognized roles were wife and mother. Western education was never a prerequisite for these ascribed roles nor was it a requirement to excel at them. Consequently, in the beginning of western education in Nigeria women and girls were not represented. It was in the early 1900s that women were allowed, for the first time, to participate in western education. The significant impact of women's late involvement in western education in Nigeria is their absence in the nation's social, political and economic development. This disempowerment has persisted and has had very negative consequences for the success of Nigerian women (Allele-Williams, 1991).

The 1967 Nigeria-Biafra civil war brought a traumatic change in the nation's economic and social wellbeing. This down turn initiated a paradigm shift in the definition of female gender roles and expectations among Nigeria's public. As husbands could no longer shoulder the financial need of the family alone wives automatically became co-breadwinners of the family. Knowledge of western education, assisted by income generating capacity, was then considered
necessary in empowering women to participate actively in the improvement of the family as well as the country’s financial conditions. In other words, by participating in western education, women would be able to assist their husbands in the financial upkeep of the family as well as contribute actively in the financial development of the country. In the late 1970s women were gradually introduced to higher education with a primary focus on domesticity. Women’s participation in the country’s higher education was not successful as many women were naïve about what western education offered to their family’s financial situation. It was in the early part of 1980s that Nigeria experienced an influx of women into higher education and this time, women went beyond the social norm of domesticity.

Although the concept of domesticity still influenced women education in the country (Allele-Williams, 1989) adherence to this concept depends mostly on ethnicity. In Anambra State for instance, which is the focus of this study, the concept of domesticity permeates every aspect of women’s lives. Anambra State is inhabited by the Igbos. Igbos believed that tradition is sacred and infallible. The doctrine of infallibility of the tradition awards it the title of a “Guide”. As a guide, tradition is not to be tampered with, violated, or overlooked. It has to be listened to, believed in, and its instructions must be strictly followed by the people. Igbo tradition designed separate ways of living for men and women in the society. Men are freeborn and as such they are independent beings. They are the custodians of the tradition and they, in the name of tradition, dictate to women how to live their life. On the other hand, women are aliens in Igbo land. They have limited rights and opportunities. They are mandated to walk on the stereotypical lines mapped out for them by tradition. According to Igbo tradition it is a taboo for married women to interfere in the areas traditionally reserved for men such as decision making on matters of importance, such as on education of children, family planning, and selection of careers.
for children. In the traditional Igbo culture violation of the sacred command of the tradition calls for severe punishment which may include banishment from the village or death, depending on the severity of the offense.

According to the Igbo culture of Anambra State careers are gender-determined. As tradition prescribes what should or should not be done by a specific gender, tradition also stratified careers based on its preconceived benefits to a particular gender. With the exception of nursing, careers in science and technology are exclusively reserved for men while careers in the field of education are for women. The caring characteristic of nursing separated it from other sciences and made it a woman’s career. Engineering for example, is strictly a male field in Anambra State. Unlike other ethnic groups in Nigeria where tradition is lenient, it is a cultural revolution for Igbo women to dare enter academic areas reserved for men. Allele-Williams (1991) and Ezumah (2008) indicated that women who defy the traditional career mandate by competing with men in the exclusively reserved fields are regarded as outliers and their action is an “insult to manhood or a taboo”. In this research I argue that sexual harassment against women in science and technology fields in Anambra State higher education institutions is a spillover from the state’s culture of inequality that undervalues the female gender. This study sets out to investigate the impact of academic field in the perceived sexual harassment experienced by women undergraduates in Anambra State’s colleges and universities.

Statement of the Problem

As women all over the world, and especially in the continent of Africa, gravitate to academic fields that are traditionally male-dominated, such as science and technology, they encounter multiple challenges that limit their opportunity to succeed in their chosen academic fields. Different landmark studies have indentified some of the challenges women in science and
technology especially those in African higher education institutions encounter in the course of their education. These include discriminatory and stereotypical attitudes of male faculty and students (Allele-Williams, 1991; Onokala & Onwurah, 2001); parents’ negative enforcement and social norms (Allele-Williams, 1991; Onokala, 2001); gender insensitive curriculum and instruction (Elegbeleye, 2006; UNESCO, 2006) and sexual harassment (Adedokun, 2004; Kalof, 2001; Leonard et al., 1989; Ladebo, 2003).

Sexual harassment has posed a tremendous challenge to African women both in the workplace and educational setting, and this problem has affected their effectiveness in their various academic fields. Literature reports that sexual harassment has impacted women’s self-esteem as well as their academic, social, and psychological wellbeing (Ladebo, 2003; Mashingaidze 2006; Popovich, 1988). The awareness of the impact of sexual harassment on women’s existence has led to multiple approaches in the definition of sexual harassment across culture, ethnicity, race, and settings.

Sexual harassment has been a challenge in all levels of education and across all academic fields in Africa. Rossetti (2001) indicated that in Botswana 68% of the sexual harassment experienced by girls in the secondary schools happened in their junior year, 18% in senior years and 14% in primary schools years. Leach, Machakanja, and Mandopa (2000) found that in a co-education school in Zimbabwe 47% of girls experienced sexual harassment from male teachers and students. Daily Champion (2007) reported that 5.7% of girls in Nigerian primary schools and 20% of girls in secondary schools have experienced sexual harassment. Leach et al. (2003) also found that 27% of girls in junior secondary schools in Ghana have experienced forced sex and over 50% have also been sexually harassed. Human Rights Watch Report (2001) also states that thousands of girls in schools across South Africa encounter sexual violence and harassment.
Across Africa as well, teachers have been accused of making sexual demands in exchange for good grades (Human Rights Watch Report, 2001; Nwaogwugwu, 2007).

Research studies on different institutions of higher learning in many African countries have revealed the trends and nature of sexual harassment experienced by women students. These include degrading verbal remarks, unwanted touching, and other types of gender-based violence (Adedokun, 2004; Abati, 2006; Ejiogu & Onyene, 2006). High proportions of female students in colleges and universities across the continent of Africa have experienced sexual harassment from male faculty, staff, and students. Banyu (2003) found that 37.7% of women students in a university in Tanzania have been sexually harassed by male faculty members. Haruhanga (2006) reported that 42% of women in Makerere University in Uganda have been sexually harassed by male faculty and peers. Human Rights Watch (2001) also indicated that one in four female students at the University of Natal (Durban, South Africa) have experienced sexual harassment from male faculty and peers.

The problem of sexual harassment in the continent of Africa has received cold reactions from government and school authorities. Human Rights Watch (2001) reported that the government and school authorities in South Africa were found to be silent about the sexual harassment experienced by female students in the country. As a result of this neglect from the government and school officials, many female students have quit schooling and many did not return to school due in part to fear of being harassed again or violated. Other countries on the continent have acted in the same manner such as Nigeria, Uganda, and Zimbabwe (CEDAW, 2008; Houreld, 2007; Human Rights Watch, 2001; Nwaogwugwu, 2007). Studies found that educational institutions in the continent have no policy initiatives on sexual harassment (Amnesty International Report, 2005; Daily Champion, 2007; Ladebo, 2003).
Women students in Nigeria colleges and universities have unique experiences of sexual harassment from male faculty, staff, and peers. Though sexual harassment is a global concept that affects virtually women of all races, ages, and colors Nigerian women experience more elusive types of harassment. In other countries or cultures, sexual harassment is a behavior that is generally unacceptable in any public setting. Nigerian society does not accept the concept of harassment and so does not perceive harassment as evil or a violation of women’s right. In Anambra State for instance, sexual harassment was indirectly legitimized by teaching and non-teaching staff. Nwaogwugwu (2007) described a practice in Anambra State colleges and universities popularly called “sorting” where students (males and females) pay their way through examinations either with cash, gifts, or sexual gratifications. In this practice, male students were asked to pay money but sexual gratification was the top expectation for women students. These faculty and staff proudly call this practice “inconvenience allowance”. As a result, students fondly divide faculty into “sortable” (those who make demands for gratification) and “unsortable” (those who do not). Consequently, women students in Nigeria colleges and universities are raising concerns over the alarming incidents of sexual harassment on campus by male faculty, staff, and students. Houreld (2006) found that 80% of women in Nigerian higher education institutions reported sexual harassment as their greatest challenge in the successful completion of their academic goals. Adedokun (2004) and Ejiogu and Onyene (2006) found that about 86% of male faculty and staff in the sampled universities in Nigeria have sexually harassed female students at one point in their teaching career. Is sorting approved practice by Anambra State higher education system? If not, how does this practice originate? How was it perceived and addressed by university administrations? What impact had sorting on students’ academic and
social integration and achievement? Precisely, what effect had sorting on women students’ participation, persistence, and successful completion of their academic goals? The purpose of this study is to investigate how women undergraduates’ educational experience has been impeded by the behaviors of the male faculty, staff, and students.

Like other African countries, Nigeria has high male to female ratios among the faculty, staff and students of its colleges and universities (Allele-Williams, 1993; Lund, 1998; Mulugeta, 2007; Rathgeber, 2002). The impact of academic field is, in part, a function of different cultures and gender proportions in different academic fields. Allele-Williams (1993) found that at the University of Benin with 1,228 members of Senior Staff, all 59 full professors were male and among the 35 associate professors 31 were males and only 4 were female. Also, students’ enrollment has the same gender imbalance problem across fields and states but some states and fields have more severe problem than others. In Anambra State for instance, where tradition constrained women from participating in science and technology careers. Omokala and Onwurah (2001) found low female enrollments in all science and technology fields especially in hard sciences such as Metallurgy (9.6%); Civil Engineering Technology (5.4%); Mechanic Engineering Technology (5%), and Physics (7.4%) which are culturally perceived domains for men. Comparing this data with another state in southern Nigeria, where tradition was not as rigid, statistical data indicated improved female participation in these academic fields. In 2002 the University of Ibadan for example, which is also located in the same geographical area as Anambra State, showed high female enrollments in the fields of Metallurgy (34%); Mechanic Engineering Technology (23%); Medicine (50%); Clinical Sciences and Dentistry; (38.5%), Electrical Engineering (10.5%); Veterinary medicine (20.5%); and Technology (33.5%). Also, the same university recorded higher female graduation rates (50%) in these academic fields.
compared to 10.3% of women that graduated with degrees in pure science, engineering, agriculture, and technology in Anambra State (Onokala & Onwurah, 2001).

Statistical data evidently show low female transition into the fields of science and technology in Nigeria particularly in Anambra State. The most recent report from the National University Commission (2003) on undergraduate admissions and enrollments in Nigeria indicated that 73% of the total number of graduates from the nation’s Senior Secondary Schools who enrolled in the fields of science and technology fields in Anambra State in the year 2001 were male and only 27% of the prospective students were female. Was sexual harassment one of the probable causes of low women transition, enrollment, and graduation rates in these academic fields since these are male-domain fields? What impact has male to female gender ratios of faculty, staff and students on the prevailing incidents of sexual harassment experienced by women students particularly in the fields of science and technology?

Culture serves as a tool that molds the way people think, act, and communicate with each other. Most Nigerian cultures are not all-gender inclusive. Nigerians need to modify their culture to benefit both male and female. After all, gender is a socially constructed attribute. The gender stereotypes that are present in Nigerian society create a picture of a typical student in each academic field, a typical instructor, and a typical administrator of an institution. These stereotypes forces women students, who want to be successful, to act, think, and behave in a particular way. Women students who do not comply with the rules and regulations are most likely to face discrimination or harassment and they have to fight more and stronger for equal results. This affects women in any particular field and has a negative impact on them no matter their status. It is necessary that all participants in the Nigerian higher education process are aware of structural discrimination in the Nigerian society and are able to recognize this discrimination.
in their own behavior. Igbo culture of Anambra State nurtures gender stereotypes and it is really working against its educational systems.

Studies evidently show that Nigerian colleges and universities have more male faculty, staff and students than females (Abati, 2006; Adedokun, 2004; Ejiogu & Onyene, 2006). This study proposed that academic field impacts the perceived sexual harassment experienced by women undergraduates. Although empirical studies have confirmed the prevalence of sexual harassment within some academic fields especially in the natural sciences, it has not yet been verified empirically that academic field is a predictor of sexual harassment. However, certain characteristics peculiar to some academic fields have been identified as predictors of high attrition of women in the fields of science and technology. For instance, the 147-page report on the women and work, done by Center for Work-Life Policy (2008) sponsored by Alcoa, Johnson & Johnson, Microsoft, Pfizer and Cisco indicated that stereotypical cultures of science and technology fields were predictor of high women dropout rates in these academic fields. Among the many factors enumerated by this research that lead to high female attrition was sexual harassment from male colleagues and bosses (63%). Does the report support the hypothesis that academic field is a factor in the sexual harassment experience by women undergraduates in the fields of science and technology? This is the main objective of this study.

Clark (1983) and Evans (1996) indicated that one way of analyzing discipline is through the structural framework: basic organizational components. To investigate the impact of academic field on the perceived sexual harassment of women undergraduates it is vital to dissect the characteristics of each academic field. Clark (1993) contended that the driving force behind academic structural differentiation is academics themselves who in pursuing their scholarship remarkably differentiate organizational networks as well as ideas (Becher & Trowler, 2001,
p.15). Becher and Trowler's (2001) hard/soft, pure/applied concepts of academic knowledge and Pantin' (1968) distinction between restricted and unrestricted sciences suggested that disciplinary communities vary in their degrees of collectivity and mutual identity. These differences in academic fields are exhibited in physical or structural forms such as buildings, membership, and constitution and in areas of attitudes, activities, and cognitive styles. However, the greatest structural features of disciplinary communities that exerts influence on disciplinary identity are the cultural elements: traditions, customs and practices, transmitted knowledge, beliefs, morals, rules of conduct, linguistic and symbolic means of communication, and the meaning they share (Becher & Trowler, p.42, 47). Hence, Münch and Smelser (1992) contended that culture sets the frame within which structures of inequality are produced, reproduced, and transformed into legitimate ones. Becher and Trowler (2001) postulated that the tribes of academe "define their own identities and defend their own intellectual ground by employing a variety of devices geared toward the exclusion of illegal immigrants" (p.47). Science and technology fields especially in Nigerian context are structured to serve only men. Inclusion of women in these academic fields demands restructuring of the entire system to accommodate women. The one-size-fits-all of Nigeria educational systems hampers the progress of the education of women in the country. The study argues that since culture is peculiar to specific academic discipline, the problem of sexual harassment with regard to nature and frequency is in a fundamental sense unique to individual academic discipline.

The differences in academic disciplines suggest that faculty characteristics are different in terms of beliefs, values, and perception. Clark (1963) posited that faculty subcultures form mostly around disciplines. As faculty in different academic disciplines grow more specialized in their academic work and viewpoints the possibility of interacting with and sharing of views
decreases, thereby making faculty more individualized. In other word, the discipline faculty embodies have deep-seated impact on their behavior, perception, and how they relate with people within the academic institution. Also, as gender was indicated to play a major role in shaping the internal divisions of power, status, and labor among academic tribes (Becher & Trowler, 2001, p.54), faculty gender can and will influence the perception, behavior and relationship among colleagues and students. Based on this argument sexual harassment is dependent on individual faculty's qualitative and quantitative makeup that is enforced by institutional and disciplinary structure and culture. This suggests that institutional variables such as faculty and student gender ratios should be considered when investigating sexual harassment across academic fields.

The differences in the socialization of males and females in Nigeria especially in Anambra State, influenced women to seek help and be help-givers, rather than be self-reliant or to function independently or competitively. This socialization contributed immensely to how Anambra women are perceived, valued, and treated especially in male-dominated fields such as science and technology. As undergraduates, behavior is expected to be independent, strategic, and void of interpersonal support. These expectations are antithetical to traditional female socialization in Nigeria especially among the Igbos of Anambra State. The way women are socialized in Nigeria, and mostly among the Igbos of Anambra State, encourages supportive interaction with faculty and peers. This mode of socialization makes women vulnerable to faculty and peer sexual exploitation. Also, many Nigerian women come into undergraduate programs in science and technology with a low self-confidence due to the lack of a solid foundation in science and technology education from secondary schools. An unsupportive academic environment exacerbates the problem of low self-confidence in women students.
thereby increasing the probability of women seeking academic help from faculty and peers who are predominantly males. Seeking private help exposed women undergraduates to the danger of being harassed by those who supposedly offer help to them. This study argues that faculty-student interaction on the course of studies is a major factor in the sexual harassment of women in the fields of science and technology in Anambra State higher education institutions. Therefore, student demographic variables such as GPA are considered important in the study of the impact of academic field on sexual harassment of women in the fields of science and technology.

To predict the impact of academic field on incidents of sexual harassment this study will have to compare the experiences of women undergraduates in traditionally male academic fields (science and technology) with that of women undergraduates in traditionally female academic fields. This will be accomplished by investigating the institutional variables (faculty and student gender ratios) and student demographic profiles.

The Significance of the Study

This study is designed to determine how academic field impacted the perceived sexual harassment experienced by women undergraduates in Anambra State higher education institutions. To accomplish this task, the study will investigate how Academic Field, Institutional Variables (Faculty and Student Gender Ratios), and Students’ Demographic Profile (Age and GPA) impact the perceived sexual harassment experienced by women undergraduates in Anambra State colleges and universities.

It was hoped that the study would enable policy makers to create or improve policy initiatives that protect the rights of women in Anambra State colleges and universities. Also, through this study, higher education institutions in the continent of African especially in Nigeria
may establish prevention and intervention programs that would address the needs of the women victims as well as protect them from future attacks.

**Research Questions**

This study sought to answer the following questions:

To what extent does academic field and associated cultural and institutional characteristics affect perceptions of sexual harassment?

What is their effect relative to individual characteristics and experiences of culturally-embedded gender stereotypes?

What are the consequences of experiencing such harassment for women, academically and socially?

**Limitations of the Study**

As a developing country, Nigeria does not have a sophisticated database of empirical studies on sexual harassment in higher education. More so, due to the fact that Nigerians do not yet perceive sexual harassment as a crime, as well as the differences in the definition of sexual harassment, the major challenge to this study was finding research work that would help the researcher to understand the problem broadly. For this reason, the study utilized any resources that relate to the research problem such as scholarly works, newspaper articles, and journals. However, the study was limited to Igbo culture of Anambra State of Nigeria. Therefore, the findings may not apply to other cultures of the world. Finally, the sample in this study was disproportionately located in a single institution and so the result may not be a solid representation of the entire population or state.

**Definition of Terms**
Sexual Harassment: Sexual harassment is defined in this study as unwelcomed sexually-determined behavior, physical contact and advances, sexually-colored remarks, showing of pornography and sexual demands, whether by words or by actions that constitutes a health and safety problem, which when objected could disadvantage the victim in her connection with her studies, including recruitment or promotion, or creates a hostile study environment (United Nations General Recommendation 19 to the Convention on the Elimination of all Forms of Discrimination Against Women).

Faculty and student Ratios: This variable explained the relationship in size or number between the men and women faculty and students.

Perception: Perception is the representation of an external event that affect the senses and which by perceptual processing caused the activation of a certain category in the mind (Wikipedia, 20).

Educational Experience: Educational experience in this study is measured by equity in the involvement of academic and social learning as well as in sharing institution’s available resources.

Gender: Gender refers to the socially constructed role ascribed to males and females (as opposed to sex, which denotes the biological distinction between males and females).

Involvement is defined in this study as the physical and psychological energy women invested to academics and extracurricular activities, integrating within the university community and the amount of time spent on tasks and within campus environment (Astin, 1984, p.292).
Chapter II

REVIEW OF LITERATURE

Historical Background of Anambra State

For clear understanding of the study, it is important to start by giving a historical overview of the state from which the sample was taken as well as the institution. Anambra is a state in south-central Nigeria. The original Anambra State was created in 1976 when East Central State was split into Anambra and Imo States. Then, Anambra State was made up of the present Anambra State, Enugu State, and Abakaliki which is part of Ebonyi State, with Enugu as its capital. During the establishment of other states in August 1991, Enugu State with Abakaliki was excised, leaving Anambra State as presently constituted, with Awka as its capital. The state derives its name from the Anambra River which runs north to south through the state. The creation of the present Anambra State resulted mainly from the desire to spread economic development so as to minimize the national problem of north-south geopolitical dichotomy that characterized the former Anambra State.

Anambra State consists of 21 local government areas, which is similar to the American division of counties. The state is renowned for its craft industries, mainly blacksmithing and wood carving. There are three senatorial districts in the state, namely: (a) Anambra North, comprising of Awka North and South; Njikoka; Dunukofia; Anaocha; Idemili North and South Local Government Areas (LGAs); (b) Anambra Central, made up of Onitsha North and South, Ogburu, Oyi, Ayamelum, and Anambra East and West LGAs; and (c) Anambra South consisting of Orumba North and South, Aguata, Ihiala, Ekwusigo, and Nnewi North and South LGAs.
Anambra State has six accredited tertiary institutions: three universities, one polytechnic, and two colleges of education. Anambra State has the highest enrollment in primary and secondary schools in Nigeria as well as the highest number of applicants to Nigerian colleges and universities. The inhabiting tribe of Anambra State is the Igbo. Igbo people are one of the leading tribes in Nigeria known for their strong beliefs in tradition, business, and the Judeo-Christian religion.

Brief History of the Sample Institutions

Nnamdi Azikiwe University

Nnamdi Azikiwe University (UNIZIK) as it is popularly called is a cosmopolitan university located in Awka, the capital city of Anambra State. Nnamdi Azikiwe University is a multi-campus university with a population of twenty-four thousand seven hundred and six (24,706) full-time students and twelve thousand, four hundred and seventy-six (12,476) part-time students. A second campus was erected at Nnewi due to increased enrollment. Nnamdi Azikiwe University is the most prestigious and most diverse higher education institution in Anambra State. The University came into being as an offshoot of the defunct Anambra State University of Technology (ASUTECH). The University was taken over by the Federal Government on July 15th 1992.

Nnamdi Azikiwe University is founded on the philosophy that knowledge should be propagated and disseminated to individuals without hindrance. The University, as its mission, uses teaching, research, and public service to solve problems in Nigerian society. The Rt. Hon. Dr. Nnamdi Azikiwe, the Ovelle of Onitsha, after whom the University is named, was in the vanguard of the fight against colonialism in Africa and was the doyen of the independence struggle in Nigeria. He believed in the use of education as a veritable tool in the liberation
struggle and in the enthronement of the dignity of man. He founded the first autonomous Nigerian University.

**Anambra State University**

Anambra State University (ANSU) is located in Uli, Anaocha Local Government Area. ANSU was established on January 13, 2000 by Anambra State Government to address the influx of prospective students across the country and abroad. **Anambra State University** is an emerging university that follows the legacy of the first generation university Anambra State University of Science and Technology (ASUTECH). ANSU has established a solid foundation in academic and research through the leadership of Vice Chancellor, Prof. Paul Orajaka. ANSU’s programs encourage liaisons with overseas students and universities. Currently the institution has about 9,000 undergraduate and graduate students.

**Anambra State Polytechnic**

Anambra State Polytechnic (ASP), formerly known as Federal Polytechnic, started as a College of Arts and Sciences. The institution is located in Oko in Aguata Local Government Area in Anambra State. ASP was built by Dr. Alex Ekwueme, the first vice-president of the Federal Republic of Nigeria. On the establishment of the Anambra State Polytechnic, Dr. Ekwueme had planned to hand over the institution to the federal government, but beyond that he was concerned with providing science education to the people in the South-Eastern Nigeria. When he finished building the institution, because of his links to the politics of the National Council of Nigerian Citizens (NCNC), ASP was taken over by the Anambra State government and later changed its name to Anambra State Polytechnic.
Madonna University

Madonna University (MU) is a private university that is owned and operated by the Catholic Church. It is located in Okija, Anambra State. MU is the first private university and the first Catholic University in Nigeria. Enjoying both state and ecclesiastical approval, MU strives to revive within its community the age-long tradition of Catholic Education and the exacting demand of the contemporary society for sound education rooted in life-promoting morality. MU’s principal objective is to remain in the forefront of centers of learning, teaching, and research.

Theoretical Framework of the Study

This study utilized two theories: Astin’s (1984) Theory of Student Involvement and Douglas and Wildavsky’s (1983) Cultural Theory of Risk to analyze the impact of sexual harassment on women undergraduates’ educational experience in Anambra State colleges and universities. Geertz (1983) postulated that being a member of a disciplinary community involves a sense of identity and personal commitment. Becher and Trowler (2001) also claimed that the process of identity and commitment development starts at the undergraduate level (p. 47) and students within the disciplinary community are conditioned at the earliest stage of their education through the process of socialization to uphold the traditions of their academic fields. Their enculturation into their academic fields shapes the way they view and react to their environment. Disciplinary socialization involves many structural elements that determine how individuals within the system are accommodated. These structural elements include the discipline’s own ideology built upon “heroic myths” (Taylor, 1976) and cultural capital (Bourdieu, 1979). The most influential element is the cultural capital due to its continual transmission and accumulation which Bourdieu believed perpetuates social inequalities. For Bourdieu, ability is socially
constructed and it is the result of individuals having access to large amounts of cultural capital. Bourdieu argues that ability itself is the product of an investment of time and cultural capital. That is, human potential is built up, nurtured, and enhanced through hard work and the desire to succeed. Landmark studies with American medical students by Jefferys and Elston (1989) and Cribb and Bignold (1999) revealed how professional attitudes and values are gradually shaped through the interaction of students with peers and lecturers as well as with academic work.

Geertz (1983) and Bourdieu's (1979) thoughts suggested that investment of time and energy is crucial for students to learn the traditional content of their academic culture and to assimilate its practices and values in order to have a successful educational experience. To this end, this study argues that of all the factors that contribute to students' attainment of successful educational experience, student-friendly environment is the most important. An environment that fosters academic and social learning, of which faculty's maximum support is the capstone, is needed to promote students' academic integration and success. The quality of the relationship that exists between the student body, faculty, and staff determines how successful students will be in achieving their academic goals. In other words, student growth and success depends largely on how conducive and nurturing the environment is and this is evaluated by the amount of time and energy students invest in socializing and pursuing their academic goals. The internal unity and continuity of the academic community depend mostly on how members of the disciplinary community work together. Working together, in this study, comprised respecting each other's nuances in the spirit of solidarity to the academic community and the key factor to achieving this interdependence is mutual interaction; a reciprocal influence between administration, faculty, staff, and students. The internal homeostasis of the disciplinary community and individual member's success is threatened when inequitable treatment or disrespect of members, as a result
of differences in biological or social status, is perceived or experienced. Sexual harassment against women in the fields of science and technology is a product of the internal relational crisis within the disciplinary or institutional communities. The faculty-student and peer-peer relationships which, according to Chickering and Gamson (1987) if well utilized maximizes students' learning outcome, is impaired as individuals take advantage of the vulnerable members, thereby making learning environment uncomfortable. As involvement in the institutional life is important for retention and student development, students who have experienced invalidation such as sexual harassment from faculty or peers are less likely to get involved and/or utilize campus services easily, thereby interrupting in their academic and social learning. Hostile learning environment threatens student involvement, satisfaction, and persistence in their chosen academic fields. Astin (1993), Pace (1984), and Tinto (1975) found that the more satisfied and involved a student is in college, the more likely he or she will be academically successful and graduate. This study intends to use Astin's (1984) Student Involvement Theory to investigate how academic field impact the sexual harassment experienced by women undergraduates in the fields of science and technology in Anambra State colleges and universities.

Alexander W. Astin is Allan M. Carter Professor of Higher Education Emeritus at the University of California, Los Angeles and Founding Director of the Higher Education Research Institute at UCLA. Astin has authored 20 books and more than 300 other publications in the field of higher education. He has been a recipient of awards for outstanding research from more than a dozen national associations and professional societies. Astin (1984) rejected the traditional pedagogical theory that treats students as "black boxes". On the input end of the box are policies and programs as well as the personal characteristics of students and faculty. At the output end are different types of measures such as standardized tests or GPA (Astin, 1984, p.519). He believed
that students should be accountable for their learning through active participation in all educational processes. Based on his argument he developed a theory on student involvement. He defined involvement as the amount of physical and psychological energy students devote to their academic experience.

The basic element of Astin’s theory is that the more students are involved in their educational formation the more they learn. Astin (1984) identified four basic characteristics associated with involvement: (a) physical and psychological energy must be invested in people, tasks, or activities; (b) levels of involvement occur along a continuum, varying in intensity for each student, and differing between students; (c) involvement has both qualitative and quantitative characteristics. The extent of students’ involvement can be measured qualitatively (e.g.; preparedness, motivation, comprehension) and quantitatively (how many hours); (d) the amount of learning and development associated with any education program is directly proportional to the quality and quantity of student involvement in that program. However, the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. Astin’s Theory of Student Involvement states that academic curriculum must stimulate students’ effort and energy investment before learning and development can take place. The theory also encouraged active student participation in the learning process as well as challenge educators to focus more on what students do rather than what lecturers do. To target those factors that motivate students and the amount of energy students are able to invest in the learning process.

Astin’s theory of student involvement provides a framework useful in analyzing the impact of sexual harassment on women undergraduates’ educational experience in the fields of science and technology. Astin’s (1984) theory suggests that students who get involved in the
learning process through continuous interaction with lecturers and peers excel in their studies. Ladebo (2003) found that most victims of sexual harassment exhibit avoidance behavior which includes avoiding the aggressor or the environment that promotes such behavior. This study assumes that inappropriate sexual attention, interaction, or contact with faculty or peers may significantly deter students from participating actively and continuously in the educational and social activities organized by the perpetrating faculty or within the environment the danger is perceived.

Sexual harassment from faculty and peers affects faculty-student or peer-peer contact and so hinder students' academic and social integration. Lecturers who demand sexual gratification from students in exchange for grades or who make sexual gratification a condition to get good grades not only make learning environment hostile but also fail in their responsibility to stimulate students to work to their potentials. Although pre-college predictors are important in determining success in college, Donovan (1984) found that college experience was even more important with regard to retention in college. Astin (1985) found that college experiences have the highest impact on student persistence including classroom experiences, residential environment, academic advising, faculty and peer interaction, and involvement in extracurricular activities. Students who are involved with the faculty, academic advisors, and peers develop a sense of belonging with the institution or the disciplinary community. The feeling of belongingness enables students to increase their level of commitment to their educational goals and appreciate their performances as well as their academic fields. In other words, the satisfactory feeling of being part of the institution or academic field strengthens the amount of time students invest in the learning process (Donovan, 1984) as well as in their personal relationship with faculty and peers. The awful experience of sexual harassment from faculty and
peers over the course of academic work destroys the faculty-student or peer-peer relationships and so jeopardizes students’ sense of belonging and satisfaction with the institution or the academic field. Students’ college experience is impeded when students’ interaction with the faculty and peers is biased by the inappropriate advances or attention to students.

Chickering and Gamson (1987) among others indicated that faculty-student contact, peer-peer interaction, active learning, time on task, high faculty expectations for students, diversity of talents, and a multiplicity of learning styles improve students’ involvement and engagement. David (1991) also found that increased interaction with peers and faculty, as well as increased involvement in extracurricular activities, lowers student dropout rates. Following David (1991) and Chickering and Gamson’s (1987) findings it can be argued that sexual harassment in a learning environment significantly impacts women students’ involvement in the social and academic life of the disciplinary community. It will also endanger their participation, progress and persistence in their academic fields. Education is an action of a peaceful mind. Fear causes agitation and anxiety. The apprehension caused by the mere sight or thought of the perpetrator or aggressor triggers resentment and disgust in students who have experienced or perceived harassment from faculty and peers. In such a situation learning opportunities are interrupted as victims are more concerned about safety than learning.

Astin’s (1975) longitudinal study identified that students who participate in extracurricular activities or organizations are less likely to drop out of college. For instance, Astin (1984) found that participation in a sport, especially in intercollegiate sport has a positive effect on student persistence (p.302). Involvement in campus job opportunities on a part-time basis was also found to improve retention (Astin, 1984). The key term in Astin’s 1975 and 1984 studies is student engagement. Engagement entails mutual interaction with faculty, staff, and
peers. Students find fulfillment by socializing with peers as they participate in the collegiate games and campus jobs. These activities offer students the opportunity to interact with the faculty, college staff, and peers thereby enhancing their affiliation with the environment they work and learn.

Associating and interacting with faculty, staff, and peers offer students the chance to develop self-esteem and self-efficacy as well as a strong sense of self-worth. This association improves their overall college experience. Likewise, unethical behavioral experiences from faculty, staff and peers destroy students’ self-esteem, self-efficacy, and self-worth. With the presence of sexual harassment in college and university campuses it would be difficult for students to associate and to socialize actively with faculty and peers thereby limiting the opportunities for academic and social growth.

**Cultural Theory of Risk**

The Cultural Theory of Risk (1983) asserts that structures of social organization endow individuals with perceptions that reinforce those structures in competition against alternative ones. Originating in the work of anthropologist Mary Douglas (1983) and political scientist Aaron Wildavsky (1983), Cultural Theory gave rise to a diverse set of research programs that span multiple social science disciplines and that have been recently used to analyze policymaking conflicts generally.

Mary Douglas was a British anthropologist, known for her writings on human culture and symbolism. Her area of expertise was social anthropology. Douglas was considered a follower of Émile Durkheim and a proponent of structuralist analysis with a strong interest in comparative religion. Douglas was known for her work on purity and danger, natural symbols, and the Cultural Theory of Risk. Douglas rejected Durkheim’s determinism, but accepted his idea of the
social basis for human thought. She used the Durkheim method of drawing on “primitive” cultures to expose the problems in modern society. For Douglas, rituals dramatize moral order in the human universe. Douglas argued that the drama of life is constructed from childhood. That is, the self concept and the linguistic code which the individual learns as a child; the individual as a moral actor; and the collective nature of human existence.

Douglas’ (1983) view of culture was a world of ordinary symbols, rituals, and activities, all of which represent what she called the “construction of social life.” Everyday life itself the focus of interest. Every mundane activity carried ritual and ceremonial significance. Symbolic order reflected social order as she looked at the ritual dramatization of social patterns. Douglas’s (1983) work has two features that form the basic structure of Cultural Theory. The first of these features is the general account of the social function of individual perceptions of societal dangers. Douglas argued that individuals associate societal harms with conduct that transgresses societal norms. This tendency, she maintained, plays an indispensable role in promoting certain social structures, by influencing members to developing the tendency to avoid subversive behaviors and by focusing resentment and blame on those who defy such institutions. Secondly, Douglas maintained that cultural ways of life and its related prospects can be depicted along two dimensions called group and grid. She postulated that a high group way of life exhibits a high degree of collective control and a low group way of life shows a much lower degree of collective control and a resulting emphasis on individual self-sufficiency. Also, a high grid way of life is characterized by obvious and lasting forms of stratification in roles and authority, whereas a low grid way of life is indicated by a more egalitarian structuring.

Some scholars have presented research work in support of Cultural Theory. For instance, Karl Dake (1991), a graduate student of Wildavsky, correlated perceptions of various societal
risks such as environmental disaster, external aggression, internal disorder, and market breakdown with subjects’ scores on attitudinal scales that he believed reflected the “cultural worldviews” associated with the ways of life in Douglas’s group-grid scheme. Later on researchers such as Boholm (1996) and Kahan, Slovic, Braman, and Gastil (2006) refined Dake’s measures and applied them to a wide variety of environmental and technological risks. Studies such as these furnished a demonstration that risk perceptions are distributed across individuals in patterns better explained by culture than by other asserted influences. Verweij and Thompson (2006) presented more interpretive empirical support for Cultural Theory that indicated how particular risk-regulation and related controversies can plausibly be understood within a group-grid framework.

The Cultural Theory of Risk was also subjected to serious criticisms that the theory was hard to understand due to the complexities and ambiguities that are inherent in the group-grid scheme and the resulting diversity of conceptualizations among cultural theorists. Other theorists objected to the fact that the theory embraced functionalism, a controversial mode of analysis that views the needs of collective entities rather than the individuals’ decision to pursue their own ends as the key causal force in social relations. Some commentators have also critiqued studies that gird empirical evidence for Cultural Theory such as Karl Dake’s survey studies. These studies, Langford and O’Riordan (1998) and Sjöberg (1998) argued that reflected unreliable measures of individual attitudes in any case explained only a modest amount of the variance in individual perceptions of risk. Finally, some theorists resisted Cultural Theory on political grounds owing to Douglas and Wildavsky’s (1983) harsh criticisms of environmentalists in their work Risk and Culture. In these accounts, group-grid gives rise to either four or five discrete
ways of life, each of which is associated with a view of nature that is congenial to its advancement in competition with the other ways of life.

Douglas and Wildavsky's Cultural Theory of Risk was useful in determining the impact of sexual harassment on women undergraduates' educational experience in Anambra State colleges and universities. Following Douglas and Wildavsky's argument, it could be said that the patriarchal structure of Nigerian society empowered males to perceive and treat females in a certain way that is consistent with discrimination and abuse. This antifemale culture also encouraged men in Nigerian higher education institutions to assume attitudes and behaviors that are contrary to their job ethics. This study postulated that the sexual harassment experienced by women undergraduates in the Nigeria's colleges and universities particularly those in Anambra State higher education institutions was associated with the stereotypical culture of the nation. This culture influenced women undergraduates' attitudes and reaction toward behaviors that can be interpreted as harassment.

According to Douglas and Wildavsky's (1983) two dimensional characteristics of Cultural Risk Theory (group and grid), Nigerian men saw themselves superior and more self-sufficient or actualized than women. By way of corollary, women perceived themselves to be inferior and subordinate to men. This perception influenced men's attitudes and relationships with women. As Douglas and Wildavsky (1983) posited, individual's perceptions of the societal dangers promotes resentment and blame on those who defy the social structure. Following Douglas and Wildavsky's (1983) argument in the traditional Nigeria society women and girls are mandated to walk on the stereotypical line marked out for them by culture and deviation from this expectation brought them variety of abuses.
Social, political and economic conflicts in Africa have exposed the worst forms of objectification of women and the abuse of their rights as citizens. Due to women’s subordinate social status and gender discrimination, women in Africa experience conflict differently from men or women in other countries of the world. Women and girls in Africa are impacted by sexual violence and economic instability, leading to sexual exploitation, forced displacement, abduction, trafficking, and torture. Conflict-related forms of gender-based violence in Africa range from random acts of sexual assault to mass rape, rape camps, military sexual slavery, forced marriages, and forced pregnancies (African Union Commission, 2004). Statistical evidence on violence against women in Africa does not commensurate with the prevalence and typologies of violence that women experience, but the data highlighted two important issues. First, women in Africa are disproportionately vulnerable to violence of all kinds especially sexual violence. Second, the cultural values and norms of most African societies have a high tolerance for violence towards women and an abuse of their human rights. However, the key to violence against women in Africa is the deep-seated beliefs of gender inequality that can be decreased with intelligent political strategies and widespread action to combat these inequalities.

Gender inequality is at the heart of Nigerian society, the family. Knowledge of the way Nigerian males and females are socialized and the probable impact of this rigid orientation on men’s relationship with women opens the door to understanding the concept of sexual harassment in Nigerian higher education institutions. Through this lens one can glance through subjective realities about sexual harassment against women in Nigerian higher education institutions. The people of Nigeria for instance, believe in the inequality of sexes. Specifically, the culture of Anambra State does not attach much importance on women since they are to be
married off to another family. Females are the property of their father. When married they become the property of their husbands.

"Charity begins at home" is a popular dictum in Nigerian society. Virtuous life is a reflection of good family upbringing while a mischievous mind is an insignia of a dysfunctional home. A man who honors his wife, sister, or mother is most likely to respect his female students and vice versa. Sexual harassment is not an act reserved for men in Nigerian higher education institutions alone; rather, it is a behavior that is found among Nigerian men as a result of traditional beliefs that underscore women. Sexual harassment in Nigerian colleges and universities is a spill-over from the sexual violence that is prevailing in the family. The Nigerian family system is founded on the strength of patriarchy where husband is the skilled master planner and key provider for the family. The wife is subordinate to the husband and in some cases a male-child's position supersedes that of the mother. The sex life of married couples lies in the sole discretion of the husband while the wife is obligated by marital bond to respond to her husband's sexual demands no matter the circumstance. Sexual violence among intimate partners is regarded as part of marital squabbles. Hence, marital rape is not considered a crime under the Sharia Penal legislation of the northern regions or under the Criminal Code of the southern states of Nigeria (Amnesty International, 2008; Foluso, 2008). The *zina de facto* of Penal Code of Nigeria permits the husband to treat the wife as he wishes and demands that wives should submit to their husbands at all cost. The definition of *zina de facto* recognizes that married men have sexual rights over their wives thereby violating the principle of equality between sexes. As a result, the laws (Sharia Penal legislation and Criminal Code) hinder wives from full control over their sex life and at the same time liberate husbands from any form of remorse. Relating this profile of Nigerian family to the sexual harassment of women undergraduates, one can argue that
the men who were husbands at home were also faculty and staff in the universities. These men cannot change their beliefs and values overnight because that is who they are. Societal culture applauds and certifies their behaviors and attitudes toward women. Hence, Beoku-Bett (1998) stated that gender-related issues in African education systems will be better understood among all by grasping African concept of socio-cultural gender role expectations.

Linton (1945) maintained, “Culture is the configuration of learned behaviors and results of behavior whose component elements are shared and transmitted by the members of a particular society” (p. 32). Following Linton’s thought, the extent culture consists of “the learned behaviors of a given human society” (p.33) women and men are equal participants in the cultural system. However, the cultural “template” has been constantly negotiated, revised, and reproduced. Historically, the ability to participate in this process of negotiation has been divided along gender lines. In historic times, patrilineal was common in most of the dominant cultures of the world. The majority of these dominant cultures systematically limited the power of women in the social, political, and educational institutions. While considerable progress in women’s rights has been made since World War II in some countries of the world, women in Africa, particularly in Nigeria, are still under-represented politically, under-compensated economically for equal work, and restricted in higher education from access to positions of authority. Gender and sexual violence are major ways women on the continent of Africa, especially in Nigeria, have been denied their fundamental rights to live and to succeed.

The History of Sexual Harassment

Sexual harassment as it is perceived today came into existence in 1964 when the United States Congress passed Title VII of the Civil Rights Act and created the Equal Employment Opportunity Commission. Constance Jones, the author of the book Sexual Harassment traced the
history of sexual harassment back to the 1830s when many women worked in New England textile mills. Jones indicated that in 1835, printers in Boston conducted a campaign of intimidation to force women out of their jobs in their industries. By then there was no term to describe their action. In the 1960s, feminists coined the term "sexual harassment".

Before the emergence of the concept, people had no way to express their encounter since there was no term by which to name it. Since this time, sexual harassment has drawn a great deal of interest from academic and legal scholars. Both parties focused primarily on the traditions, methodologies, and assumptions, but drew different conclusions. Feminist scholars, for instance, contended that the legal system, being male-dominated, has no understanding or regard for the perspectives of women who have been sexually harassed. Initially, sexual harassment was perceived by the public as a normal biological attraction of males to females or an instigation of males' sexual pursuit of women in the workplace or institution. Catherine MacKinnon, as cited in Wyatt (2007) a professor at the University of Michigan Law School and Susan Brownmiller, an activist, initiated the study of sexual harassment and redefined the concept as an issue of power instead of sex (Nancy Wyatt, 2007). These noble women acknowledged that sexual behaviors in the workplace or in the academic institutions were not normal, but were a problem of discrimination against women.

**Definition of Sexual Harassment**

**Legal Definition of sexual harassment:** According to Gutek and Done (2001) sexual harassment is defined as a legal and a psychological phenomenon. Legally, two types of sexual harassment were identified (a) quid pro quo (this for that) harassment that requires the employee to submit to sexual demands as a condition for promotion to avoid trouble, or being dismissed or in the case of faculty-student relationship, sex for better grades and (b) hostile-environment
harassment where sexuality or discriminatory intimidation, ridicule, and insult are being practiced in the environment in which the employee works or students learn.

**Psychological and behavioral definitions:** Psychologists defined sexual harassment on the reasonableness of the offender (Browne, 1997). From this point of view, sexual harassment is perceived as an act of unsuitable mind or lack of understanding as prevents one from having the mental capacity required by law to enter into a particular relationship. Therefore, sexual harassment was seen as an act done as a result of mental imbalance.

**Theories of Sexual Harassment**

According to Skaine (1996) there is no single cause of sexual harassment or a particular theoretical framework that best explains it. However, there are five widely accepted theories or models of sexual harassment that tried to explain the phenomenon from different angles and perspectives. These theories are the organizational theory (Gruber, 1992; Tangri et al., 1982), four-factor theory (O’Hare & O’Donohue, 1998), sex role spillover theory (Gutk & Merasch, 1982; Tangri & Hayes, 1997), sociocultural theory (Farley, 1978; MacKinnon, 1979, Malovich & Stake, 1990; Tangri & Hayes, 1997), and the natural–biological theory (Tangri et al., 1982). In this study, only three of these theories were analyzed. These include: organizational theory, sociocultural theory and natural–biological theory.

**Organizational Theory**

Organizational theory (Gruber, 1992; Tangri et al., 1982) explained sexual harassment through organizational-related issues such as power and status inequalities within the organization. According to this theory, power and status inequalities that characterized organizational settings increase the probability of the occurrence of sexual harassment. As Cleveland and Kerst (1993) indicated, the key issue in the problem of sexual harassment is
power. Lips (1991) stated, the exercise of power is expected and accepted in a hierarchical society. Western societies are structured hierarchically. This type of structure or orientation renders some individuals powerful and makes the less powerful subordinate to their authority. Unfortunately, in this type of structure, men are favored more than women because of the stereotypical belief that men are goal-oriented, powerful and aggressive, whereas women are passive-receptive and family-oriented (Allgeier & McCormick, 1983; Eagly, 1983; Eagly & Mladinic, 1989; Eagly & Wood, 1982). In this context, it could be said that sexual harassment is the consequence of organizational hierarchical structure that allots unequal power to people within the system. Organizational theory also identified other factors that facilitate sexually abusive behavior within a hierarchical system. These behaviors include the permissiveness of the organizational climate, gendered occupations, and organizational ethics, norms and policies (Dekker & Barling, 1998; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Gutek, 1985; Gutek & Morasch, 1982; O'Hare & O'Donohue, 1998; Whaley & Tucker, 1998; Willness et al., 2007).

Sociocultural Theory

Sociocultural theory analyzed the social and political context in which sexual harassment is initiated. In view of this theory, sexual harassment is the enforcement of gender inequalities within the social system (Gutek, 1985; Thomas & Kitzinger, 1997). Matchen and DeSouza (2000) and Stockdale (1993) argued that sexual harassment, regardless of its form, is related to the sexist male ideology of male dominance and male superiority. The perception of women as the inferior sex and the gender stratification that emphasized on the sex role expectations introduces and maintains sexual harassment (Gutek, 1985; Malovich & Stake, 1990; Pryor; 1987; Schaecht & Atchison, 1993; Tangri & Hayes, 1997). MacKinnon (1979) contested that women’s inferior position in the society is not only a consequence of gender inequality but it is the cause
of sexual harassment. Tangri, Burt, and Johnson (1982) postulates that sexual harassment maintains male dominance occupationally, by intimidating, and discouraging women from work. In other words, sociocultural theories considered the issue of patriarchy system that initiates and perpetuates the subordination of women by men. As a result, sexual harassment is an instrument of domination to keep women in their place.

Natural/Biological Theory

Natural-biological theory (Barak et al., 1995; Browne, 1997; Tangri & Hayes, 1997; Studd & Gattiker, 1991) argued that sexual harassment is an extension of mate selection evolutionary theory. In other words, sexual harassment is an expression of sexual attraction, a natural element in mate seeking. Naturally, men have a more powerful inner drive to be sexually aggressive and urge to look for mates than women. According to natural/biological theory, such sexual behavior is not harassment (Barak et al., 1995). Tangri and Hayes (1997) argued that this higher sex drive of men leads them to sexually aggressive behavior at work. In support of Tangri and Hayes' (1997) argument, Studd and Gattiker (1991) posited that the differences in the reproductive strategies among men and women may create a conflict of interest that spills over at the workplace. Also, Browne (1997) followed the same line of thought. He said, in the attempt to maximize the reproductive success, men uses power instrumentally in order to obtain sex. Such attempts to gain sexual access Browne (1997) argued could lead to coercive sexual behaviors. Natural/biological theory acknowledges the innate human instincts as a potentially driving force to sexually aggressive behavior.

Sexual Harassment in Higher Education

The impact and scope of sexual harassment in colleges and universities surfaced in the early 1980s leading to the creation of policies, procedures, extensive training programs and
materials designed to identify and prevent sexual harassment. In spite of the efforts to minimize or eradicate sexual harassment on college campuses, the frequency of complaints are increasing (Riggs et al., 1993). Sexual harassment is a real-life experience for women across countries, culture, and ethnicity. According to the AAUW (2006) report about two-thirds of college students (62%) have been sexually harassed and about one-third of first-year students (41%) have been sexually harassed by peers. Katz (2005) indicated that a survey conducted by the American Psychological Association (APA) on female graduate students revealed that over 12.7% have experienced sexual harassment, 21% have avoided classes for fear of being sexually harassed, 11% tried to report an incident of sexual harassment and 3% have dropped a course because of sexual harassment. A 1997 survey of nearly 200 female college and university students in Mumbai, India found that 39% of the respondent complained of sexual harassment (Puja, 2003). At Jimma University in Ethiopia sexual violence, harassment, and lack of security were indicated as the most common problems facing female students (Panos, 2003).

AAUW (2006) identified sexual harassment as number one pervasive problem to equity in education at all levels. AAUW argued that sexual harassment posed a damaging effect on the educational experience of many college students and disrupts students' ability to learn and succeed at secondary levels. According to AAUW sexual harassment interferes with students' ability to perform in an educational setting. Students have become aware of the existence of policies on harassment (AAWU, 1999); however, increased awareness does not mean less incidents of sexual harassment or increased report of incidents. The AAUW's research report, "Drawing the Line: Sexual Harassment on Campus" indicated that more than one-third of college students tell no one after being harassed; almost half (49%) confide in a friend, and only seven percent (7%) of students report the incident to a college employee.
Studies on Sexual Harassment in Colleges and Universities

A wealth of studies on sexual harassment in higher education analyzed the perceptions of undergraduate students, graduates, and faculty across culture, ethnicity, and race. These studies considered the gender differences on how sexual harassment is perceived and found that women are most likely than men to view an act as harassment (Dietz-Uhler & Murrell, 1992, Marks & Nelson, 1993; Popovich, Gehlseruf, Jolton, Somers, & Godinho, 1992). Males and females differ in their perception of sexual harassment as in verbal harassment, nonsexual touching, flirting, and sexual looks. While the majority of sexual harassment is overwhelmingly targeted toward women, more and more studies are indicating that sexual harassment also applies to men.

Whatley and Wasienleski (2001) investigated the incidence of sexual harassment in academia. Three hundred and ninety-seven faculty, staff, and administrators from the office of Information Technology at Valdosta State University, representing a stratified random sample, were sent a research packet via campus mail. The data showed that 20% of the participants had experienced sexual harassment. Of the 20% reporting they had been sexually harassed, 63% indicated they had been sexually harassed once or twice, 26.3% indicated sometimes, 5.2% indicated often, and 5.2% indicated many times. Also, of those indicating that they had been sexually harassed, 90% were female and 10% were male. The ethnicity of the males indicating that they had experienced sexual harassment was 100% White. Whereas, the ethnicity of the females who indicated that they had experienced sexual harassment was 88.2% White and 11.8% were African American. Of those indicating sexual harassed, 42.1% were staff, 26.3% were faculty, and 26.3% were administrators. The results also indicated that males and females differed in their perceptions of how to stop sexually harassing behavior effectively. Specifically, female compared to male respondents favored more passive actions to arrest the unwanted
behavior. The results also showed that females compared to males reported more gender harassment and unwanted sexual attention.

Leonard et al. (1989) studied sexual harassment at North Carolina State University. Five hundred and seventy-four undergraduate women students; 115 graduate women students; 500 women staff; and 175 women faculty were surveyed. The study identified five types of sexual harassment behaviors on campus: unwanted sexist comments, unwanted sexual statements, unwanted personal attention, unwanted sexual propositions, and unwanted physical or sexual advances. About 40% of the respondents reported experiencing unwanted sexist comments one or more times within the last 5 years, and slightly more than half of these said they had experienced unwanted sexist comments several times. Seventeen percent of the respondents experienced unwanted sexual statements, almost 11% reported several incidents. Over 10% were victims of unwanted personal attention; almost 5% had experienced it once and 5% several times. Almost 4% reported that unwanted sexual propositions were directed toward them, and 8% of the respondents were victims of unwanted physical or sexual advances, almost 4% one time and over 4% several times. Altogether, 29% of the respondents said that they had experienced one or more forms of sexual harassment. Sexist comment was the most commonly reported sexual harassment behavior by all four groups of respondents. Thirty-eight percent of the undergraduate students said they had experienced unwanted sexist comments, while 26% of the graduate students, 60% of the faculty respondents, and 35% of the staff respondents reported incidence of unwanted sexist comments. On the effects and responses to sexual harassment, all four groups of respondents reporting incidents of sexual harassment identified the most common effect of harassment was strong emotions (e.g., anger, anxiety and depression). Sixty-two percent of the participants reported that they had experienced strong emotions as a result of the sexual
harassment. Sixty-six percent of the victims indicated avoidance of the person or situations involving the person as a response to the harassment. All groups except the graduate students reported experiencing negative feelings about themselves (15%) and impaired work performance (15%). Six percent of the participants identified impaired academic performance and 4% reported physical problems, altered academic or career plans, and altered employment or career plans. The profile of sexual harassers indicated that the overall percentage of respondents identified males as perpetrators in the five categories of behavior, ranging from 78% to 100%. Both males and females were identified as perpetrators in the categories of sexist comments (22%) and sexual statements (8%).

Kalof et al. (2001) studied the influence of race and gender on student self-reports of sexual harassment by college professors. Sexual harassment in this study was defined in terms of gender harassment (suggestive remarks, crude jokes, use of sexist teaching materials, sexual comments, seduction (offensive, but sanction free advances), sexual bribery (solicitation of sexual activity for the promise of rewards, or what is more commonly known as “quid pro quo”), sexual coercion (threats of punishment), and unwanted sexual attention and/or sexual assault. The focus of the study was on gender harassment, sexual coercion, and unwanted sexual attention. Participants in the study include 386 women and 139 men enrolled in a large diverse university. The participants are of African American (7.6%), Caucasian (63.2%), Asian, Pacific Islander or Filipino (11.9%), Hispanic (4.9%), and other minority groups (9.5%). The study found that 40% of the women and over 28.7% of the men had experienced at least one of 16 incidents of sexual harassment identified in the study. Gender harassment was indicated to be the highest incidence of sexual harassment with over 38.9% of women and over 26.6% of men, while unwanted sexual attention was reported by over 11.1% of the women and 6% by men. In
terms of race, 30% of the African Americans experienced at least 1 of the 16 incidents of sexual harassment by a college professor and at least 1 sexually harassing experience was reported by over 30.8% of Hispanics, over 33.9% of Asians, over 39.4% of Whites and over 30.6% of the students from other minorities. When gender harassment and race is compared, African Americans (30%), Hispanics (23.1%), Asians (32.8%), white (36.5%), and other minority groups (28.6%) reported of being sexually harassed. African American students (7.5%), Hispanics (7.7%), Asians (10.9%) of Asians, White (11%), and other minorities (4.1%) reported unwanted sexual attention. Sexual coercion was reported by only 9 students.

Attitudes and Perceptions of Sexual Harassment

Foulis and McCabe (1997) examined how gender, gender role, gender role stereotypes, age, occupation, and experience of sexual harassment impact attitudes and perceptions of sexual harassment of 123 female and 73 male high school and university students, as well as workers. These variables were also investigated in terms of their relationship to the experience of sexual harassment. The findings revealed that high school males had more tolerant attitudes toward sexual harassment than females. However, there were no differences between males and females at university and in the workplace in their attitudes. The strongest predictor of attitudes to sexual harassment for high school males was gender role stereotypes. Gender differences occur as a result of reinforcement and modeling and these differences influence attitudes toward sexual harassment. Males perceive more situations as being sexual or potentially sexual, and so view sexually harassing behavior as normal or appropriate. Attitudes to sexual harassment also were found to be an indicator of perceptions for university students and workers. Participants' perceptions of sexual harassment were found to significantly predict attitudes toward sexual harassment. The correlation between these two variables revealed that those participants with
more tolerant attitudes toward sexual harassment perceived fewer incidents to be sexual harassment. Attitudes were found to be a predictor of experience of sexual harassment. Masculinity was also found to predict experience of sexual harassment.

Wear and Aultman (2005) investigated how third and fourth-year medical students perceive and experience sexual harassment, what they believe about reporting sexual harassment, and how they believe it might be stopped in the educational environment. Five focus groups were conducted with 24 medical students during the months of May and June, 2004, regarding their experiences and perceptions of sexual harassment and other issues surrounding gender equity during their medical education. Focus groups encourage interaction among participants and provide a forum for addressing sensitive topics. The result indicated that the gender climate during students’ pre-clinical education was impressive but changed as they progressed to their clinical year. Nine of the 14 female students with clinical experience described explicit sexual comments directed at them in clinical settings and also sexual harassment was found to be underreported and most often included worries about retaliation, hostility from peers, increase distress, getting the harasser in trouble, and possible humiliation and ostracism from peers.

Turner (2006) examined how United States women undergraduate and graduate students perceive and experience their campus climate. Female subjects were recruited women from a predominantly White research university in the northeast totaling 46 participants, 31 were undergraduates, 15 were graduate students, 37 were White and 9 were students of color. On this campus, women students comprised more than half of the undergraduate and graduate population. Focus group interviews were used, which centered on the actual words of the participants so as to give insight into their perceptions and experiences that would help to identify sources and effects of challenges and supports of women students. There were 8 focus
group interviews with 4 to 12 participants each: 2 graduate student focus groups, 2 residence hall focus groups, 2 women's center focus groups, and 1 student of color center focus group. Findings indicated that across race, university classification, and level of involvement, the women students in this study reported a chilly campus climate. Three main themes that emerged from the data were: (a) socialization of safety, (b) safety concerns realized, and (c) coping with fear for safety. Women worried about personal safety, experiencing sexual victimization, and being blamed for attacks on their person. Women students' attitudes about safety revealed that, although women felt safe on this particular campus, they still think about their personal safety. In addition to regularly thinking about their personal safety on campus, women students reported actual incidents of sexual victimization. The incidents of victimization reported ranged from sexist comments from male peers to sexist drawings and depictions of women in a negative light. Students in this study also reported incidents of harassment and bias that occurred at all times of day, night, week, and weekend.

**Sexual Harassment in Nigerian Higher Institution**

Sexual harassment is not quite familiar to Nigerian society. However, it is one of the most difficult challenges facing women in higher education in the country. For years, sexual harassment has been rampant in Nigerian universities, but until recently very little has been done about it. As a traditional, tribal-based society, Nigeria has mechanisms that legitimize, cloud, and deny sexual abuse, assaults, and harassment as forms of violence against women. Most Nigerian communities believed in male supremacy; hence, sexual harassment is perceived as an acceptable exercise of male's prerogative over women's sexuality. Due to the prevailing incidents of sexual harassment on college and university campuses, Nigerian scholars are
gradually embarking in studying the nature and trends of sexual harassments in Nigerian higher education institutions.

Adedokun (2004) studied sexual harassment in one of the universities in the cosmopolitan city of Lagos, Nigeria to determine the presence of sexual harassment in this multi-ethnic university. Data were collected from focus group discussions, interviews, and social mapping of more than 30,000 people. The target groups were males and females from all fields including part-timers who had spent at least one semester in the sample university. Academic and non-academic staff, members of student affairs unit, university administrators, students, parents, and guardians were also recruited in this study. Existing documents from the university senate and disciplinary committee reports were also reviewed. The discussions and interviews focused on the understanding of gender violence, its occurrence, perceptions, and experiences of sexual harassment, factors promoting and preventing sexual harassment, perception of perpetrators and victims, consequences, and management of sexual harassment by the sample institution. Results showed that sexual harassment is a reality in Nigerian institutions and it is not peculiar to a particular ethnic group or culture. Also, two key findings were reported in this study: (a) sexual harassment is a form of gender violence and (b) there is an absence or inadequate policy that addressed sexual harassment in the institution. Existing documents on sexual harassment from the university senate and disciplinary committee identified six main forms of sexual harassment at the institution, including: (a) harassment by male instructors to female students (the most common), (b) male students to female students, (c) male lecturers to female non-academic staff, (d) non-academic male staff to female students, (e) senior male professors to female academic staff, and (f) male non-academic staff to female non-academic staff. Female students are the most targeted group for sexual harassment and male faculty
members are the main perpetrators as well as male staff. The perpetrators mostly use intimidation, aggression, exploitation, and threat to get to their victims. Four significant drives to sexual harassment were also identified: (a) cost-benefit analysis (sexual remuneration for services rendered), (b) inadequacy in admission system (sexual gratification from incoming freshmen as a guarantee for admission), (c) abuse of power (sexual gratification for job promotion), (d) and status of women (perception of women as sexual objects).

Ladebo (2003) conducted a case study to determine who harasses and who is being harassed in the sample institutions in Nigeria and to assess where sexual harassment is more rampant: private, state, or federally-owned institutions. Three higher education institutions were chosen from the southwestern region of Nigeria. The enrolments in the three institutions were: private 2,150 students with 120 faculty members, federal 3,778 students with 258 faculty members, and state 18,000 students with 481 faculty members. Members of these institutions were interviewed and surveyed. The findings showed that the perpetrators of sexual harassment were mostly male faculty members as well as male students, while female students were most likely the victims. Female students respond to intimidating sexual advances in exchange for academic rewards, financial help, or to avoid conflict with the faculty perpetrators. The study showed that there is absence of policy guidelines that define what constitutes sexual harassment in the sampled institutions. The study also indicated that sexual harassment is a critical stressor that threatens the performance of students individually and collectively, as well as the general functioning of the institutions. The study also indicated that reporting sexual harassment incidents is the least likely thing to do by the victims because of fear of being punished or harassed again.
Effah-Chukwuma and Osarenren (2001) conducted the first national survey on the prevalence of violence against women in Nigeria titled “Project Alert on Women’s Right.” This study examined the extent of violence against young women in Nigerian universities and polytechnics. Questionnaires were administered to an average of 15 students from all Nigerian higher education institutions, ranging from first-year undergraduates to postgraduate levels. Thirty-three 33.4% of the respondents admitted that male lecturers, heads of departments, and deans made sexual advances to them; 28.9% indicated that the perpetrators were angry when they refused to comply with their demands. Fourteen (14.4%) percent were given a failing grade in their courses following their rejection of such advances. Forty-five (45%) percent indicated that they knew of cases of rape over the past year at their institutions. Forty-four (44.5%) percent of the respondents said that female students were harassed and threatened by cult members.

Summary of the Review

The above studies indicate that sexual harassment is prevailing in higher education institutions across geographical regions, culture, and ethnicity. Sexual harassment is significantly impacting students’ social, psychological, emotional, and academic lives as they struggle with the mental and physical frustration associated with such experiences. The manifestations of these unwelcomed sexual behaviors take different forms or shapes and the manner in which students perceive and respond to incidents depend chiefly on their gender, culture and level of education (Dietz-Uhler & Murrell, 1992; Marks & Nelson, 1993, Popvich, Gehlsuf, Jolton, Somers & Godinho, 1992).

Comparing Nigerian experience with that of other countries, the difference is mostly on the availability of policy initiatives that address sexual harassment (Adedokun, 2004; Ladebo, 2003). Sexual harassment was found to have a disruptive effect on the general functioning of
institutions as the perpetrators (mostly members of faculty), whose responsibilities include inculcating academic and moral knowledge to students, engage in behaviors that are contrary to their job ethic (Ladebo, 2003). Absence of workable policy contributed to the nonchalant attitudes of the administrators, staff and faculty who prey on their female students in exchange of grades and admission opportunities. Policy will be established and enforced if the administration has sound moral judgment and are conforming to the accepted standard of conduct designed by the institution. It becomes problematic when individuals in a position to create and enforce policy are the perpetrators. Lack of a feasible policy that protects victims also explains why sexual harassment is underreported, as students are worried about the perpetrators’ retaliation. The fear of been harassed again, humiliated, and ostracized cripples the victims’ disposition to tell their experiences. Rather, victims confided in their friends, and those who can no longer handle the pressure dropped their courses or leave college entirely in order to avoid the aggressors (Ladebo, 2003; Leonard et al., 1989).

Sexual harassment has been identified as the key stressor to women’s performance individually and collectively (Ladebo, 2003). The choice to study or participate in academic and social learning is impeded by the overwhelming experience or perception of harassment and the fear of failing the course. That explains why some students yield to the demands and threats from their perpetrators. As Keel (2005) pointed out, individual’s choice to respond to a situation is controlled by the perception and understanding of the potential pain and punishment that are associated with the object or the situation. In this state of mind, it would be very difficult for women students to engage or concentrate in any kind of activity, be it academic or social. According to Ulrich (2008) learning is the ability to modify behavior with respect to individually experienced interactions with the environment. Taking this definition to be true, a negative
experience of a college environment would impact a student's ability to adapt attitudes that would enhance his/her educational experience.

There are a wealth of studies outside the ones reviewed for this study that found that college environmental conditions have significant effects on students' educational experiences and attainments. That is, the number of years of schooling completed or degrees earned (Pascarella & Terenzini, 1991) and students' learning, both academically and personally (Belcheir, 2003). Other studies also indicated that students' perceptions of the campus climate may affect persistence by shaping the student's sense of belonging (Hurtado & Carter, 1997; Kaya, 2004). Fleming (1984) indicated that exposure to prejudice and discrimination on campus has a significant effect on black students' cognitive and affective development at predominantly white institutions. According to Fleming's thought, sexual harassment of women undergraduates in men academic fields may significantly impact their participation, success, and persistence in their chosen academic fields. That is to say, the likelihood that students will live and learn on a particular campus increases as they perceive the environment to be student-friendly and the probability decreases as they perceive hostility in the environment. As indicated by college impact models of student development students' success in college depends on many factors among which is students' fit within the environment. In other word, students perceive the college experience as satisfactory when they feel academically and socially integrated within the environment in which they live and learn. Student's fear or inner struggle with the college environment manifest in students' impaired academic performance, avoidance of persons or aggressors, absent or lateness to classes, resentments and disassociation with faculty and peers interactions, dropping out of courses, altered academic career plans and dropping out of college (Leonard et al., 1989, Ladebo, 2003; Wear & Autman, 2005).
A persistently hostile learning environment increases students' loss of focus in their study and contributes to distaste for learning, which results in less involvement in academic and social activities. Astin's (1984) involvement theory suggests that student involvement has a positive impact on students' development and learning. He hypothesized that the greater the student's involvement in college, the greater the amount of student learning and personal growth (p. 307).

Following Astin's original arguments, other researchers projected advantages associated with student involvement in college. Hewitt (2002) and Hunt and Rentz (1994) found that student involvement positively affect students' overall satisfaction with the college experience, fosters the continuing pursuit of academics, and facilitates personal growth and development. In other words, the more students are involved in academic and social activities the more likely they feel that they belong to their institution. The more women are constrained by environmental conditions such as sexual harassment (which limits their involvement or connection with self, faculty and peers) the more they feel alienated from the institution and the less they get involved or make quality effort in the educational activities.

Studies found strong relationship between quality of effort, learning, and persistence with students' perceptions of the college environment (Braxton, Sullivan, & Johnson, 1997; Kuh, Vesper, Connolly & Pace, 1997; Kuh, Pace, & Vesper 1997; Tinto, 1975; 1993; 1997). Perceived fit in the college environment includes involvements in activities, interactions and influence with peers (Astin, 1993); faculty (Astin, 1993; Kuh & Hu, 2001; Terenzini, Pascarella, & Blimling, 1996; Bean, 1985) and involvement in extracurricular activities (Bauer & Bennett, 2008; & Pascarella & Terenzini, 1979; 2005). Tinto's (1993) theory of student departure argued that the greater the level of academic and social integration or fit the greater chance of students remaining enrolled. In other words, as students are involved in educational opportunities that
promote personal and academic development in a student-friendly environment they feel successful, satisfied, and actualized. Meaning that unhealthy college environments such as one where sexual harassment is perceived and experienced, deprives students of the opportunity to excel personally and collectively.
Chapter III

METHODOLOGY

Overview of Research Methodology

This chapter describes the design of this study, the main focus of which is to investigate the impact of academic field on the prevailing sexual harassment experienced by women undergraduates in the fields of science and technology in Anambra State colleges and universities. Due to differences in the understanding and definition of sexual harassment across culture and ethnicity, this study utilized the Sexual Harassment on Campus Survey (SHCS) tool designed specifically to suit the Nigerian context to establish an in-depth knowledge of the impact of sexual harassment on women undergraduates’ educational experience. This tool was created by me and was used to identify and document the variables that underlie the nature and frequency of sexual harassment experiences of women undergraduates in the traditionally male academic fields in relation to that of women undergraduates in the traditionally female academic fields. These variables include (a) attitudes and behaviors exhibited by women students to avoid the risk of potential sexual harassment (Adjustment to Behavioral Exposure); (b) the preconceived beliefs about gender that women undergraduates have because of cultural, parental, or other social influences (Culturally-Embedded Gender Stereotypes); (c) actual experiences of harassing behaviors from faculty, staff and peers (Behavioral Exposure Index) and; (d) the overall judgment of women undergraduates of the extent to which they feel sexually harassed by their male faculty and peers (Perceived Sexual Harassment).
The Conceptual Framework

Figure 1 depicts the conceptual framework that guided this research study. The first level embodies the overall research question. The second level reflects the academic fields enrolled by women undergraduate participants. The third level displays the three constructs in the study: individual, organizational, and cultural variables. The first construct individual variables, refers to age, GPA, year of study, location of residence, living arrangement, marital status, number of children, and the participants' judgment of the extent to which they feel sexually harassed. The second construct organizational variables, refers to faculty and student gender ratios (the quantitative number of males and females faculty and students), academic and social comfort (the extent to which women undergraduates feel comfortable or fairly treated in their academic environment, and behavioral exposure which is the actual exposure to potentially harassing behaviors). The third construct, cultural variables, refers to culturally-embedded gender stereotypes (the preconceived beliefs about gender that women undergraduates have because of cultural, parental, or other social influences). The third level depicts the two hypothetical constructs: perceived sexual harassment and the adjustment to behavioral exposure of women undergraduates to avoid potential harassment.

The Logic Model

Figure 2 displays the logic model underlying the study design. For the purpose of this study the logic model was developed as a graphical representation of the conceptual framework as it relates to the formation of testable hypotheses. The logic model assumed that the three constructs (individual variables, organizational variables and cultural
variables) beyond academic fields affect the perceived sexual harassment and the adjustment to behavioral exposure of women undergraduates to situations that could be interpreted as harassment. Also, as an independent variable, perception of harassment in turn impacts the dependent variable the adjustment to behavioral exposure of women undergraduates to avoid potential harassment.

Figure 1  The Logic Model

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACADEMIC FIELD</td>
<td>PERCEIVED HARASSMENT</td>
</tr>
<tr>
<td>(1= Education, 2=Technology, 3=Life Sciences, 4=Hard Sciences)</td>
<td></td>
</tr>
<tr>
<td>INDIVIDUAL PROFILE</td>
<td>ADJUSTMENT TO BEHAVIOR</td>
</tr>
<tr>
<td>(Age, GPA, Year of Study, Location of Residence, Living Arrangement, Marital Status, Number of Children, and Participants’ Judgment of the Extent to Which They Feel Sexually Harassed)</td>
<td></td>
</tr>
<tr>
<td>ORGANIZATIONAL</td>
<td></td>
</tr>
<tr>
<td>PROFILE</td>
<td></td>
</tr>
<tr>
<td>Faculty/Student Gender Ratios, academic and social Comfort, Behavioral Exposure Index)</td>
<td></td>
</tr>
<tr>
<td>CULTURAL PROFILE</td>
<td></td>
</tr>
<tr>
<td>Culturally-Embedded Gender Stereotypes</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2

The Conceptual Framework

Research Questions

Does academic field impact the sexual harassment of women in the field of science and technology in Anambra State colleges and universities?

Academic Fields
(Arts, Preliminary Studies, Social Studies, Education, Postgraduate Studies, Law, Engineering Technology, Life Medicine, Natural Sciences, Environmental Sciences, and Management)

Individual, Organizational, and Cultural Profiles

Individual Variables
(Age, GPA, Year of Study, Location of Residence, Living Arrangement, Marital Status, Number of Children, and Participants' Judgment of the Extent to Which They Feel Sexually Harassed)

Perceived Sexual Harassment

Organizational Variables
(Faculty/Student Gender Ratio, Academic and Social Comfort, Behavioral Exposure Index)

Adjustment to Behavioral Exposure to Harassment

Cultural Variable
(Culturally-Embedded Gender Stereotypes)

Sexual Harassment Impact on Women's Educational Experience in the Field of Science and Technology
Developing the Survey Instrument for the Study

The survey instrument was constructed for the purposes of identifying not only the presence of sexual harassment, but also for identifying behaviors typically associated with sexual harassment experienced by women undergraduates in Anambra State colleges and universities. While residents of more developed countries are familiar with the concept of sexual harassment and behaviors that constitute sexual harassment, this concept is unfamiliar to women of less developed countries, such as the sub-Saharan African countries particularly Nigeria. In Nigeria, deeply-rooted cultural influences serve to desensitize many of the women. By identifying behaviors consistent with sexual harassment, the presence of sexual harassment will be more easily studied and its effects more easily measured.

The Sexual Harassment on Campus Survey (SHCS) tool created for this study is guided by the constructs in the conceptual map. The questions addressed five constructs that explored how academic field impacts sexual harassment against women undergraduates in Anambra colleges and universities. These constructs include: Individual Variables (Age, GPA, Year of Study, Location of Residence, Living Arrangement, Marital Status, Number of Children, and Participant's Judgment of the Extent They Feel Harassed); Organizational Variables (Faculty Gender Ratio, Student Gender Ratio, Academic and Social Comfort, and Behavioral Exposure Index); Cultural Variables (Culturally-Embedded Gender Stereotypes); Perceived Sexual Harassment and Adjustment to Behavioral Exposure to Potential Harassment. Simple English was used for better understanding of the concept. Clear instruction and font are also considered very important for clarity purposes. Although tendencies to create extensive survey exist, time is one of the main items that were considered during the construction of the survey. It is important that the survey take a minimal length of time so that it is not an obstacle to the completion of the
survey. The survey is designed to be completed within 15 minutes. The tone of the questions is designed to be user-friendly. The questions are structured under each construct for clarity of purpose and each question is measured with a likert scale, open-ended questions, and a checklist. The survey was handed to the participants by me.

**Sample Size**

The sample size for this study was determined by a method outlined by Dr. Martin J. Finkelstein (M. J. Finkelstein, personal communication, November 14, 2009). To determine the sample size necessary for the multiple regressions, the number of independent variables was multiplied by the number of categories within each variable in order to define the number of cell in a matrix of the results. To then ensure the size of the sample, with an estimated 50% response rate, the desired sample was doubled to yield a pool of several hundreds to which the survey will be sent. This method yields a desired sample size of 200 with 400 surveys being sent.

**Sample Selection and Data Collection**

The sample for this study was selected from the population of 760 women undergraduates in the fields of science and technology and 2140 women undergraduates in other academic fields that are currently enrolled in the 2009-2010 academic year at Nnamdi Azikiwe University, Madonna University, Anambra State University, and Anambra State Polytechnic in Anambra State of Nigeria. The lists of women undergraduates enrolled in the 2009-2010 academic year were accessible through the Head of Departments (HOD) in the sampled institutions. The sampling in this study occurred in two stages: the informational stage and the survey administration stage.

**Informational Stage**
Recruitment letters (Letter of Solicitation) was sent to the 760 women undergraduates in the fields of science and technology and 2140 women undergraduates in other academic fields through their heads of departments (HOD). Only 418 of the 2900 women undergraduates responded to the letter of solicitation. These 418 prospective participants were women undergraduates from the fields of Engineering Technology, Environmental Sciences, Health Sciences and Technology, Management Sciences, Natural Sciences, Arts, Education, Preliminary Studies, Social Studies. A week before the actual day of the study, the 418 prospective participants who responded to the recruitment letter were invited for a brief meeting during which a cover letter explaining further the aim of the study and what was to be expected of the participants was distributed.

Survey Administration Stage

On the day of the study only 310 out of the 418 women undergraduates who came to the meeting the previous week reported at the Nnamdi Azikiwe University Complex, Hall B for the study. Most of the participants who showed up for the study came from Nnamdi Azikiwe University which may be as the result of the two-stage processes (informational and survey administration) adapted in this study or other reasons such as transportation problem. The Sexual Harassment on Campus Survey (SHCS) was passed out to the participants. It took them approximately 15 minutes to complete.

Research Questions and Null Hypotheses

This study sought to test the following questions and null hypotheses:

1. What is the association of Academic Field in terms of culture and structure (Faculty and Student Gender Ratios) relative to other Institutional and Individual characteristics (Age, GPA,
Year of Study, Location of Residence; Living Arrangement; Marital Status Number of Children, Academic and Social Comfort, Behavioral Exposure Index), and Culturally-Embedded Gender Stereotypes in predicting the perceptions of sexual harassment?

H_{01}: Academic Field in terms of culture and structure (Faculty and Student Gender Ratios) relative to other Institutional and Individual characteristics (Age, GPA, Year of Study, Location of Residence; Living Arrangement; Marital Status Number of Children, Academic and Social Comfort, Behavioral Exposure Index), and Culturally-Embedded Gender Stereotypes are not associated with the perceptions of sexual harassment.

2. What is the association of Academic Field in terms of culture and structure (Faculty and Student Gender Ratios) relative to other Institutional and Individual characteristics (Age, GPA, Year of Study, Location of Residence; Living Arrangement; Marital Status Number of Children, Academic and Social Comfort, Behavioral Exposure Index) and Culturally-Embedded Gender Stereotypes in predicting the Adjustments to Behavioral Exposure of women undergraduates to potential situations that could lead to harassment?

H_{01}: Academic Field in terms of culture and structure (Faculty and Student Gender Ratios) relative to other Institutional and Individual characteristics (Age, GPA, Year of Study, Location of Residence; Living Arrangement; Marital Status Number of Children, Academic and Social Comfort, Behavioral Exposure Index) and Culturally-Embedded Gender Stereotypes are not associated with the adjustment to behavioral exposure of women undergraduates to potential situations that could lead to harassment.

Study Variables
The two dependent variables used in the hypothesis testing were Perceived Sexual Harassment and Adjustments to Behavioral Exposure. Perceived Sexual Harassment was used as a dependent variable in the testing of the first hypothesis and as an independent variable in the testing of the second hypothesis utilizing Adjustments to Behavioral Exposure as a dependent variable. The overarching independent variable in this study was Academic Field. However, with regards to hypothesis testing, there are 7 other co-independent variables: Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment. Behavioral Exposure Index refers to the potentially harassing behavior by faculty and peers. Culturally-Embedded Gender Stereotypes is the preconceived beliefs about gender that women undergraduates have because of cultural, parental, or other social influences. Academic and Social Comfort is the extent to which women undergraduates feel comfortable or fairly treated in their academic environment.

Table 1
Research Independent and Dependent Variables of the Sexual Harassment on Campus Survey

<table>
<thead>
<tr>
<th>Variable Names</th>
<th>Label Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOL</strong></td>
<td>Student Currently Attending</td>
</tr>
<tr>
<td><strong>LIVING1</strong></td>
<td>Where Currently Living</td>
</tr>
<tr>
<td><strong>LIVING2</strong></td>
<td>Living Arrangement</td>
</tr>
</tbody>
</table>

<p>| SCHOOL: | 1=Nnamdi Azikiwe University; 2=Other |
| LIVING1: | 1=On-campus dormitory; 2=On-campus apartment; 3=Off-campus dormitory; 4=Off-campus Apartment |
| LIVING2: | 1=I live alone; 2=I live with a roommate; 3=I live with my parent |</p>
<table>
<thead>
<tr>
<th>Variable Names</th>
<th>Label Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Variables</strong></td>
<td>Sexual Harassment on Campus Survey (SHCS)</td>
</tr>
<tr>
<td><strong>PROGRAM</strong></td>
<td>Program Currently Enrolled</td>
</tr>
<tr>
<td><strong>Sexual Harassment on Campus Survey (SHCS)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td>Age</td>
</tr>
<tr>
<td><strong>MARITAL</strong></td>
<td>Marital Status</td>
</tr>
<tr>
<td><strong>CHILDREN</strong></td>
<td>How many children</td>
</tr>
<tr>
<td><strong>GPA</strong></td>
<td>Current Cumulative Grade Point Average (GPA)</td>
</tr>
<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ACADEMICFIELDS</strong></td>
<td>Academic Fields</td>
</tr>
</tbody>
</table>

**ACADEMICFIELDS:** Derived from the variable PROGRAM by separating participants into four groups:
1= Education (Reference Category); 2= Technology; 3= Life Sciences; 4= Hard Science

**PROGRAM:**
1= Arts; 2= Education; 3= Engineering Technology; 4= Environmental Sciences; 5= Health Science & Technology; 6= Law; 7= Management Sciences; 8= Medicine; 9= Natural Sciences; 10= Preliminary Studies; 11= School of Postgraduate Studies; 12= Social Studies

**MARITAL:**
1= Single; 2= Married; 3= Divorced; 4= Widowed

- 4= I live with my husband;
- 5= I live with my boyfriend;
- 6= I live alone with my kid/s
<table>
<thead>
<tr>
<th>Variable Names</th>
<th>Label Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERCEIVETOTAL</strong></td>
<td>Extent to which student has been sexually harassed</td>
</tr>
<tr>
<td><strong>Q14</strong></td>
<td>PERCEIVETOTAL: Composite score consisting of the sum of 1 survey question</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td>Age</td>
</tr>
<tr>
<td><strong>GPA</strong></td>
<td>Current Cumulative Grade Point Average (GPA)</td>
</tr>
<tr>
<td><strong>DEPENDENT VARIABLES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PERCEIVETOTAL</strong></td>
<td>Extent to which student has been sexually harassed</td>
</tr>
<tr>
<td><strong>Q28 – Q39</strong></td>
<td>PERCEIVETOTAL: Composite score consisting of the sum of 1 survey question</td>
</tr>
<tr>
<td><strong>ACADEMICFIELDS</strong></td>
<td>Academic Fields</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td>Age</td>
</tr>
</tbody>
</table>

**Hypothesis 1**

**DEPENDENT VARIABLE**

**PERCEIVETOTAL**: Extent to which student has been sexually harassed

**Q14**: PERCEIVETOTAL: Composite score consisting of the sum of 1 survey question

**AGE**: Age

**GPA**: Current Cumulative Grade Point Average (GPA)

**INDEPENDENT VARIABLES**

**ACADEMICFIELDS**: Derived from the variable PROGRAM by separating participants into four groups: 1=Education (Reference Category); 2=Technology; 3=Life Sciences; 4=Hard Sciences
<table>
<thead>
<tr>
<th>Variable Names</th>
<th>Label Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACULTYGENDRATIO</td>
<td>Ratio of Male Faculty to Female Faculty</td>
</tr>
<tr>
<td>STUDENTGENDRATIO</td>
<td>Ratio of Male Students to Female Students</td>
</tr>
<tr>
<td>CULTURALLYEMBTOTAL</td>
<td>The extent to which traditional culture has influenced the beliefs and values of the student.</td>
</tr>
<tr>
<td>FACULTYGENDRATIO: Ratio of male faculty to female faculty expressed as a percentage for each response in the variable PROGRAM.</td>
<td></td>
</tr>
<tr>
<td>STUDENTGENDRATIO: Ratio of male students to female students expressed as a percentage for each response in the variable PROGRAM.</td>
<td></td>
</tr>
<tr>
<td>CULTURALLYEMBTOTAL: Composite score consisting of the sum of the 9 survey questions 2-10.</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesis 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>ADJUSTMENTTOTAL</td>
<td>Adjustment to Behavioral Exposure to potential harassment</td>
</tr>
<tr>
<td>Q35 – Q41</td>
<td>ADJUSTMENTTOTAL: Composite score consisting of the sum of the 6 survey questions 35-41.</td>
</tr>
<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>ACADEMICFIELDS</td>
<td>Academic Fields</td>
</tr>
</tbody>
</table>
| ACADEMICFIELDS: Derived from the variable PROGRAM by separating participants into four groups 1=Education (Reference Category); 2=Technology; 3=Life Sciences; 4=Hard
<table>
<thead>
<tr>
<th>Variable Names</th>
<th>Label Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>Age</td>
</tr>
<tr>
<td>FACULTYGENDRATIO</td>
<td>FACULTYGENDRATIO: Ratio of male faculty to female faculty expressed as a percentage for each response in the variable PROGRAM.</td>
</tr>
<tr>
<td>CULTURALLYEMBTOTAL</td>
<td>CULTURALLYEMBTOTAL: Composite score consisting of the sum of the 9 survey questions 2–10.</td>
</tr>
<tr>
<td>PERCEIVETOTAL</td>
<td>PERCEIVETOTAL: Composite score consisting of the sum of 1 survey question 34.</td>
</tr>
<tr>
<td>BEHAVIORALTOT</td>
<td>BEHAVIORALTOT: Composite score consisting of the sum of the 11 questions 22-33</td>
</tr>
</tbody>
</table>

**BEHAVIORALTOT:** 122–33: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree
Composite Variables and Scale Reliability

Prior to utilizing the subscales for hypothesis testing, the internal reliability and consistency of the subscales was measured using Cronbach's alpha. For the purposes of this study, alpha coefficients were calculated for each of the subscales and the following guidelines were used to determine the degree to which each subscale measured the intended phenomena: greater than .90 was considered an excellent measure, greater than .80 was considered a good measure, greater than .70 was considered an acceptable measure, greater than .60 was considered a questionable measure, greater than .50 was considered a poor measure, and less than .50 was considered an unacceptable measure (George & Mallery, 2003).

Adjustment to Behavioral Exposure

The Adjustment to Behavioral Exposure subscale was the first subscale tested. The Adjustment to Behavioral Exposure subscale is intended to measure the level of participants' behavioral adjustment due to fear or experiences of sexual harassment. Six items comprised the Adjustment to Behavioral Exposure subscale: questions 26 - 31. Participants with missing values for any of the items of the subscale were not included in the analysis. The 39 participants with missing values were excluded, leaving 272 valid cases. While missing values for individual questions were minimal (question 26 and question 31 were each missing one response), 37 responses were missing from question 29. The combination of the 6 items comprising the Adjustment to Behavioral Exposure subscale yielded a Cronbach's alpha coefficient of .89, which is considered a good measure. However, if question 29 was removed from the analysis, Cronbach's alpha coefficient increased to .90, allowing for the inclusion of the 37 participants with missing values for question 29. The combination of the six items comprising the
Adjustment to Behavioral Exposure subscale, following the removal of question 29, yielded a Cronbach's alpha coefficient of .90, which is considered an excellent measure.

Perceived Sexual Harassment

The second subscale tested was the Perceived Sexual Harassment subscale, representing behaviors consistent with sexual harassment. The Perceived Sexual Harassment subscale was comprised of question 34. It is theorized that sexual harassment is so deeply rooted in the culture of the subjects participating in the study, that self-identification of sexual harassment would be difficult if not impossible. Therefore, the Perceived Sexual Harassment subscale is a measure of the overall judgment of women undergraduates that they have been sexually harassed by their male instructors and peers. Participants with missing values for any of the items of the subscale were not included in the analysis. Those with missing values numbered 9, accounting for fewer than 3% of the total responses. One item (survey questions 34) comprised the Perceived Sexual Harassment subscale. One item comprising the Perceived Sexual Harassment subscale yielded a Cronbach's alpha coefficient of .91, which is considered an excellent measure.

Behavioral Exposure Index

The third subscale tested for reliability and internal consistency was the Behavioral Exposure Index subscale. Behavioral Exposure Index measures the participants' overall experiences of behaviors that could be interpreted as sexual harassment. Low scores on the Behavioral Exposure Index subscale are consistent with sexual harassment having detrimental effects on the overall academic experience of the participant. Participants with missing values for any of the items of the subscale were not included in the analysis. Those with missing values numbered 16, accounting for approximately 5% of the total responses. Eleven questions (survey questions 22 - 33) comprised the Behavioral Exposure Index subscale. The combination of the
11 items of the Behavioral Exposure Index subscale yielded a Cronbach's alpha coefficient of .89, which is considered a good score.

**Culturally-Embedded Gender Stereotypes**

The deeply-rooted cultural values of the Igbo, an indigenous tribe accounting for the largest percentage of faculty and students in Anambra State colleges and universities, heavily influences the thought processes of many women studying in Anambra State colleges and universities. Traditionally, women are not treated as equal but have to follow a path determined by their male counterparts. Therefore, women are conditioned to accept many of the actions considered to be sexual harassment in more developed regions of the world.

It is possible that sexual harassment is so deeply rooted in the perceptions of women undergraduates in Anambra colleges and universities that these women students may be unaware when they are being sexually harassed. The Culturally-Embedded Gender Stereotypes measured the preconceived beliefs about gender that women undergraduates have because of cultural, parental, or other social influences. Participants with missing values for any of the items of the subscale were not included in the analysis. Those with missing values numbered 15, and accounted for approximately 5% of the responses. Without the missing values, 295 valid cases were used in the testing of reliability. Nine items (survey questions 2-10) comprised the Culturally-Embedded Gender Stereotypes subscale. The combination of these nine items yielded a Cronbach's alpha coefficient of .78, which is an acceptable score.

**Data Analysis**

The procedures described in this section analyzed the impact of sexual harassment on women undergraduates' educational experience as measured by Sexual Harassment on Campus Survey (SHCS). The SHCS addressed 4 constructs: Culturally-Embedded Gender Stereotypes,
Behavioral Exposure Index, Perceived Sexual Harassment, and Adjustment to the Behavioral Exposure Index. The SHCS survey tool was administered to 310 women undergraduates in the sampled institutions who are enrolled in the fields of Engineering Technology, Environmental Sciences, Health Sciences and Technology, Management Sciences, Natural Sciences, Arts, Education, Preliminary Studies, and Social Studies.

Marshal and Rossman (1989) defined data analysis as the "process of creating order, structure, and meaning to the bulk of collected data". SHCS was used to determine the impact of sexual harassment on women undergraduates' educational experience. For an in-depth understanding of the impact of sexual harassment the study focused on the impact of academic fields on the frequency and nature of the harassment experienced by the participants. Descriptive statistics was collected from the demographic profiles of the research participants and on each question of the survey variables. Frequency and percentage measurements were used to explore patterns in the responses to the survey questions. The Cronbach's alpha coefficients were used to determine the quality of the survey subscales. Finally, a hierarchical linear regression was used to test the predictive power of the independent variables on the Perceived Sexual Harassment and on the Adjustment to Behavioral Exposure Index used by participants to avoid potential harassment incidents. Three successive models were tested to determine the best combination of predictor variables for Perceived Sexual Harassment and Adjustment to Behavioral Exposure Index scores.
Chapter IV

ANALYSIS OF THE DATA

Introduction

In the Igbo culture of Anambra State careers are gender-determined. As tradition ascribes roles for individual genders, tradition also stratifies careers based on the preconceived benefits to excel in the gender roles and expectations. With the exception of nursing, careers in science and technology are male dominated, while careers in the fields of education are female dominated. The care characteristics of the nursing preferences separated it from other science fields and made it traditionally career for women. Women who defy the traditional career mandate by competing with men in traditionally male fields are regarded as outliers and their action is perceived as insult to manhood or a taboo (Allele-Williams, 1989; Alutu & Eraikhuen, 2004).

As women on the continent of Africa enter into academic fields that are traditionally male-oriented, such as science and technology, they encounter multiple challenges that limit their opportunity to succeed in their chosen academic fields.

Literature suggested that sexual harassment is one of the major problems facing women in higher education across countries of the world (AAUW, 2006; Ladebo, 2003 & Panos, 2003). Particularly, sexual harassment is pertinent to the colleges and universities on the continent of Africa. Most African colleges and universities, including those in Nigeria have no policy initiatives that address sexual harassment. This makes the problem more complex and more challenging for women in the continents’ colleges and universities (Adedokun, 2004; Effa-Chkwuuma & Osarenren, 2001; Kalof et al., 2001; Ladebo, 2003; Leonard et al., 1989). In
Nigeria for instance, sexual harassment is not perceived as a crime and so there is no legal ground to prosecute sexual harassment offenders (Amnesty International, 2007; Foluso, 2008).

As a global malady, sexual harassment has been researched extensively in many parts of the world except in Africa. African culture stands out as the key reason why sexual harassment is not recognized as a criminal offense (Abati, 2006; Allele-Williams, 1989). A wealth of studies done on sexual harassment throughout the world analyzed it from different perspectives including attitudes and perception (Foulis, 1997; Turner & Torres, 2006) and experiences (Leonard et al., 1989; Whatley & Wasienleski, 2001) of primary and high schools students, undergraduates, graduates, faculty, and staff. Other studies addressed the issues of who harassed and who has been harassed as well as types, frequency, and behaviors considered as sexual harassment (Kalof et al., 2001; Leonard et al., 1989; Ladebo, 2003). Some studies investigated the impact of sexual harassment on the victims. These impacts included avoidance of the aggressors (Ladebo, 2003), poor academic achievement (Ndlovu, 2001), and impaired psychological well-being (Popvich, 1988).

**Purpose of the Study**

The main purpose of this study was to contribute to the wealth of studies done in this area, with Africa as the focus. To this end, this study was designed to determine how academic field impacted the perceived sexual harassment experienced by women undergraduates in the fields of science and technology in Anambra State higher education institutions. To accomplish this task, the study set out to investigate how Academic Field, Institutional Variables (Faculty and Student Gender Ratios), Students’ Demographic Profile (Age and GPA), Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes impacted the perceived sexual harassment experienced by women undergraduates in Anambra State colleges and universities.
Secondly, the study explored how these variables Academic Field, Institutional Variables (Faculty and Student Gender Ratios), Students’ Demographic Profile (Age and GPA), Behavioral Exposure Index, Culturally-Embedded Gender Stereotypes, and Perceived Sexual Harassment influenced the Adjustment to Behavioral Exposure of women undergraduates to potential sexual harassment in Anambra State colleges and universities.

It was hoped that the study would enable policy makers to create or improve policy initiatives that protect the rights of women in Anambra State colleges and universities. Also, it was hoped that through this study, higher education institutions on the continent of Africa, especially in Nigeria might establish prevention and intervention programs that would address the needs of the victims as well as protect women from future attacks.

Overview of the Chapter

This chapter presents the analysis of the research findings. These include descriptive statistics gathered from the demographic profiles of the research participants across each question of the survey. The frequencies and percentages of responses to the survey questions are reported. Finally, the Cronbach’s alpha coefficients used to determine the quality of the survey subscales and hierarchical linear regressions used to test the hypotheses are reported. The chapter is presented in the following order:

The demographic profile of the research participants which include: (a) Academic Field (b) Institutional Affiliation of the Participants; (c) Year of Study of the Participants; (d) Location of Residence; (e) Living Arrangement; (f) Marital Status and; (g) Number of Children.

The descriptive frequencies of the subscales: (a) Culturally-Embedded Gender Stereotypes; (b) Academic and Social Comfort (c) Behavioral Exposure Index (d) Perceived
Sexual Harassment; (e) Students’ Judgment of the Extent to Which They Feel Sexually Harassed and; (f) Participants’ Adjustment to Behavioral Exposure Index to Potential Harassment.

The description of scale and key variables (a) Independent Variables; (b) Dependent Variables; and the hierarchical linear regression followed by the summary of the quantitative findings.


Academic Field of the Participants

As an integral part of the hypotheses being tested, the relationship of academic field with the occurrence of sexual harassment was explored. It was proposed in this study that women undergraduates studying in the traditionally female academic fields would perceive or experience fewer behaviors that could be interpreted as sexual harassment than those studying in traditionally male academic fields. Table 2 presents the responses on the academic field. The findings indicated that

- 22.6% of the participants enrolled in the field of Arts,
- 14.4% in the field of Management Sciences,
- 12.1% in the field of Environmental Sciences,
- 10.2% in the field of Engineering Technology,
- 10.2% in the field of Natural Sciences,
- 9.2% in the field of Education,
- 5.9% in the field of Health Science & Technology,
- 4.9% in the field of Social Studies,
- 4.3% in the field of Medicine,
3.6% in the field of Law,
1.3% were in the field of Preliminary Studies, and
1.3% were in the field of School of Postgraduate Studies.

Notably, almost a quarter of the participants enrolled in the field of Arts (22.6%) which was anticipated due to the Nigerian cultural beliefs and practices. Equally notable was the percentage of participants in the field of Engineering Technology (10.2%). There was an increase over the years on women undergraduate enrollments in the fields of Engineering Technology (10.2%) when compared with Onokala and Onwurah’s (2001) findings on Civil Engineering (5%) and Mechanical Engineering Technology (5.4%).

Table 2

<table>
<thead>
<tr>
<th>Field</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditionally Male Fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>31</td>
<td>10.2</td>
</tr>
<tr>
<td>Management Sciences</td>
<td>44</td>
<td>14.4</td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>37</td>
<td>12.1</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>31</td>
<td>10.2</td>
</tr>
<tr>
<td>Health Science &amp; Technology</td>
<td>18</td>
<td>5.9</td>
</tr>
<tr>
<td>Medicine</td>
<td>15</td>
<td>4.3</td>
</tr>
<tr>
<td>Law</td>
<td>11</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Traditionally Female Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>69</td>
<td>22.6</td>
</tr>
<tr>
<td>Education</td>
<td>28</td>
<td>9.2</td>
</tr>
<tr>
<td>Social Studies</td>
<td>18</td>
<td>4.9</td>
</tr>
<tr>
<td>Preliminary Studies</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>School of Postgraduate Studies</td>
<td>4</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Institutional Affiliation of the Participants

The study analyzed the colleges and universities that participants were attending. The responses are presented in Figure 3. The findings follow:

- 46% of the participants attended Nnamdi Azikiwe University, Awka.
- 32% attended Federal Polytechnic, Oko,
- 19% attended Anambra State University, Nnewi,
- 2% attended Madonna University, Okija, and
- 0.3% attended St. Paul's University, Awka.

Figure 3. Institutional Affiliation of Participants (in Percent), N=310.
Year of Study of the Participants

The year of study of the participants was investigated. Responses to this question are presented graphically in Figure 4. The findings indicated that

- 63% of the participants were senior,
- 11% were junior,
- 10% were sophomore, and
- 16% were freshmen.

Figure 4. Year of Study of Participants (in Percent), N=310.

Location of the Participants’ Residence

The study also explored the location of the participants’ residence. The study postulated that the location of participants’ residence would possibly contribute to additional instances of sexual harassment above and beyond those experienced in the classroom environment. Figure 5 displays the responses to this question. The findings indicated that 90.9% of the participants...
lived in the institution-owned buildings. The following are the percentages of women undergraduates that lived in each location.

- 37.4% of the participants lived in Off-Campus Apartment,
- 27% lived in Off-Campus Dormitory,
- 27% lived in On-Campus Dormitory, and
- 9% lived in the Family House.

Figure 5. Location of Residence of Participants (in Percent), N=310.

Living Arrangement of the Participants

The living arrangement of women undergraduates in the study was also examined. It is possible that the living arrangement of the participants could make them more vulnerable to sexual harassment as well as influence their perception or tolerance of behaviors consistent with sexual harassment. Figure 6 displays the findings on the living arrangement of the participants. The findings on the living arrangement of the participants are as follows:
• 43% of the participants lived alone,
• 37% lived with a roommate,
• 10% lived with family,
• 5% lived with a friend,
• 4% lived with spouse, and
• 1% lived with kids.

![Pie chart showing living arrangements of participants (in percent), N=310.](image)

**Figure 6. Living Arrangement of Participants (in Percent), N=310.**

**Participants' Age, Marital Status and Number of Children**

The age, marital status, and number of children of the study subjects were also investigated. The study hypothesized that younger women undergraduates that are single with no children would perceive more behaviors as sexual harassment than older, married, widowed, and divorced women undergraduates. Figure 7 presents the frequency of responses to marital status and Figure 8 presents participants' responses on the number of children. On the marital status the study indicated the following
The average age range was 18 to 30 years ($M = 22.94$, $SD = 2.64$),

- 84% of the participants were single,
- 15% were married,
- 3% was widowed, and
- 1% was divorced.

Figure 7. Marital Status of Participants (in Percentage), N=310.

Figure 8 presents the percentages of participants’ responses on the number of children. The study indicated the following:

- 89% of the participants had no children,
- 3% had 1 child,
- 4% had 2 children,
- 3% had 3 children, and
• 1% of the participants had 4 children.

Figure 8. Number of Children of Participants (in Percent), N=310.

Dependent Variables: Basic Descriptive Frequencies Associated With

Dependent Variables

To analyze the descriptive variables a frequency distribution was calculated for each of the survey items to explore the number of responses and the percentages of the total responses accounted for by each category. With respect to this study, knowledge of how Igbo culture influenced women undergraduates’ behavior and attitudes was important for a clear understanding of the impact of sexual harassment on women undergraduates’ educational experience in the Anambra State of Nigeria. For this reason, the Culturally-Embedded Gender Stereotypes score was first calculated. This was followed by Academic and Social Comfort,
Behavioral Exposure Index score, Participants' Judgment of the Extent to Which They feel Sexually Harassed, and the Adjustment to Behavioral Exposure Index score.

Higher scores are indicative of a dominant presence of the measured phenomena except for the Adjustment to Behavioral Exposure Index subscale where lower scores are indicative of a dominant presence of the measured phenomena. In other words, for the subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment the participants with high scores exhibit signs that they experienced behaviors that could be interpreted as sexual harassment or have been affected by behaviors that could be interpreted as sexual harassment. For the subscale Adjustment to Behavioral Exposure Index high score means that participants are doing more to avoid encountering behaviors that can be interpreted as harassment.

Culturally-Embedded Gender Stereotypes

Nigerian gender socialization, particularly the Igbo of Anambra State, was embedded in strong, rigid, cultural beliefs and practices. To measure the extent to which Igbo culture has influenced the beliefs and values of women undergraduates, culturally-embedded gender stereotypes within the participants' learning environment was investigated. Table 3 depicts the findings on Culturally-Embedded Gender Stereotypes. The result suggested:

Approximately 1 out of 4 (25.5%) of the participants agreed or strongly agreed that students of the opposite sex are better students and more able to succeed in their academic field.

About 1 out 2 (47.4%) of the participants agreed or strongly agreed that students of the opposite sex are better able to help them academically.
Almost 2 out 5 (39.9%) of the participants agreed or strongly agreed that they did not feel there was anything wrong with being treated differently because of their gender, including being treated negatively.

Approximately 1 out 4 (26.9%) of the participants agreed or strongly agreed that women should not be in certain academic fields.

About 1 out 6 (16%) of the participants agreed or strongly agreed that sometimes women deserve to be sexually harassed because they are not equal to men.

Approximately 7 out 10 (69.6%) of the participants agreed or strongly agreed that sometimes women deserve to be sexually harassed because of the way they dress.

About 1 out of 2 (48.4%) of the participants agreed or strongly agreed that if women are treated negatively by a man, they probably did something to deserve it.

One out of 8 (12.9%) of the participants agreed or strongly agreed that women should not be professionals; women should just raise families.

One out of 6 (15.9%) of the participants agreed or strongly agreed that if women are sexually harassed, it is better to ignore it and not report it.

In summary, while possibly conditioned to respond negatively to overt statements of male chauvinism, participants perceived more subtle attacks on the equality of women positively. This could indicate a social conditioning through male cultural influences. Responses to overt statements of inequality were very polarized. More subtle statements elicited either a split response or an opposite response. The statement that sometimes women deserved to be sexually harassed because of the way they dress, received a majority of positive response, with a
cumulative total of 69.6% between agreed and strongly agreed. The same held true for responses to the statement: If women are treated negatively by a man, they probably did something to deserve it. Exhibiting self-deprecating tendencies, about 1 out of 2 (48.4%) of the participants also agreed or strongly agree with the statement. Worth noting are the responses to the question: Women should not be professionals; women should just raise families. Overwhelmingly, 7 out of 10 (73.8%) of the participants either disagreed or strongly disagreed with this statement, suggesting that modernism has crept into African, and particularly Igbo culture.

Table 3

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>I feel that students of the opposite sex are better students and more able to succeed in my field of study.</td>
<td>39</td>
<td>12.6</td>
<td>146</td>
<td>47.1</td>
</tr>
<tr>
<td>I feel that students of the opposite sex are better able to help me academically.</td>
<td>27</td>
<td>8.7</td>
<td>88</td>
<td>28.4</td>
</tr>
<tr>
<td>I don’t feel there is anything wrong with being treated differently because of my gender, including being treated negatively.</td>
<td>43</td>
<td>14.1</td>
<td>105</td>
<td>34.3</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree N</td>
<td>Strongly Disagree %</td>
<td>Disagree N</td>
<td>Disagree %</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>----------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Women should not be in certain fields of study: only men should be in certain fields of study.</td>
<td>74</td>
<td>24.1</td>
<td>113</td>
<td>36.8</td>
</tr>
<tr>
<td>Sometimes women deserve to be sexually harassed because they are not equal to men.</td>
<td>97</td>
<td>31.7</td>
<td>113</td>
<td>36.9</td>
</tr>
<tr>
<td>Sometimes women deserve to be sexually harassed because of the way they dress.</td>
<td>15</td>
<td>4.9</td>
<td>30</td>
<td>9.7</td>
</tr>
<tr>
<td>If women are treated negatively by a man, they probably did something to deserve it.</td>
<td>32</td>
<td>10.4</td>
<td>58</td>
<td>18.8</td>
</tr>
<tr>
<td>Women should not be professionals; women should just raise families.</td>
<td>130</td>
<td>42.1</td>
<td>98</td>
<td>31.7</td>
</tr>
<tr>
<td>If a woman is sexually harassed, it is better to just ignore it and not report it.</td>
<td>109</td>
<td>35.4</td>
<td>100</td>
<td>32.5</td>
</tr>
</tbody>
</table>

**Participants' Academic and Social Comfort**

To determine the extent to which women undergraduates feel comfortable or fairly treated in their academic environment Academic and Social Comfort was calculated. Table 4 displays the findings of this analysis. The findings indicated that:
Nine out of 10 (91.4%) of the participants agreed or strongly agreed that they had the opportunity to compete for scholarship in their respective academic field.

Nine out of 10 (92.3%) of the participants agreed or strongly agreed that they feel they received the help they should receive in their classes.

Approximately 9 out of 10 (85.9%) of the participants agreed or strongly agreed that their papers and tests were graded fairly.

Nine out of 10 (93.3%) of the participants agreed or strongly agreed that they are respected by male peers.

About 9 out of 10 (85.2%) of the participants agreed or strongly agreed that they are respected by instructors.

About 9 out 10 (86.1%) of the participants agreed or strongly agreed that they are respected by faculty and staff.

Four out of 5 (84.7%) of the participants agreed or strongly agreed that they have opportunities to advance in their chosen academic fields.

Four out of 5 (83.5%) of the participants agreed or strongly agreed that they can freely share their opinions in class.

About 9 out 10 (87.8%) of the participants agreed or strongly agreed that they can freely participate in class discussions.

Approximately 9 out 10 (85.7%) of the participants agreed or strongly agreed that they can freely ask questions in class.

Four out of 5 (83.5%) of the participants agreed or strongly agreed that they participate in group projects and that their contributions were accepted.
Overall, the findings indicated that participants felt comfortable in their respective academic fields with regard to equity in participation and opportunity to compete for scholarships. They believed they were treated fairly, respected, and that they had the opportunity to compete with males in their academic fields. The participants’ high score on Academic and Social Comfort clearly showed that women undergraduates feel basically comfortable as individuals, even in an environment that was highly gendered.

Table 4

Frequency Distributions on Academic and Social Comfort (in Percent) N=310.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>I feel I have the opportunity to compete for scholarships.</td>
<td>10 3.2</td>
<td>7 2.3</td>
<td>9 2.9</td>
<td>206 66.2</td>
</tr>
<tr>
<td>I feel I receive the help I should receive in my classes.</td>
<td>9 2.9</td>
<td>10 3.2</td>
<td>5 1.6</td>
<td>217 69.8</td>
</tr>
<tr>
<td>I feel my papers and tests are graded fairly.</td>
<td>13 4.2</td>
<td>9 2.9</td>
<td>22 7.1</td>
<td>212 68.2</td>
</tr>
<tr>
<td>I feel I am respected by my peers and other students.</td>
<td>5 1.6</td>
<td>5 1.6</td>
<td>11 3.5</td>
<td>226 72.7</td>
</tr>
<tr>
<td>I feel I am respected by my instructors.</td>
<td>8 2.6</td>
<td>16 5.1</td>
<td>22 7.1</td>
<td>210 67.5</td>
</tr>
<tr>
<td>I feel I am respected by department faculty and staff (Instructors, Office Assistants, and Administrators)</td>
<td>6 1.9</td>
<td>8 2.6</td>
<td>29 9.4</td>
<td>197 63.5</td>
</tr>
<tr>
<td>I feel I have the opportunity to advance in my field.</td>
<td>8 2.9</td>
<td>15 5.5</td>
<td>19 6.9</td>
<td>128 46.7</td>
</tr>
</tbody>
</table>
Frequency Distributions on Academic and Social Comfort (in Percent) N=310.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can freely share my opinions in class.</td>
<td>9 2.9</td>
<td>18 5.8</td>
<td>24 7.8</td>
<td>199 64.4</td>
<td>59 19.1</td>
</tr>
<tr>
<td>I can freely participate in class discussions.</td>
<td>2 0.6</td>
<td>14 4.5</td>
<td>22 7.1</td>
<td>201 65.0</td>
<td>70 22.7</td>
</tr>
<tr>
<td>I can freely ask questions in class.</td>
<td>6 1.9</td>
<td>8 2.6</td>
<td>30 9.7</td>
<td>191 62.0</td>
<td>73 23.7</td>
</tr>
<tr>
<td>When I participate in group projects, my contributions are accepted.</td>
<td>2 0.6</td>
<td>15 4.9</td>
<td>34 11.0</td>
<td>196 63.4</td>
<td>62 20.1</td>
</tr>
</tbody>
</table>

Behavioral Exposure Index

A clear knowledge of whether or not women undergraduates experienced behaviors that could be interpreted as sexual harassment in their living and learning environment from instructors and peers was vital in grasping its impact on their educational experience. To this end, the Behavioral Exposure Index was investigated. Table 5 reports the results of this analysis.

The findings showed the following:

- Approximately 2 out of 3 (64.1%) of the participants have been touched inappropriately by a faculty member.
- Nearly 2 out of 3 (63.7%) of the participants have been offered good grades or help for sexual favors.
- Four out of 5 (80.2%) of the participants have experienced inappropriate jokes being told in front of them.
- About 7 out of 10 (69.6%) of the participants have heard inappropriate comments about their gender.
Almost 3 out of 5 (62.6%) of the participants have heard negative things about their gender.

Seven out of 10 (71%) of the participants have experienced inappropriate gestures directed to them.

About 3 out of 4 (76.9%) of the participants have either been insulted or experienced sarcastic criticism directed to them.

Approximately 4 out of 5 (80.2%) of the participants have heard untrue rumors spread about them.

Nearly 7 out of 10 (73.3%) of the participants have been spoken to angrily by the instructor and/or male peers.

Approximately 3 out 5 (56.1%) of the participants have been humiliated or embarrassed.

About 4 out of 5 (81.2%) of the participants have been spoken about negatively behind their back.

Nearly 3 out of 5 (64.6%) of the participants have been intentionally excluded because of their gender.

In summary, the findings indicated that participants were able to identify experiences that could be interpreted as sexual harassment. Particularly experiences of more subtle forms of sexual harassment were prevalent among the participants. Worth noting was the percentage of participants that agreed or strongly agreed to having been touched by male instructors and peers. It is also important to note the percentages of the participants who indicated having been excluded from academic and social activities because of their gender and those that have been offered good grades or helped for sexual favors. The findings were that 3 out of every 5 (64.1%) women undergraduates who participated in the study reported being touched by a faculty
member as well as 3 out of every 5 (64.6%) women undergraduates reported being intentionally excluded from academic and social activities because of their gender. Approximately 3 out 5 women undergraduates (63.7%) reported being offered good grades or helped for sexual favors by their instructors. Obviously, the findings imagined the impact of such unethical behavior on women undergraduates’ psychological wellbeing and the quality of education received by students in the state’s colleges and universities. Although these behaviors were apparent within the participants’ living and learning environments, most of them indicated that these behaviors occur sometimes.

These findings supported the Leonard et al. (1989) study on sexual harassment at North Carolina State University. Leonard et al. (1989) identified five types of sexual harassment behaviors on campus: unwanted sexist comments, unwanted sexual statement, unwanted personal attention, unwanted sexual propositions, and unwanted physical or sexual advances.

Table 5

Frequency Distribution on Behavioral Exposure Index (in Percent), N=310

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Touching inappropriately by a faculty member</td>
<td>100</td>
<td>32.4</td>
<td>11</td>
<td>3.6</td>
<td>151</td>
</tr>
<tr>
<td>Offering of good grades or help for sexual favors</td>
<td>98</td>
<td>31.5</td>
<td>15</td>
<td>4.8</td>
<td>149</td>
</tr>
<tr>
<td>Telling inappropriate jokes in front of you</td>
<td>49</td>
<td>15.9</td>
<td>12</td>
<td>3.9</td>
<td>202</td>
</tr>
<tr>
<td>Making inappropriate comments about your gender</td>
<td>73</td>
<td>23.6</td>
<td>21</td>
<td>6.8</td>
<td>168</td>
</tr>
</tbody>
</table>
**Frequency Distribution on Behavioral Exposure Index (in Percent), N=310.**

<table>
<thead>
<tr>
<th>Event</th>
<th>Never N</th>
<th>Never %</th>
<th>Almost Never N</th>
<th>Almost Never %</th>
<th>Sometimes N</th>
<th>Sometimes %</th>
<th>Often N</th>
<th>Often %</th>
<th>Very Often N</th>
<th>Very Often %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking negatively about your gender</td>
<td>84</td>
<td>27.4%</td>
<td>31</td>
<td>10.1%</td>
<td>142</td>
<td>46.3%</td>
<td>41</td>
<td>13.4%</td>
<td>9</td>
<td>2.9%</td>
</tr>
<tr>
<td>Directing inappropriate gestures towards you</td>
<td>74</td>
<td>24.1%</td>
<td>15</td>
<td>4.9%</td>
<td>162</td>
<td>52.8%</td>
<td>51</td>
<td>16.6%</td>
<td>5</td>
<td>1.6%</td>
</tr>
<tr>
<td>Insulting or sarcastic criticism directed towards you</td>
<td>63</td>
<td>20.7%</td>
<td>35</td>
<td>11.5%</td>
<td>157</td>
<td>51.5%</td>
<td>37</td>
<td>12.1%</td>
<td>13</td>
<td>4.3%</td>
</tr>
<tr>
<td>Spreading untrue rumors about you</td>
<td>49</td>
<td>15.9%</td>
<td>24</td>
<td>7.8%</td>
<td>184</td>
<td>59.7%</td>
<td>40</td>
<td>13.0%</td>
<td>11</td>
<td>3.6%</td>
</tr>
<tr>
<td>Using angry tone when talking to you</td>
<td>50</td>
<td>16.2%</td>
<td>32</td>
<td>10.4%</td>
<td>176</td>
<td>57.1%</td>
<td>40</td>
<td>13.0%</td>
<td>10</td>
<td>3.2%</td>
</tr>
<tr>
<td>Humiliating or embarrassing you</td>
<td>73</td>
<td>23.9%</td>
<td>61</td>
<td>20%</td>
<td>135</td>
<td>44.3%</td>
<td>29</td>
<td>9.5%</td>
<td>7</td>
<td>2.3%</td>
</tr>
<tr>
<td>Speaking negatively about you behind your back</td>
<td>41</td>
<td>13.3%</td>
<td>17</td>
<td>5.5%</td>
<td>194</td>
<td>62.8%</td>
<td>44</td>
<td>14.2%</td>
<td>13</td>
<td>4.2%</td>
</tr>
<tr>
<td>Intentionally excluding you because of your gender</td>
<td>90</td>
<td>29.2%</td>
<td>19</td>
<td>6.2%</td>
<td>143</td>
<td>46.4%</td>
<td>41</td>
<td>13.3%</td>
<td>15</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

**Comparison of the Responses of the Participants in the Traditionally Male Dominated Fields with the Responses of the Participants in the Female Dominated Fields on the Behavioral Exposure Index**

Table 6 depicts the responses of the participants on the Behavioral Exposure Index according to their academic fields on the behavioral exposure index. Comparing harassment
experiences of the participants in the traditionally male fields with that of the participants in the traditionally female fields would help in determining the impact of academic field in the harassment experiences of the participants from faculty and peers. The findings indicated the following.

Three out of 5 (60.9%) of the participants in the traditionally male fields and nearly 7 out of 10 (68.8%) of the participants in the traditionally female fields have been touched inappropriately by a faculty member. However, 1 out of 5 (22.5%) of the participants in the traditionally male fields have been touched inappropriately by a faculty member. The same was true about participants in the traditionally female fields (20.1%).

Approximately 3 out of 5 (58.4%) of the participants in the traditionally male fields and 7 out of 10 (71.7%) of the participants in the traditionally female fields have been offered good grades or help for sexual favors. Almost 1 out of 16 (6.2%) of the participants in the traditionally male fields have been offered good grades or help by a faculty member often or very often. The same was also true for participants in the traditionally female fields.

Nearly 4 out of 5 (79.8%) of the participants in the traditionally male fields and 4 out of 5 (80.7%) participants in the traditionally female fields have experienced inappropriate jokes being in front of them. More than 1 out of 5 (23%) of the participants in the traditionally male fields and 1 out of 7 (14.8%) of the participants in the traditional female fields have experienced inappropriate jokes being in front of them often or very often.

Approximately 7 out of 10 (65.6%) of the participants in the traditionally male fields and nearly 4 out of 5 (76.6%) of the participants in the traditionally female fields have heard inappropriate comments about their gender. About 1 out of 5 (18.6%) of the participants in the
traditionally male fields and 1 out of 10 (10.9%) of the participants in the traditionally female fields have heard inappropriate comments about their gender often or very often.

Approximately 3 out of 5 (58.3%) of the participants in the traditionally male fields and about 7 out of 10 (68.6%) of the participants in the traditionally female fields have heard negative things about their gender. About 1 out of 5 (17.6%) of the participants in the traditionally male fields and 1 out of 7 (14.1%) of the participants in the traditionally female fields have heard negative things about their gender often or very often.

Approximately 7 out of 10 (67%) of the participants in the traditionally male fields and nearly 4 out of 5 (76.3%) of the participants in the traditionally female fields have experienced inappropriate gestures directed to them. Approximately 1 out of 5 (20.3%) of the participants in the traditionally male fields and 1 out of 7 (14.3%) of the participants in the traditionally female fields often or very often have experienced inappropriate gestures directed to them.

Almost 2 out of 3 (66.3%) of the participants in the traditionally male fields have either been insulted or experienced sarcastic criticism directed to them. This was true about participants in the traditionally female fields (71.2%). However, about 1 out of 5 (18.8%) of the participants in the traditionally male fields and 1 out of 10 (11.9%) of the participants in the traditionally female fields have experienced sarcastic criticisms directed to them often or very often.

More than 7 out of 10 (73.5%) of the participants in the traditionally male fields and more than 4 out of 5 (81.2%) of the participants in the traditionally female fields have heard untrue rumors spread about them. About 1 out of 5 (18.9%) of the participants in the traditionally male fields and 1 out of 10 (12%) of the participants in the traditionally female fields have heard untrue rumors about them often or very often.
About 7 out of 10 (69%) of the participants in the traditionally male fields and nearly 4 out of 5 (79.7%) of the participants in the traditionally female fields have been spoken to angrily by the instructor and/or male peers. Approximately 1 out of 6 (17.4%) of the participants in the traditionally male fields and 1 out of 7 (14.1%) of the participants in the traditionally female fields have been spoken to angrily by instructor and/or male peers often or very often.

Approximately 3 out of 5 (56%) of the participants in the traditionally male fields have been humiliated or embarrassed. The same was true for participants in the traditionally female fields (55.4%). About 1 out of 10 (11.6%) of the participants in the traditionally male fields have been humiliated or embarrassed often or very often. The same was true for participants in the traditionally female fields (10.1%).

About 4 out of 5 (79.2%) of the participants in the traditionally male fields and more than 4 out of 5 (84.2%) of the participants in the traditionally female fields have been spoken about negatively behind their back. Approximately 1 out of 5 (20.2%) of the participants in the traditionally male fields and 1 out of 7 (14.2%) of the participants in the traditionally female fields have been spoken about negatively behind their back often or very often.

Approximately 3 out of 5 (57.7%) of the participants in the traditionally male fields and more than 7 out of 10 (72.1%) of the participants in the traditionally female fields have been intentionally excluded because of their gender. However, about 3 out of 10 (29.8%) of the participants in the traditionally male fields and 1 out 8 (13.8%) of the participants in the traditionally female fields been intentionally excluded from activities often or very often.

Overall, the data showed that participants in the traditionally female academic fields have higher cumulative frequency scores than participants in the traditionally male fields. The data also showed significant differences in the direction of occurrence of incidents of harassment.
behaviors. The data indicated that participants in the traditionally female fields tend to cluster in the middle with high cumulative frequency scores on “Sometimes” which is an indication of a neutral position. Comparably, participants in the traditionally male fields experienced behaviors that could be interpreted as harassment “Often or Very Often”. That is, although the cumulative frequency scores of the participants in the traditionally male dominated fields are lower than those in the traditionally female academic fields, the intensity of the occurrence of the harassment are more severe among those in male dominated fields. Approximately 1 out of 4 (23%) of the participants in the traditionally male fields and 1 out of 7 (14.8%) of the participants in the traditionally female fields have heard inappropriate jokes in front of them often or very often. The same was true about hearing inappropriate comments about their gender, hearing negative things about their gender, experiencing inappropriate gestures directed to them, hearing untrue rumors about them, having been spoken to angrily by an instructor and peers, being spoken about negatively behind one’s back, and intentionally excluded from activities. Therefore, it could be concluded that participants in the traditionally male fields are more harassed than their counterparts in traditionally female fields. This is because they experienced behaviors that are consistent with harassment often or very often and participants in the traditionally female fields experienced these behaviors mostly sometimes.

The findings also supported Adedokun (2004), Leonard et al. (1989) and Wear and Autman (2005) findings. Adedokun (2004) studied sexual harassment in one of the universities in the cosmopolitan city of Lagos Nigeria to determine the presence of sexual harassment in this multi-ethnic university. Adedokun found that perpetrators mostly use intimidation, aggression, exploitation, and threat to get to their victims. Wear and Autman investigated how third and fourth-year medical students perceive and experience sexual harassment, what they believe about
reporting sexual harassment, and how they believe it might be stopped in the educational environment. Wear and Autman found that female students indicated experiencing explicit sexual comments directed at them. Leonard et al. (1989) studied sexual harassment at North Carolina State University. Leonard et al. (1989) found that participants experienced unwanted sexual statements, unwanted personal attention, unwanted physical or sexual advances and unwanted sexual propositions.

Table 6

<table>
<thead>
<tr>
<th>Frequency distribution on Behavioral Exposure Index by Academic Fields (in Percent)</th>
<th>310</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditionally Male Fields</td>
</tr>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Touching inappropriately by Faculty</td>
<td>35.3</td>
</tr>
<tr>
<td>Offering of good grades or help for sexual favors</td>
<td>37.8</td>
</tr>
<tr>
<td>Telling inappropriate jokes in front of you</td>
<td>16.4</td>
</tr>
<tr>
<td>Making inappropriate comments about your gender</td>
<td>28.4</td>
</tr>
<tr>
<td>Speaking negatively about your gender</td>
<td>31.9</td>
</tr>
<tr>
<td>Directing inappropriate gestures towards you</td>
<td>27.5</td>
</tr>
<tr>
<td>Insulting or sarcastic criticism directed towards you</td>
<td>23.2</td>
</tr>
<tr>
<td>Spreading rumors about you</td>
<td>18.4</td>
</tr>
</tbody>
</table>
Participants' Judgment of the Extent to Which They feel Sexually Harassed

To develop a comprehensive understanding of the problem of sexual harassment, the study also investigated the participants' overall judgment of the extent to which they felt sexually harassed. Participants' Judgment of the Extent to Which They Feel Sexually Harassed explored the participants' opinion or evaluation of the overall treatment they received from instructors and peers. Table 7 displays the participants' responses to the survey question. The findings indicated that 39.4% of the participants agreed and 10.1% of the participants strongly agreed that they have been denied help or punished with poor grades for denying unwelcomed sexual advances by their instructors. That means that in every 5 participants, 2 agreed that they have been denied help or punished with poor grades for denying unwelcomed sexual advances to their instructors. This finding was a puzzling contradiction to the responses on the Academic and Social Comfort scale where participants overwhelmingly indicated that they were treated fairly, respected, as well as given the opportunity to compete with males in their academic fields. Further
examination of this data indicated that only 11.6% of the participants who scored high in Academic and Social Comfort scale felt very harassed.

However, the finding supported the reports of Nwaogwugwu (2007) and Effah-Chukwuma and Osarenren (2001). These studies examined the extent of violence against young women in Nigerian Universities and Polytechnics. The finding showed that 14.4% of the participants reported that they were given a failing grade in their courses following their rejection of sexual advances.

Table 6

<table>
<thead>
<tr>
<th>Frequency Distribution on Participants' Judgment of the Extent to Which They Feel Sexually Harassed (in Percent) N=310.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>I have been denied help or punished with poor grades for denying unwelcomed sexual advances to my instructors.</td>
</tr>
</tbody>
</table>

Participants' Adjustment to Behavioral Exposure to Potential Harassment

It was also important to this study to know the level of women undergraduates' behavioral adjustments to avoid potential sexual harassment in their living and learning environments. Thus, participants' Adjustment to Behavioral Exposure to avoid potential sexual harassment was determined. Table 8 displayed the responses of the participants to the items on this scale. The findings are:

- 37.8% of the participants do not volunteer or take campus jobs because of fear of being sexually harassed,
38.1% of the participants do not participate in most campus activities because of fear of being sexually harassed,

39.5% of the participants do not asked academic help from instructors and peers of the opposite sex for fear of being sexually harassed,

23.8% of the participants do not socialize with peers,

25.2% of the participants do not associate with their academic community because of how they were perceived and treated by instructors and peers of opposite sex, and

44.5% of the participants do not report sexual harassment incidents because the disciplinary committees are comprised of men.

Overall, the findings suggest that the participants' college experience have been impeded by their perception or fear of sexual harassment in their living and learning environments. That is, participants have been required to make unreasonable behavioral adjustments that impact their academic and social progress. Perception of or fear of sexual harassment prevented approximately 2 out of every 5 women from volunteering or taking campus jobs (37.8%), participating in most campus activities (38.1%), or seeking academic help from instructors and peers (39.5%). About 1 out of every 5 (20%) women do not socialize with their peers and 1 out of every 4 (25.2%) participants alienated themselves from their academic community out of fear of sexual harassment and the treatments they received from male instructors and peers. However, 2 out of every 5 women would not report sexual harassment to a disciplinary committee comprised of men.

These findings supported the Wear and Aultman's (2005) study and AAUW's 2006 report. Although Wear and Aultman's (2005) study did not disclose the characteristics of the disciplinary committee, it did find that sexual harassment was underreported because of worries
about retaliation, hostility from peers, increased distress, fear of getting the harasser in trouble, and possible humiliation and ostracism from peers. The AAUW’s report also indicated that due to fear of sexual harassment women students absent themselves from classes regularly, attend classes late often, change courses or program, and even dropped out of their programs.

Table 8

<table>
<thead>
<tr>
<th>Frequency Distribution on Participants’ Adjustment to Behavioral Exposure to Potential Harassment (in Percent), N=310</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>I do not volunteer or take campus jobs because of fear of sexual harassment.</td>
</tr>
<tr>
<td>I do not participate in most campus activities because of fear of being sexually harassed.</td>
</tr>
<tr>
<td>I do not ask for academic help from lecturers and peers of the opposite sex for fear of being sexually harassed.</td>
</tr>
<tr>
<td>I do not socialize with my peers for fear of being sexually harassed.</td>
</tr>
<tr>
<td>I do not associate with my academic community because of how I am perceived and treated by lecturers and peers of the opposite sex.</td>
</tr>
<tr>
<td>I would not report harassment to disciplinary committee comprised of men.</td>
</tr>
</tbody>
</table>
Independent Variables: Descriptive Frequencies Association with Dependent Variables

The overarching independent variable in this study was Academic Field. However, with regards to hypothesis testing there are 7 other co-independent variables: Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment. The two dependent variables used in the hypothesis testing are Perceived Sexual Harassment and Adjustment to Behavioral Exposure. Perceived Sexual Harassment was used as a dependent variable in the testing of the first hypothesis and as an independent variable in the testing of the second hypothesis with Adjustment to Behavioral Exposure as a dependent variable.

Academic Field

Participants in the traditionally female academic field. To explore the scores on the four subscales used in the study by academic field, descriptive statistics were calculated for each subscale within each academic field. The first group analyzed was those comprising of traditionally female academic fields, which include Arts, Education, Preliminary Studies, School of Postgraduate Studies, and Social Studies. The results of these calculations are presented in Table 9. The following are the mean scores and standard deviation scores for all academic fields.

- Culturally-Embedded Gender Stereotypes: Arts (M=2.83, SD=0.53), Education (M=2.68, SD=0.82), Preliminary Studies (M=2.47, SD=0.45), Post Graduate Studies (M=3.11, 1.11), and Social Studies (M=2.98, SD=0.54);
- Behavioral Exposure Index: Arts (M=2.90, SD=0.92), Education (M=2.73, SD=0.86), Preliminary Studies (M=2.35, SD=1.25), Post Graduate Studies (M=2.35, SD=0.70), and Social Studies (M=2.36, SD=0.98);
Perceived Sexual Harassment: Arts (M=2.55, SD=0.56), Education (M=2.54, SD=0.70), Preliminary Studies (M=3.06, SD=0.16), Post Graduate Studies (M=2.90, SD=0.14), and Social Studies (M=2.32, SD=0.53); and

Adjustment to Behavioral Exposure: Arts (M=4.06, SD=0.61), Education (M=4.13, SD=0.27), Preliminary Studies (M=4.00, SD=0.60), Post Graduate Studies (M=3.63, SD=0.55); and Social Studies (M=3.89, SD=0.97).

In all, the findings indicate that participants in the traditionally female academic fields scored higher on Adjustment to Behavioral Exposure than females in the traditionally male academic fields. Participants’ scores on Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment across all academic fields were lower than their scores on Adjustment to Behavioral Exposure. The low mean scores on Culturally-Embedded Gender Stereotypes, Behavioral Exposure, and Perceived Sexual Harassment indicate that participants in traditionally female academic fields did not believe or accept that they had been affected by the perception, fear of or experience of behaviors that could be interpreted as sexual harassment. The high score on Adjustment to Behavioral Exposure indicate that previous experiences of sexual harassment have led respondents to avoid many academic and social situations where they perceive a possible threat.

Table 9
Descriptive Statistics on Subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure, Perceived Sexual Harassment and Adjustment to Behavioral Exposure Index by Traditionally Female Academic Fields (N=310).
Descriptive Statistics on Subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure, Perceived Sexual Harassment and Adjustment to Behavioral Exposure Index by Traditionally Female Academic Fields (N=310).

<table>
<thead>
<tr>
<th>Academic Field</th>
<th>Subscale</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Culturally-Embedded Gender Stereotypes</td>
<td>68</td>
<td>1.00</td>
<td>4.33</td>
<td>2.83</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>68</td>
<td>1.00</td>
<td>4.40</td>
<td>2.90</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>Perceived Sexual Harassment</td>
<td>65</td>
<td>1.06</td>
<td>3.59</td>
<td>2.55</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Adjustment to Behavioral Exposure</td>
<td>69</td>
<td>1.00</td>
<td>5.00</td>
<td>4.06</td>
<td>0.61</td>
</tr>
<tr>
<td>Arts</td>
<td>Education</td>
<td>25</td>
<td>1.00</td>
<td>4.00</td>
<td>2.68</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>28</td>
<td>1.00</td>
<td>4.40</td>
<td>2.73</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>Perceived Sexual Harassment</td>
<td>27</td>
<td>1.18</td>
<td>3.53</td>
<td>2.54</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Adjustment to Behavioral Exposure</td>
<td>28</td>
<td>3.83</td>
<td>5.00</td>
<td>4.13</td>
<td>0.27</td>
</tr>
<tr>
<td>Education</td>
<td>Preliminary Studies</td>
<td>4</td>
<td>2.00</td>
<td>3.00</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>4</td>
<td>1.00</td>
<td>4.00</td>
<td>2.35</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>Perceived Sexual Harassment</td>
<td>4</td>
<td>2.94</td>
<td>3.24</td>
<td>3.06</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Adjustment to Behavioral Exposure</td>
<td>4</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>School of Post-Graduate Studies</td>
<td>Culturally-Embedded Gender Stereotypes</td>
<td>3</td>
<td>2.00</td>
<td>4.22</td>
<td>3.11</td>
<td>1.11</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>4</td>
<td>2.00</td>
<td>3.4</td>
<td>2.35</td>
<td>0.70</td>
</tr>
</tbody>
</table>
Descriptive Statistics on Subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure, Perceived Sexual Harassment and Adjustment to Behavioral Exposure Index by Traditionally Female Academic Fields (N=310).

<table>
<thead>
<tr>
<th>Academic Field Subscale</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Sexual Harassment</td>
<td>3</td>
<td>2.82</td>
<td>3.06</td>
<td>2.90</td>
<td>0.14</td>
</tr>
<tr>
<td>Adjustment to Behavioral Exposure</td>
<td>4</td>
<td>2.83</td>
<td>5.00</td>
<td>3.63</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Social Studies

- Culturally-Embedded Gender Stereotypes: 14 | 1.78 | 3.78 | 2.98 | 0.54 |
- Behavioral Exposure Index: 15 | 1.00 | 4.20 | 2.36 | 0.98 |
- Perceived Sexual Harassment: 12 | 1.47 | 3.12 | 2.32 | 0.53 |
- Adjustment to Behavioral Exposure: 15 | 1.00 | 4.83 | 3.89 | 0.97 |

Participants in the traditionally male academic field. The same descriptive statistics were computed for the subscales Culturally-Embedded Stereotypes, Behavioral Exposure, Perceived Sexual Harassment and Adjustment to Behavioral Exposure for participants within traditionally male academic fields. The results are presented in Table 10. The following are the mean and standard deviation scores for academic fields.

- **Culturally-Embedded Gender Stereotypes**: Engineering Technology (M=2.49, SD=0.56), Environmental Sciences (M=2.85, SD=0.78), Health Sciences and Technology (M=2.68, SD=0.82), Law (M=2.21, SD=1.03), Management Sciences (M=2.37, SD=0.60), Medicine (M=3.00, SD=0.84), and Natural Sciences (M=2.66, SD=0.55);

- **Behavioral Exposure Index**: Engineering Technology (M=2.74, SD=0.86), Environmental Sciences (M=2.91, SD=0.86), Health Sciences and Technology (M=2.72,
Perceived Sexual Harassment: Engineering Technology (M=2.67, SD=0.59), Environmental Sciences (M=2.83, SD=0.62), Health Sciences and Technology (M=2.49, SD=0.69), Law (M=2.17, SD=0.85), Management Sciences (M=2.11, SD=0.60), Medicine (M=2.95, SD=0.61), and Natural Sciences (M=2.55, SD=0.58); and

Adjustment to Behavioral Exposure: Engineering Technology (M=3.80, SD=0.75), Environmental Sciences (M=3.89, SD=0.58), Health Sciences and Technology (M=4.20, SD=), Law (M=3.79, SD=0.98), Management Sciences (M=4.00, SD=0.72), Medicine (M=3.99, SD=0.44), and Natural Sciences (M=4.37, SD=0.56).

The data shows that participants in traditionally male academic fields scored lower on Adjustment to Behavioral Exposure than respondents in traditionally female academic fields. The mean scores for both cluster groups are comparatively close on Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment. This finding suggests that these participants again did not believe or acknowledge they had been impacted by the perception of or fear of sexual harassment. The high score on Adjustment to Behavioral Exposure suggests that participants made behavioral adjustments to offset the harassing behaviors of male instructors and peers.

Table 10

Descriptive Statistics on Subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure, Perceived Sexual Harassment and Adjustment to Behavioral Exposure Index by Traditionally Male Academic Fields (N= 310).
### Descriptive Statistics on Subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure, Perceived Sexual Harassment and Adjustment to Behavioral Exposure Index by Traditionally Male Academic Fields (N = 310).

<table>
<thead>
<tr>
<th>Academic Field</th>
<th>Subscale</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Technology</td>
<td>Culturally-Embedded Gender Stereotypes</td>
<td>30</td>
<td>1.33</td>
<td>4.11</td>
<td>2.49</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>29</td>
<td>1.80</td>
<td>5.00</td>
<td>2.74</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>Perceived Sexual Harassment</td>
<td>29</td>
<td>1.35</td>
<td>4.41</td>
<td>2.67</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>Adjustment to Behavioral Exposure</td>
<td>31</td>
<td>1.17</td>
<td>5.00</td>
<td>3.80</td>
<td>0.75</td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>Culturally-Embedded Gender Stereotypes</td>
<td>34</td>
<td>1.44</td>
<td>5.00</td>
<td>2.85</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>35</td>
<td>1.60</td>
<td>5.00</td>
<td>2.91</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>Perceived Sexual Harassment</td>
<td>30</td>
<td>1.24</td>
<td>4.06</td>
<td>2.83</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Adjustment to Behavioral Exposure</td>
<td>37</td>
<td>2.17</td>
<td>5.00</td>
<td>3.89</td>
<td>0.58</td>
</tr>
<tr>
<td>Health Science &amp; Technology</td>
<td>Culturally-Embedded Gender Stereotypes</td>
<td>17</td>
<td>1.00</td>
<td>4.33</td>
<td>2.68</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>Behavioral Exposure Index</td>
<td>18</td>
<td>1.00</td>
<td>4.40</td>
<td>2.72</td>
<td>1.02</td>
</tr>
<tr>
<td></td>
<td>Perceived Sexual Harassment</td>
<td>18</td>
<td>1.12</td>
<td>3.41</td>
<td>2.49</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>Adjustment to Behavioral Exposure</td>
<td>17</td>
<td>3.50</td>
<td>4.83</td>
<td>4.20</td>
<td>0.35</td>
</tr>
<tr>
<td>Law</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Culturally-Embedded Gender Stereotypes  |  10  |  1.44  |  4.11  |  2.21  |  1.03  
Behavioral Exposure Index            |  10  |  1.00  |  4.00  |  2.54  |  1.20  
Perceived Sexual Harassment          |  10  |  1.12  |  3.53  |  2.17  |  0.85  
Adjustment to Behavioral Exposure    |  11  |  1.00  |  4.67  |  3.79  |  0.98  

Management Sciences
Culturally-Embedded Gender Stereotypes |  43  |  3.11  |  3.89  |  2.37  |  0.60  
Behavioral Exposure Index             |  43  |  1.00  |  4.00  |  2.25  |  0.85  
Perceived Sexual Harassment           |  39  |  1.24  |  3.35  |  2.11  |  0.66  
Adjustment to Behavioral Exposure     |  43  |  2.33  |  5.00  |  4.00  |  0.72  

Medicine
Culturally-Embedded Gender Stereotypes |  12  |  1.89  |  4.00  |  3.00  |  0.84  
Behavioral Exposure Index             |  12  |  1.00  |  4.20  |  3.12  |  1.15  
Perceived Sexual Harassment           |  11  |  1.47  |  3.71  |  2.95  |  0.61  
Adjustment to Behavioral Exposure     |  13  |  3.00  |  5.00  |  3.99  |  0.44  

Natural Sciences
Culturally-Embedded Gender Stereotypes |  29  |  1.33  |  4.00  |  2.66  |  0.54  
Behavioral Exposure Index             |  31  |  1.00  |  5.00  |  2.65  |  1.06  
Perceived Sexual Harassment           |  27  |  1.24  |  3.71  |  2.55  |  0.58  
Adjustment to Behavioral Exposure     |  31  |  3.00  |  5.00  |  4.37  |  0.56  

Faculty Gender Ratio and Student Gender Ratio

The ratio of male to female faculty members by academic field and institution. It was hypothesized in the study that the ratio of male to female faculty and students would influence scores on the four subscales in such a manner that those academic fields with a higher male to female faculty and student ratios would demonstrate higher scores on the subscale Adjustment to
Behavioral Exposure and higher scores on the subscales Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment. Prior to testing the hypotheses, male to female faculty ratios were calculated. The ratios of male to female faculty by institution and academic field are presented in Table 11. The findings are as follows:

- In the field of Arts the ratio of male to female faculty in Nnamdi Azikiwe University was (1.22), Madonna University (1.86), Anambra State Polytechnic (2.03) and Anambra State University (3.55);
- In the field of Education the ratio of male to female faculty in Nnamdi Azikiwe University was (1.70), Madonna University (2.45), Anambra State Polytechnic (1.04) and Anambra State University (2.33);
- In the field of Engineering Technology the ratio of male to female faculty in Nnamdi Azikiwe University was (4.26), Madonna University (3.55), Anambra State Polytechnic (1.50) and Anambra State University (6.14);
- In the field of Environmental Sciences the ratio of male to female faculty in Nnamdi Azikiwe University was (2.70), Madonna University (2.13), Anambra State Polytechnic (3.55) and Anambra State University (4.00);
- In the field of Health Sciences and Technology the ratio of male to female faculty in Nnamdi Azikiwe University was (1.22), Madonna University (1.13), Anambra State Polytechnic (1.86) and Anambra State University (2.03);
- In the field of Law the ratio of male to female faculty in Nnamdi Azikiwe University was (3.00), Madonna University (2.23), Anambra State Polytechnic (2.33) and Anambra State University (1.50);
In the field of Management Sciences the ratio of male to female faculty in Nnamdi Azikiwe University was (2.81), Madonna University (1.38), Anambra State Polytechnic (2.70) and Anambra State University (2.45);

In the field of Medicine the ratio of male to female faculty in Nnamdi Azikiwe University was (4.56), Madonna University (4.00), Anambra State Polytechnic (4.01) and Anambra State University (2.45);

In the field of Natural Sciences the ratio of male to female faculty in Nnamdi Azikiwe University was (1.63), Madonna University (1.38), Anambra State Polytechnic (3.55) and Anambra State University (1.75); and

In the field of Social Studies the ratio of male to female faculty in Nnamdi Azikiwe University was (1.56), Madonna University (2.33), Anambra State Polytechnic (2.33) and Anambra State University (1.86).

In general, the findings indicated high ratios of male to female faculty members in all academic fields across colleges and universities in the study. The findings also showed that the gender divide was wider among the traditionally male academic fields than in the traditionally female academic fields. The results supported Allele-Williams (1993), Lund (1998) and Rathgeber (2002)'s studies on male to female faculty ratios in African colleges and universities. These landmark studies reported shortages of female faculty and staff in all academic fields across African colleges and universities.

Table 11
Ratio of Male to Female Faculty Members by Academic Field and Institution

<table>
<thead>
<tr>
<th>Academic Field</th>
<th>Nnamdi Azikiwe University</th>
<th>Madonna University</th>
<th>Anambra State Polytechnic</th>
<th>Anambra State University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Ratio of Male to Female Faculty Members by Academic Field and Institution

<table>
<thead>
<tr>
<th>Academic Field</th>
<th>Nnamdi Azikiwe University</th>
<th>Madonna University</th>
<th>Anambra State Polytechnic</th>
<th>Anambra State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>1.86</td>
<td>1.22</td>
<td>2.03</td>
<td>3.55</td>
</tr>
<tr>
<td>Education</td>
<td>2.45</td>
<td>1.70</td>
<td>1.04</td>
<td>2.33</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>4.26</td>
<td>3.55</td>
<td>1.50</td>
<td>6.14</td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>2.70</td>
<td>2.13</td>
<td>3.55</td>
<td>4.00</td>
</tr>
<tr>
<td>Health Sciences &amp; Technology</td>
<td>1.22</td>
<td>1.13</td>
<td>1.86</td>
<td>2.03</td>
</tr>
<tr>
<td>Law</td>
<td>3.00</td>
<td>2.23</td>
<td>2.33</td>
<td>1.50</td>
</tr>
<tr>
<td>Management Sciences</td>
<td>2.81</td>
<td>1.38</td>
<td>2.70</td>
<td>2.45</td>
</tr>
<tr>
<td>Medicine</td>
<td>4.56</td>
<td>4.00</td>
<td>4.01</td>
<td>2.45</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>1.63</td>
<td>1.38</td>
<td>3.55</td>
<td>1.75</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1.56</td>
<td>2.23</td>
<td>2.33</td>
<td>1.86</td>
</tr>
</tbody>
</table>

**Ratio of male to female students by academic field and institution.** The same ratios were calculated for male to female students within each academic field, within each institution. The ratios of male to female students by academic field and institution are presented in Table 12. The findings are as follows:

- In the field of Arts the ratios of male to female students were: Nnamdi Azikiwe University (0.54), Madonna University (0.33), Anambra State Polytechnic (0.37) and Anambra State University (0.67);
In the field of Education the ratios of male to female students were: Nnamdi Azikiwe University (0.43), Madonna University (0.21), Anambra State Polytechnic (0.26) and Anambra State University (0.67);

In the field of Engineering Technology the ratios of male to female students were: Nnamdi Azikiwe University (9.00), Madonna University (10.11), Anambra State Polytechnic (8.09) and Anambra State University (3.76);

In the field of Environmental Sciences the ratios of male to female students were: Nnamdi Azikiwe University (4.00), Madonna University (2.13), Anambra State Polytechnic (3.55) and Anambra State University (1.63);

In the field of Health Sciences and Technology the ratios of male to female students were: Nnamdi Azikiwe University (1.22), Madonna University (1.13), Anambra State Polytechnic (0.28) and Anambra State University (0.67);

In the field of Law the ratios of male to female students were: Nnamdi Azikiwe University (1.00), Madonna University (2.23), Anambra State Polytechnic (1.60) and Anambra State University (1.50);

In the field of Management Sciences the ratios of male to female students were: Nnamdi Azikiwe University (1.44), Madonna University (1.38), Anambra State Polytechnic (2.70) and Anambra State University (0.67);

In the field of Medicine the ratios of male to female students were: Nnamdi Azikiwe University (2.33), Madonna University (4.00), Anambra State Polytechnic (2.41) and Anambra State University (2.19);
In the field of Natural Sciences the ratios of male to female students were: Nnamdi Azikiwe University (1.50), Madonna University (1.70), Anambra State Polytechnic (1.27) and Anambra State University (0.69); and

In the field of Social Studies the ratios of male to female students were: Nnamdi Azikiwe University (1.38), Madonna University (1.04), Anambra State Polytechnic (0.59) and Anambra State University (1.00).

As expected, the ratio of male to female students was much lower in traditionally female academic fields, as exhibited by the 0.33 in the field of Art at Madonna University. However, the existing disparity was wider in some fields. That is, there was a wider range between male to female ratios in some departments and in different institutions. For instance, at Madonna University, the ratio of male to female students was approximately 10:1 in the field of Engineering Technology, a traditionally male academic field in Africa especially among the Igbos of Nigeria. The findings also supported Allele-Williams (1993), Hoffman-Barthes et al. (1999), and Lund’s (1998) studies that found gender disparity in student enrollments in African colleges and universities. These studies indicated high ratios of male to female students in most academic fields especially in the traditionally male fields.

Table 12

<table>
<thead>
<tr>
<th>Academic Field</th>
<th>Nnamdi Azikiwe University</th>
<th>Madonna University</th>
<th>Federal Polytechnic</th>
<th>Anambra State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>0.54</td>
<td>0.33</td>
<td>0.37</td>
<td>0.67</td>
</tr>
<tr>
<td>Education</td>
<td>0.43</td>
<td>0.21</td>
<td>0.26</td>
<td>0.67</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>9.00</td>
<td>10.11</td>
<td>8.09</td>
<td>3.76</td>
</tr>
</tbody>
</table>
Ratio of Male to Female Students by Academic Field and Institution

<table>
<thead>
<tr>
<th>Academic Field</th>
<th>Nnamdi Azikiwe University</th>
<th>Madonna State University</th>
<th>Federal Polytechnic</th>
<th>Anambra State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Sciences</td>
<td>4.00</td>
<td>2.13</td>
<td>3.55</td>
<td>1.63</td>
</tr>
<tr>
<td>Health Sciences &amp; Technology</td>
<td>1.22</td>
<td>1.13</td>
<td>0.28</td>
<td>0.67</td>
</tr>
<tr>
<td>Law</td>
<td>1.00</td>
<td>2.23</td>
<td>1.60</td>
<td>1.50</td>
</tr>
<tr>
<td>Management Sciences</td>
<td>1.44</td>
<td>1.38</td>
<td>2.70</td>
<td>0.67</td>
</tr>
<tr>
<td>Medicine</td>
<td>2.33</td>
<td>4.00</td>
<td>2.41</td>
<td>2.09</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>1.50</td>
<td>1.70</td>
<td>1.27</td>
<td>0.69</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1.38</td>
<td>1.04</td>
<td>0.59</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Hypotheses Testing Results

This study sought to test the following questions and null hypotheses:

Research Questions and Hypotheses

Are Academic Field, Organizational Variables (Faculty Gender and Student Gender Ratios), Individual Variables (Age and GPA), Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes associated with the Perceived Sexual Harassment experienced by women undergraduates in Anambra State colleges and universities?

H₀: Academic Field; Organizational Variables (Faculty Gender and Student Gender Ratios); Individual Variables (Age and GPA), Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes are not associated with the Perceived Sexual Harassment experienced by women undergraduates in Anambra State colleges and universities.
Are Academic Field, Organizational Variables (Faculty Gender and Student Gender Ratios), Individual Variables (Age and GPA), Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment associated with the Adjustment to Behavioral Exposure of women undergraduates to potential sexual harassment in Anambra State colleges and universities?

H_{01}: Academic Field, Organizational Variables (Faculty Gender and Student Gender Ratios), Individual Variables (Age and GPA), Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index and Perceived Sexual Harassment are not associated with the Adjustment to Behavioral Exposure used by women undergraduates in the fields of science and technology to avoid potential sexual harassment in Anambra State colleges and universities.

Findings for Hypothesis 1

H_{01}: Academic Field; Organizational Variables (Faculty Gender and Student Gender Ratios); Individual Variables (Age and GPA), Behavioral Exposure Index and Culturally-Embedded Gender Stereotypes do not associate with the Perceived Sexual Harassment experienced by women undergraduates in Anambra State colleges and universities.

A hierarchical linear regression was used to test the predictive power of the independent variables on the Perceived Sexual Harassment. Three successive models were tested to determine the best combination of predictor variables for Perceived Sexual Harassment scores. As stated previously, low scores on Perceived Sexual Harassment is indicative that women undergraduates did not believe or accept they had been affected by the perception, fear of, or experience of behaviors that could be interpreted as sexual harassment. The results for all three models predicting Perceived Sexual Harassment are presented in Table 13.

Perceived Sexual Harassment Model 1
The first model of the hierarchical regression used Academic Field, Faculty Gender Ratio, and Student Gender Ratio to predict Perceived Sexual Harassment. The variable Academic Field was created by dividing traditionally male academic fields into one category and traditionally female academic fields into another category. Faculty Gender Ratio and Student Gender Ratio represented the gender ratios of males to females. For the purposes of the study, non-science and non-technology fields (traditionally female academic fields) were coded 0 and science and technology fields (traditionally male academic fields) were coded 1. Table 13 presents the hierarchical linear regression analysis predicting Perceived Sexual Harassment.

The first model was not significant at the .05 level, $F (3, 153) = 2.23$, $p = .09$, and predicted 4.2% of the variance in Perceived Sexual Harassment. In this first model, only Academic Field contributed to the predicting power of the model. The relationship between Academic Field and Perceived Sexual Harassment was such that membership in the group of students classified as studying in traditionally male academic fields (science and technology fields) corresponded to a decrease of .34 in Perceived Sexual Harassment. This finding indicates that women undergraduates in the traditionally male academic fields were less likely to judge themselves as having been harassed than their counterparts in traditionally female academic fields. This finding was not expected and so needs further study.

The other two variables (Faculty Gender Ratio and Student Gender Ratio) in the first model predicting Perceived Sexual Harassment were not significant. Though not significant at the .05 level, Faculty Gender Ratio and Student Gender Ratio have direct relationship with the dependent variable Perceived Sexual Harassment. The results of the analysis indicated that increasing the Faculty Gender Ratio by one male faculty member increased Perceived Sexual Harassment by .14 points, and increasing the Student Gender Ratio by one male student.
increased the Perceived Sexual Harassment by .004 points. The more outnumbered male faculty and students were the more women undergraduates experience behaviors that could be interpreted as harassment.

Table 12

Hierarchical Linear Regression Analysis Predicting Perceived Sexual Harassment Scores (in Percent), N=310.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 B</th>
<th>Model 2 B</th>
<th>Model 3 B</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Sexual Harassment</td>
<td>2.21**</td>
<td>1.33*</td>
<td>0.69</td>
<td>[-0.48, 1.86]</td>
</tr>
<tr>
<td>Academic Field</td>
<td>-0.34*</td>
<td>-0.11</td>
<td>-0.10</td>
<td>[-0.34, 0.14]</td>
</tr>
<tr>
<td>Faculty Gender Ratio</td>
<td>0.14</td>
<td>0.12</td>
<td>0.09</td>
<td>[-0.03, 0.21]</td>
</tr>
<tr>
<td>Student Gender Ratio</td>
<td>0.004</td>
<td>0.00</td>
<td>0.01</td>
<td>[-0.04, 0.07]</td>
</tr>
<tr>
<td>Age</td>
<td>0.04</td>
<td>0.01</td>
<td>0.01</td>
<td>[-0.03, 0.05]</td>
</tr>
<tr>
<td>GPA</td>
<td>-0.39*</td>
<td>-0.22*</td>
<td></td>
<td>[-0.44, -0.01]</td>
</tr>
<tr>
<td>Behavioral Exposure</td>
<td>0.43**</td>
<td>0.26**</td>
<td></td>
<td>[0.14, 0.39]</td>
</tr>
<tr>
<td>Culturally-Embedded Gender Stereotypes</td>
<td></td>
<td></td>
<td>0.48**</td>
<td>[0.3, 0.66]</td>
</tr>
</tbody>
</table>

Note. CI = confidence interval.

**p < .01 and *p < .05.
Perceived Sexual Harassment Model 2

Again, Table 13 presents the hierarchical linear regression analysis predicting Perceived Sexual Harassment. For the second model, the variables from the first model were used in addition to the variables Age, GPA, and Behavioral Exposure Index. Age was measured in years and GPA was the measure of academic performance. The Behavioral Exposure Index was measured by the scale scores indicating the frequency with which women undergraduates encountered harassing behaviors. Low scores on the Behavioral Exposure Index indicated lower exposure to potentially harassing behaviors and high scores were indicative of a higher exposure to potentially harassing behaviors.

In the second model, the inclusion of the three additional variables increased the $r^2$ value from .34 to .38. The second model was significant, $F(6, 150) = 15.34, p < .01$, suggesting that the two variables, GPA and Behavioral Exposure Index significantly contributed to the model. The relationship between GPA and Perceived Sexual Harassment was negative, indicating an inverse relationship. Specifically, the relationship was such that every one point increase in GPA corresponded to a .39 point decrease in Perceived Sexual Harassment. This finding suggests that women undergraduates with high GPAs reported fewer of the behaviors that could be interpreted as sexual harassment.

The other variable contributing to the second model predicting Perceived Sexual Harassment was Behavioral Exposure Index. The relationship between Behavioral Exposure Index and Perceived Sexual Harassment was positive and indicated that a .1 point increase in the Behavioral Exposure Index corresponded to a .43 point increase in Perceived Sexual Harassment. Therefore, as women undergraduates experienced more of the behaviors that could be interpreted as harassment their tendency to consider themselves harassed increased.
The variables that did not contribute significantly to the model predicting Perceived Sexual Harassment were Faculty Gender Ratio, Student Gender Ratio, and Age. Contrary to the first model, Academic Field did not significantly contribute to the model but was still inversely related to the variable Perceived Sexual Harassment. The relationship was such that studying in traditionally male academic fields corresponded to a decrease in Perceived Sexual Harassment. Again, this finding was not expected and so warrants further study. It is foreseeable that women undergraduates in the traditionally male academic fields, like science and technology, were already high achievers or intellectually bright students. Therefore, they are less likely to need or ask for academic help from faculty and peers and so have less exposure to behaviors that could be interpreted as harassment.

**Hypothesis 1: Perceived Sexual Harassment Model 3**

Table 13 shows that the final model of the hierarchical linear regression was significant at the .05 level and predicted 48.6% of the variance in Perceived Sexual Harassment. The null hypothesis was rejected. The final model utilized seven independent variables: Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes. The variable Culturally-Embedded Gender Stereotypes was the only variable added to the final model, and the addition of Culturally-Embedded Gender Stereotypes increased $r^2$ by .10 or from .38 to .48. The variable Culturally-Embedded Gender Stereotypes measured the preconceived beliefs about gender that women undergraduates have because of cultural, parental, or other social influences. Low Culturally-Embedded Gender Stereotypes scores indicated less cultural conditioning to gender stereotyping.

The final model tested was significant, $F (7, 149) = 19.41, p < .01$, indicating that the combination of all seven items predicted nearly half the variance in women undergraduates'
feelings that they have been sexually harassed. In particular, three variables significantly contributed to the model: GPA, the Behavioral Exposure Index (exposure to potentially harassing behavior by faculty and peers), and Culturally-Embedded Gender Stereotypes (cultural gender stereotypes held by women undergraduates). These variables accounted for half of the variance in Perceived Sexual Harassment.

In conclusion, the likelihood that women undergraduates will report having experienced sexual harassment was determined by (a) actual exposure to potentially harassing behaviors by faculty and students (Behavioral Exposure Index); (b) their academic performance (GPA), and cultural gender stereotypes held by women undergraduates rather than age and institutional characteristics such as academic fields and faculty and student gender ratios. However, Nwaogwugwu (2007) indicated that students in Anambra State colleges and universities pay their way through examination either by sexual gratification, gifts, or money. Considering the practice of sorting, it could be possible that women undergraduates sort in order to get good grades. Therefore, the variable GPA may not be a good indicator to perceived sexual harassment.

**Findings for Hypothesis 2**

Are Academic Field, Organizational Variables (Faculty Gender and Student Gender Ratios), Individual Variables (Age and GPA), Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment associated with the Adjustment to Behavioral Exposure of women undergraduates in the fields of science and technology to potential sexual harassment in Anambra State colleges and universities?

H₀: Academic Field, Organizational Variables (Faculty Gender and Student Gender Ratios), Individual Variables (Age and GPA), Culturally-Embedded Gender Stereotypes, Behavioral Exposure and Perceived Sexual Harassment are not associated with the Adjustment
A hierarchical linear regression was used to determine the significance of the models predicting Adjustment to Behavioral Exposure, that is, the extent to which women avoid certain situations for fear of encountering harassment. Three successive models were tested to determine the best combination of predictive variables. The results of the analyses are presented in Table 14.

Adjustment to Behavioral Exposure Model 1

Like the first model predicting Perceived Sexual Harassment, the first model of the hierarchical regression predicting Adjustment to Behavioral Exposure used Academic Field, Faculty Gender Ratio, and Student Gender Ratio. For the dependent variable Adjustment to Behavioral Exposure, higher scores indicated that students changed their academic and social behavior specifically to avoid exposure to harassing incidents from faculty and peers. It was hypothesized in this study that women undergraduates in the traditionally male academic fields will perceive or experience more of the behaviors that could be interpreted as sexual harassment. As such, they will score low in the dependent variable Adjustment to Behavioral Exposure.

The first model was significant at the .05 level of significance, $F(3, 129) = 3.27, p = .02$, and predicted 7.1% of the variance in Adjustment to Behavioral Exposure. Although the model was significant overall, none of the three variables significantly contributed individually to the first model predicting Adjustment to Behavioral Exposure. Academic Field however, was directly related to Adjustment to Behavioral Exposure. The relationship between Academic Field and Adjustment to Behavioral Exposure suggested that studying in traditionally male academic fields
fields increased the tendency of women undergraduates to use less negative avoidance behaviors or make less behavioral adjustment.

Table 13
Hierarchical Linear Regression Predicting Adjustment to Behavioral Exposure (in Percent), N=310.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 B</th>
<th>Model 2 B</th>
<th>Model 3</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.37**</td>
<td>3.30**</td>
<td>3.20**</td>
<td>[2.07, 4.33]</td>
</tr>
<tr>
<td>Faculty Gender Ratio</td>
<td>-0.10</td>
<td>-0.11</td>
<td>-0.11</td>
<td>[-0.22, 0.003]</td>
</tr>
<tr>
<td>Student Gender Ratio</td>
<td>-0.04</td>
<td>-0.03</td>
<td>-0.02</td>
<td>[-0.08, 0.03]</td>
</tr>
<tr>
<td>Academic Field</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.01</td>
<td>[-0.24, 0.23]</td>
</tr>
<tr>
<td>Age</td>
<td>0.05*</td>
<td>0.04*</td>
<td></td>
<td>[0.001, 0.08]</td>
</tr>
<tr>
<td>GPA</td>
<td></td>
<td>0.04</td>
<td>0.06</td>
<td>[-0.14, 0.27]</td>
</tr>
<tr>
<td>Behavioral Exposure</td>
<td>-0.03</td>
<td>-0.05</td>
<td></td>
<td>[-0.18, 0.08]</td>
</tr>
<tr>
<td>Culturally-Embedded Gender Stereotypes</td>
<td></td>
<td></td>
<td>0.13</td>
<td>[-0.06, 0.32]</td>
</tr>
<tr>
<td>Perceived Sexual Harassment</td>
<td></td>
<td></td>
<td>-0.06</td>
<td>[-0.22, 0.10]</td>
</tr>
</tbody>
</table>

$R^2$ | .07 | .11 | .13

$F$ | 3.27* | 2.63* | 2.21*

$\Delta R^2$ | .07 | .04 | .01

$\Delta F$ | 3.27 | 1.93 | .95

Note. CI = confidence interval.

**p < .01 and *p < .
Adjustment to Behavioral Exposure Model 2

Again, the results of the analyses are presented in Table 14. The second model predicting Adjustment to Behavioral Exposure utilized the three predictor variables from the first model (Academic Field, Faculty Gender Ratio, and Student Gender Ratio) and included three new variables: Age, GPA, and Behavioral Exposure Index. Age was measured in years and GPA was the measure of academic performance. Behavioral Exposure Index was measured by the scale scores indicating the frequency with which subjects encountered harassing behaviors. Low scores on the Behavioral Exposure Index indicated that participants encountered fewer of behaviors that could be interpreted as sexual harassment.

The second model using the previous three predictors with the inclusion of Age, GPA, and Behavioral Exposure Index was significant at the .05 level of significance, \( F(6, 126) = 2.63, \ p = .02 \), and predicted 11.1% of the variance in Adjustment to Behavioral Exposure. The inclusion of the three variables increased \( r^2 \) to .04. Only Age significantly contributed to the second model predicting Adjustment to Behavioral Exposure.

Again, Academic Field was inversely related to Adjustment to Behavioral Exposure. The finding suggested that studying in a traditionally male academic field could lead to more avoidance behavior of potentially threatening situations.

As indicated, only Age significantly contributed to the second model predicting Adjustment to Behavioral Exposure. The relationship between Age and Adjustment to Behavioral Exposure was direct, and indicated that as students grew older in age, they were more likely to avoid situations that could be interpreted as sexual harassment.

GPA was also directly related to Adjustment to Behavioral Exposure. The relationship between GPA and Adjustment to Behavioral Exposure was such that as women undergraduates'
GPAs increased, they were more likely to avoid behaviors that could be interpreted as sexual harassment.

Faculty Gender Ratio and Student Gender Ratio were inversely related to Adjustment to Behavioral Exposure. The correlation between Faculty and Student Gender Ratios to Adjustment to Behavioral Exposure indicated that as the number of male faculty and students increased the likelihood of women undergraduates exhibiting avoidance behaviors to possible sexual harassment threat increased.

Behavioral Exposure was also inversely related to Adjustment to Behavioral Exposure. A more negative experience of Behavioral Exposure triggers greater avoidance behaviors by women undergraduates.

**Adjustment to Behavioral Exposure Model 3**

The results for all three models predicting Adjustment to Behavioral Exposure are presented in Table 14. The final model of the hierarchical linear regression predicting Adjustment to Behavioral Exposure utilized the six independent variables from the first two models, and included two new independent variables: Culturally-Embedded Gender Stereotypes and Perceived Sexual Harassment. Low Culturally-Embedded Gender Stereotypes scores indicated less cultural conditioning to negative gender stereotypes, and low Perceived Sexual Harassment scores indicated a lower overall judgment of women undergraduates that they have been sexually harassed by their male instructors and peers.

The final model of the hierarchical linear regression was significant at the .05 level, $F (8, 124) = 2.21, p = .03$, and predicted 12.5% of the variance in Adjustment to Behavioral Exposure. The null hypothesis was rejected. Again, the progression of model testing is shown in Table 14. The final model utilized eight independent variables: Academic Field, Faculty Gender Ratio,
Student Gender Ratio, Age, GPA, Behavioral Exposure Index, Culturally-Embedded Gender Stereotypes, and Perceived Sexual Harassment. The variables Culturally-Embedded Gender Stereotypes and Perceived Sexual Harassment were the only variables added to the final model, and the addition of these variables increased $r^2$ by .02 or from .11 to .13. Only the variable Age significantly contributed to the model predicting Adjustment to Behavioral Exposure indicating that the probability of women undergraduates exhibiting greater negative avoidance behaviors increases by age.

**Summary of the Quantitative Findings**

The investigation of the impact of sexual harassment on women undergraduates' educational experience began with the exploration of the Culturally-Embedded Gender Stereotypes in the participants' living and learning environments. This was followed by determining the Academic and Social Comfort of the participants in the respective academic fields, Behavioral Exposure Index, Participants' Judgment of the Extent to Which They feel Sexually Harassed, and the Adjustment to Behavioral Exposure of women undergraduates to potential sexual harassment in their living and learning environments. The summary of the findings are as follows:

**The Descriptive Frequencies: Independent Variables**

The findings on Culturally-Embedded Gender Stereotypes showed that while possibly conditioned to respond negatively to overt statements of male chauvinism, responses to more subtle statements of inequality were very polarized. More subtle statements elicited either a split response or a positive response. For instance, approximately 7 out of 10 (69.65) women undergraduate participants agreed that sometimes women deserved to be sexually harassed because of the way they dress.
The Academic and Social comfort findings indicated that participants felt comfortable in their respective academic fields with regard to equity in participation and opportunity to compete for scholarship. They believed they were treated fairly, were respected, and had the opportunity to compete with males in their academic fields.

The Behavioral Exposure results showed that participants were able to identify experiences that could be interpreted as sexual harassment. Particularly experiences of more subtle forms of sexual harassment were prevalent among the participants. The findings specified that 2 out of every 3 (64.1%) of the participants have been touched by a faculty member and that 2 out of every 3 (64.6%) of the participants have been intentionally excluded from academic and social activities because of their gender. Approximately 2 out of 3 of the participants (63.7%) have been offered good grades or helped for sexual favors by their instructors. Comparing traditionally male and female academic fields, the data showed that participants in the traditionally female academic fields have higher cumulative frequency scores than participants in the traditionally male fields. The data also showed significant differences in the direction of occurrence of incidents of harassment behaviors. The data indicated that participants in the traditionally female fields tend to cluster in the middle with high cumulative frequency scores on “Sometimes” which is an indication of a neutral position. Participants in the traditionally male fields experienced behaviors that could be interpreted as harassment “Often or Very Often”. That is, although the cumulative frequency scores of the participants in the traditionally male dominated fields are lower than those in the traditionally female academic fields, the intensity of the occurrence of the harassment (Often or Very Often) are more severe among those in male dominated fields. More than 1 out of 4 (23%) of the participants in the traditionally male fields and 1 out of 7 (14.8%) of the participants in the traditionally female fields have heard
inappropriate jokes in front of them often or very often. The same was true about hearing inappropriate comments about their gender, hearing negative things about their gender, experiencing inappropriate gestures directed to them, hearing untrue rumors about them, having been spoken to angrily by an instructor and peers, being spoken about negatively behind one's back, and intentionally excluded from activities. Therefore, it could be concluded that participants in the traditionally male fields are more harassed than their counterparts in traditionally female fields. This is because they experienced behaviors that are consistent with harassment often or very often and participants in the traditionally female fields experienced these behaviors mostly sometimes.

The findings on Participants' Judgment of the Extent to Which They feel Sexually Harassed indicated that 39.4% of the participants agreed and 10.1% of the participants strongly agreed that they have been denied help or punished with poor grades for denying unwelcomed sexual advances to their instructors. This finding was a puzzling contradiction to the responses on the Academic and Social Comfort scale where participants overwhelmingly indicated that they were treated fairly, respected, and had opportunities to compete with males in their academic fields. Further investigation of the data indicated that of the 49.5% that indicated having been denied help or punished with poor grades only 11.6% of these participants scored high on the Academic and Social Comfort scale and still felt very harassed.

The findings on Adjustment to Behavioral Exposure suggested that participants' college experience have been impeded by their perception or fear of sexual harassment in their living and learning environments. That is, participants have been required to make unreasonable behavioral adjustments that impact their academic and social progress. Statistically, perception of or fear of sexual harassment prevented approximately 2 out of every 5 women from
volunteering or taking campus jobs (37.8%), participating in most campus activities (38.1%), or seeking academic help from instructors and peers (39.5%). About 1 out of every 5 (20%) women do not socialize with their peers and 1 out of every 4 (25.2%) women undergraduates alienated themselves from their academic community because of the fear of sexual harassment and the treatments they receive from instructors and peers of the opposite sex. However, 2 out of every 5 (44.9%) women would not report sexual harassment to disciplinary committee comprised of men.

Description of Scale and Key Variables: Independent Variables

Academic fields. The findings showed that women undergraduates in the traditionally female academic fields scored higher on Adjustment to Behavioral Exposure and lower on Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment across all academic fields than females in the traditionally male academic fields. Comparing both clusters of fields indicated that women undergraduates in both traditionally male and traditionally female academic fields have adjusted their behaviors to cope with the harassing behaviors of their instructors and peers. However, the degree of the adjustment was higher for women in the traditionally female academic field than those in the traditionally male academic fields. This finding was not expected and so required further study.

Faculty and student gender ratios. The findings indicated high ratios of male to female faculty members in all academic fields across colleges and universities in the study. The findings also showed that the gender divide was wider among the traditionally male academic fields than in the traditionally female academic fields. As expected, the ratio of male to female students was much lower in traditionally female academic fields. However, the existing disparity was wider in some academic fields. For instance, at Madonna University, the ratio of male to female students
was approximately 10:1 in the field of Engineering Technology which was also a traditionally male academic field in Africa, especially among the Igboos of Nigeria.

**Hypotheses Testing**

The quantitative findings suggested multiple variables that significantly impacted the perceived sexual harassment experienced by women undergraduates in the fields of science and technology in Anambra State colleges and universities. These variables affected the perception and behaviors of women undergraduates in their living and learning environments collectively and individually.

The findings reported that combination of seven items significantly predicted the Perceived Sexual Harassment. These include: Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes. Particularly, three variables significantly contributed to the model that predicted Perceived Sexual Harassment: GPA, Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes. The finding indicated that the likelihood that women undergraduates will report having experienced sexual harassment was determined by (a) actual exposure to potentially harassing behaviors by faculty and students; (b) their academic performance (GPA) and cultural gender stereotypes held by women undergraduates than age and institutional characteristics such as academic fields, faculty and student gender ratios. These variables accounted for half of the variance in Perceived Sexual Harassment. However, recalling Nwaogwugwu's (2007) study, students in Anambra State colleges and universities pay their way through examination either by sexual gratification, gifts, or money (sorting). The indication of GPA as a predictor to perceive sexual harassment appeared to be questionable. As the result indicated, the overall GPA of the study participants was 3.04 and the GPA of the participants in
the traditionally male academic fields was 3.25. Could it be that these participants sorted or generally, that students with high GPAs in the institutions sorted? This need further study.

In the second hypotheses which tested the dependent variable Adjustment to Behavioral Exposure, only the variable Age significantly contributed to the model predicting Adjustment to Behavioral Exposure. The relationship indicated that the probability of women undergraduates exhibiting greater negative avoidance behaviors decreases with age. The variables GPA and Culturally-Embedded Gender Stereotypes were directly related to Adjustment to Behavioral Exposure. Again, five variables were negatively but not significantly related to Adjustment to Behavioral Exposure: Academic Field, Faculty Gender Ratio, Student Gender Ratio, Behavioral Exposure Index, and Perceived Sexual Harassment. Invariably, the findings showed that behavioral adjustment to the environmental condition was not well predicted and if perceived harassment was quite predictable, how individuals respond as regards to adjustment of behaviors seems to be less predictable.

These quantitative findings suggested that women undergraduates' educational experience has been impeded by perception or fear of sexual harassment in their living and learning environments. The findings indicated that the perception or fear of sexual harassment has prevented approximately 2 out of every 5 (40%) women undergraduates from volunteering, taking campus jobs, participating in most academic and social activities, or seeking academic help from male instructors and peers. Approximately 1 out of every 5 (20%) women undergraduates do not socialize with their peers or associate with their academic community because of the fear of sexual harassment and the treatment they received from instructors and peers of the opposite sex. Though women undergraduates felt they had not been discriminated against academically and socially, 1 out of 2 (49.5%) did believed they had been punished
academically for denying unwanted sexual advances. Conclusively, these findings suggested that women undergraduates have been forced to make behavioral adjustments in order to avoid the threatening environmental condition they found themselves.

Relating these findings to Astin’s (1984) Student Involvement Theory and Douglas and Wildavsky’s (1983) Cultural Theory of Risk which are the theoretical frameworks used in this study, women undergraduates educational experiences have been impacted. Astin’s Student Involvement Theory postulated that the more students are involved in their educational formation, the more they learn. Astin’s theory encouraged active student participation in the learning process. David (1991) found that increased interaction with peers and faculty, as well as increased involvement in extracurricular activities, lowers students’ dropout rate. Chickering and Gamson (1987) argued that, among other factors, faculty-student contact and peer-peer interaction improve students’ academic involvement and engagement. Douglas and Wildavsky’s Cultural Theory of Risk argued that individuals associate societal harms with conduct that transgresses societal norms. This tendency, they maintained, plays an indispensable role in promoting certain social structures, by influencing members to develop the tendency to avoid subversive behaviors and by focusing resentment and blame on those who defy the institutions. Following Astin (1984), David (1991), Chickering and Gamson’s (1987) as well as Douglas and Wildavsky’s arguments supported by the findings in this study, experience or fear of sexual harassment has significantly impacted women undergraduates’ involvement in the social and academic life of their disciplinary community. It has also endangered women undergraduates’ academic progress, success and persistence in their respective academic fields.
Chapter V

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Overview of the Chapter

This chapter contains a review of the purpose and nature of the study. Discussion of the hypotheses and the statistical findings that confirm or reject the hypotheses are also presented. Possible rationale for the obtained findings as they relate to existing literature was offered. Unexpected findings, limitations of the study, and implications to policy and practice are discussed in this chapter along with some recommendations for future study.

Purpose and Nature of the Study

The purpose of this study was to determine the scope and the impact of sexual harassment on women undergraduates' educational experience in Anambra State of Nigeria. To accomplish this task the study focused primarily on how academic field impacted the perceived sexual harassment experienced by women undergraduates. Also, to ascertain the level of the impact on academic and social learning processes, the study investigated how women undergraduates' experiences or fear of sexual harassment influenced their attitudes and behaviors in responding to their environmental condition.

This study utilized Astin's (1984) Theory of Student Involvement and Douglas and Wildavsky's (1983) Cultural Theory of Risk as the theoretical frameworks. The basic element of Astin's theory was the more students are involved in their educational formation the more they learn. Douglas and Wildavsky's theory asserts that structures of social organization endow individuals with perceptions that reinforce those structures in competition against alternative ones. By using Astin's theory of Student Involvement and Douglas and Wildavsky's Cultural
Theory of Risk as theoretical frameworks, this study attempted to investigate the infractions or abuses that have transpired during faculty-student and peer-peer encounters within the participants' living and learning environments. This study proposed that sexual harassment or the fear of sexual harassment impacted students' involvement in the academic and social learning. Also, that harassment occurred mostly when students sought academic help and advisement. Therefore, this study was intended to disentangle the ambiguity that surrounds the problem of sexual harassment of women undergraduates in a country that has no definition for sexual harassment, such as Nigeria. By applying Astin's theory of student involvement and Douglas and Wildavsky's Cultural Theory of Risk in the study of sexual harassment the study extended the value of their works beyond their original focus to a wider audience.

Research Questions

The core research questions identified the major concerns of this study. There are two key components to be considered. First, the research study focused on the impact of the key variables on the perceived sexual harassment experienced by women undergraduates in Anambra State colleges and universities. The second concern of this study was to determine the impact of the key variables in the study on the adjustment to behavioral exposure of women undergraduates to harassment situations in their living and learning environments.

This study sought to answer the following questions:

Are Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, and Behavioral Exposure Index, associated with the Perceived Sexual Harassment experienced by women undergraduates in Anambra State colleges and universities?
Are Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment associated with the Adjustment to Behavioral Exposure of women undergraduates to potential sexual harassment in Anambra State colleges and universities?

**Data Collection**

The sample for this study was selected from the population of 760 women undergraduates in the fields of science and technology and 2140 women undergraduates in other academic fields currently enrolled in the 2009-2010 academic year at Nnamdi Azikiwe University, Madonna University, Anambra State University, and Anambra State Polytechnic in Anambra State of Nigeria. The lists of women undergraduates enrolled in the 2009-2010 academic year were accessible through the Head of Departments (HOD) in the sampled institutions. The sampling in this study occurred in two stages: the informational stage and the survey administration stage.

**Informational Stage**

Recruitment letters (Letter of Solicitation) were sent to 760 women undergraduates in the fields of science and technology and 2140 women undergraduates in other academic fields through their heads of departments (HOD). Only 418 of the 2900 women undergraduates responded to the letter of solicitation. These 418 prospective participants were women undergraduates from the fields of Engineering Technology, Environmental Sciences, Health Sciences and Technology, Management Sciences, Natural Sciences, Arts, Education, Preliminary Studies, and Social Studies. A week before the actual day of the study, the 418 prospective participants who responded to the recruitment letter were invited for a brief meeting.
which the cover letter explaining further the aim of the study and what was expected of the
participants were distributed.

Survey Administration Stage

On the day of the study only 310 out of the 418 women undergraduates who came to the
meeting a week ago reported to Nnamdi Azikiwe University Complex, Hall B for the study.
Most of these came from Nnamdi Azikiwe University, which may be the result of the two-stage
processes (informational and survey administration) adapted in this study and/or transportation
difficulty. The Sexual Harassment on Campus Survey (SHCS) was passed out to the participants;
and it took them approximately 15 minutes to complete.

Composite Variables and Scale Reliability

Prior to utilizing the subscales for hypothesis testing, the internal reliability and
consistency of the subscales were measured using Cronbach's alpha. For the purposes of this
study, alpha coefficients was calculated for each of the subscales and the following guidelines
were used to determine the degree to which each subscale measures the intended phenomena:
greater than .90 was considered an excellent measure, greater than .80 was considered a good
measure, greater than .70 was considered an acceptable measure, greater than .60 was considered
a questionable measure, greater than .50 was considered a poor measure, and less than .50 was
considered an unacceptable measure (George & Mallery, 2003).

The Perceived Sexual Harassment scale measured the overall judgment of women
undergraduates that they have been sexually harassed by their male instructors and peers. The
combination of one survey question comprising the Perceived Sexual Harassment subscale
yielded a Cronbach's alpha coefficient of .91, which is considered an excellent measure. The
Adjustment to Behavioral Exposure subscale measured the level of participants' behavioral
adjustment due to fear of or threat of sexual harassment. The combination of the six survey questions comprising the Adjustment to Behavioral Exposure subscale yielded a Cronbach’s alpha coefficient of .90, which is considered an excellent measure. The Behavioral Exposure Index measured the participants’ overall experiences of behaviors that could be interpreted as sexual harassment. The combination of the 12 survey questions comprising the Behavioral Exposure Index subscale yielded a Cronbach’s alpha coefficient of .89, which is considered a good measure. Culturally-Embedded Gender Stereotypes measured the preconceived beliefs about gender that women undergraduates had because of cultural, parental, or other social influences. The combination of these nine survey questions yielded a Cronbach’s alpha coefficient of .78, which is an acceptable measure.

Research Methodology

Descriptive statistics were calculated first. Then, a hierarchical linear regression was used to test the predictive power of the independent variables on the Perceived Sexual Harassment and Adjustment to Behavioral Exposure. Three successive models were tested to determine the best combination of predictor variables for Perceived Sexual Harassment and Adjustment to Behavioral Exposure scores.

Summary of Major Findings

This section of the chapter presents the descriptive frequencies and the findings regarding the research questions that were used to guide the study. Each question contributed to the investigation of how academic field impact the sexual harassment experienced by women undergraduates in Anambra State colleges and universities. The findings are followed by discussion and the relative implications of the findings to policy and practice.
The Descriptive Frequencies: Independent and Dependent Variables

The findings on Culturally-Embedded Gender Stereotypes showed that, while possibly conditioned to respond negatively to overt statements of male chauvinism, responses to more subtle statements of inequality were very polarized. More subtle statements elicited bimodal response or positive responses. The Academic and Social comfort findings indicated that participants reported feeling comfortable in their respective academic fields with regard to equity in participation and opportunity to compete for scholarship. They believed they were treated fairly, respected and had opportunities to compete with males in their academic fields. The Behavioral Exposure Index results showed that 2 out of every 3 (64.1%) of the participants have been touched by a faculty member as well as 2 out of every 3 (64.6%) of the participants have been intentionally excluded from academic and social activities because of their gender. Approximately 2 out 3 (63.7%) women undergraduates who participated in this study have been offered good grades or helped for sexual favors by their instructors.

Comparably, participants in the traditionally male fields experienced behaviors that could be interpreted as harassment “Often or Very Often”. That is, although the cumulative frequency scores of the participants in the traditionally male dominated fields are lower than those in the traditionally female academic fields, the intensity of the occurrences of the harassment are more severe among those in male dominated fields. Approximately 1 out of 4 (23%) of the participants in the traditionally male fields and 1 out of 7 (14.8%) of the participants in the traditionally female fields have heard inappropriate jokes in front of them often or very often. The same was true about hearing inappropriate comments about their gender, hearing negative things about their gender, experienced inappropriate gestures directed to them, heard untrue rumors about them, have been spoken to angrily by instructor and peers, spoken about negatively behind back
and intentionally excluded from activities. Although it was enticing to base the conclusion on the cumulative frequency scores by which participants in the traditionally female fields appeared to be more harassed, due to the neutrality of the position “Sometimes” or the intensity of the occurrence of the incident it was difficult to draw that conclusion. Therefore, in terms of significance of position (Sometimes, Often, Very Often) or the intensity of occurrence, it could be concluded that participants in the traditionally male fields are more harassed than their counterparts in the traditionally female fields. This is because they experienced behaviors that are consistent with harassment often or very often and participants in the traditionally female fields experienced these behaviors mostly sometimes.

The findings on Participants’ Judgment of the Extent to Which They feel Sexually Harassed indicated that 39.4% of the participants agreed and 10.1% of the participants strongly agreed that they have been denied help or punished with poor grades for denying unwelcomed sexual advances to their instructors. Further investigation of the data indicated that of the 49.5% that indicated having been denied help or punished with poor grades only 11.6% of these participants scored high in Academic and Social Comfort scale and still felt very harassed. The findings on the other dependent variable showed that perception or fear of sexual harassment have prevented approximately 2 out of every 5 (37.8%) participants from volunteering or taking campus jobs, participating in most campus activities (38.1%), or seeking academic help from instructors and peers (39.5%). About 1 out of every 5 (20%) of these participants do not socialize with their peers and 1 out of every 4 (25.2%) participants alienated themselves from their academic community because of the fear of sexual harassment and the treatments they received from male instructors and peers. However, 2 out of every 5 (44.9%) of the participants would not report sexual harassment to disciplinary committee comprised of men.
Basic Descriptive Findings: Academic Field and other Variables

The findings indicated that women undergraduates in the traditionally female academic fields scored higher on Adjustment to Behavioral Exposure and lower on Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment across all academic fields than females in the traditionally male academic fields. Comparing both clusters of fields indicated that participants in both traditionally male and traditionally female academic fields have adjusted their behaviors to cope with the harassing behaviors of their instructors and peers. However, the degree of the adjustment was higher for participants in the traditionally female academic fields than those in the traditionally male academic fields. This finding was not expected. The findings also indicated high ratios of male to female faculty members in all academic fields across colleges and universities in the study. Gender divide was found to be wider among the traditionally male academic fields than in the traditionally female academic fields. As expected, the ratio of male to female students was much lower in traditionally female academic fields and the existing disparity was wider in some academic fields. For instance, at Madonna University, the ratio of male to female students was approximately 10:1 in the field of Engineering Technology which was also a traditionally male academic field in Africa especially among the Igbos of Nigeria.

Hypothesis Testing

Research Question 1: Are Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, and Behavioral Exposure Index associated with the Perceived Sexual Harassment experienced by women undergraduates in Anambra State colleges and universities?
A hierarchical linear regression was used to test the predictive power of the independent variables on the Perceived Sexual Harassment. Three successive models were tested to determine the best combination of predictor variables for Perceived Sexual Harassment scores. The study found that Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes were significant predictors of Perceived Sexual Harassment ($F (7, 149) = 19.41, p < .01$). These variables accounted for half of the variance in Perceived Sexual Harassment.

The variable Academic Field was negatively related to Perceived Sexual Harassment and the nature of the relationship indicated that participants in the traditionally male academic fields were less likely to judge themselves as harassed than their counterparts in the traditionally female academic fields. This finding was not expected and so needs further study. Particularly, three variables significantly contributed to the model that predicted Perceived Sexual Harassment: GPA, Behavioral Exposure, and Culturally-Embedded Gender Stereotypes. The finding indicated that the likelihood that women undergraduates will report having experienced sexual harassment was determined by (a) actual exposure to potentially harassing behaviors by faculty and students; and (b) their academic performance (GPA) and the cultural gender stereotypes held by women undergraduates rather than by age, academic fields, and faculty and student gender ratios. However, recalling the research of Nwaogwugwu (2007) that students in Anambra State colleges and universities pay their way through examination either by sexual gratification, gifts, and or money (sorting), the indication of GPA as a predictor to perceived sexual harassment appeared to be questionable. As the study indicated, the overall GPA of the study participants was 3.04 and the GPA of the participants in the traditionally male academic
fields was 3.25. Could it be that these participants sorted or generally, that students with high GPAs in the institutions sorted? This need further study.

**Research Question 2:** Are Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, Behavioral Exposure Index, and Perceived Sexual Harassment impact the Adjustment to Behavioral Exposure used by women undergraduates in the fields of science and technology to avoid potential sexual harassment in Anambra State colleges and universities?

The final research question examined the impact of Academic Field, Faculty Gender Ratio, Student Gender Ratio, Age, GPA, Culturally-Embedded Gender Stereotypes, Behavioral Exposure, and Perceived Sexual Harassment on the Adjustment to Behavioral Exposure used by women undergraduates to avoid potential sexual harassment in their colleges and universities. Again, a hierarchical linear regression was utilized to determine the significance of the models predicting the Adjustment to Behavioral Exposure. Three successive models were tested to determine the best combination of predictive variables. The final model of the hierarchical linear regression was significant at the .05 level, $F (8, 124) = 2.21, p = .03$, and predicted 12.5% of the variance in Adjustment to Behavioral Exposure. Collectively, all the eight variables are predictors to Adjustment to Behavioral Exposure. Academic Field was negatively related to the dependent variable Adjustment to Behavioral Exposure. That is, participants in male-dominated fields reported less avoidance behavior than their counterparts in the female-dominated fields. Individually, only the variable Age significantly contributed to the model predicting Adjustment to Behavioral Exposure. The relationship between Age and Adjustment to Behavioral Exposure was direct, and indicated that as students grew older in age, they were more likely to avoid situations that could be interpreted as sexual harassment. Invariably, the findings showed that
behavioral adjustment to the environmental condition was not well predicted and if perceived harassment was quite predictable, how individuals respond as regards to adjustment of behaviors seems to be less predictable.

Discussion on the Major Findings

Social, political and economic conflicts in Africa have exposed the worst forms of objectification of women and the abuse of their rights as citizens. Due to women’s subordinate social status and gender discrimination, women in Africa experience conflict differently when compared to women in other parts of the world. On a daily basis women and girls in Africa are challenged not only by economic instability that leads to all kinds of exploitation, forced displacement, abduction, trafficking and torture but also unusual kinds of sexual violence. Considering women’s social status in Africa especially those in Sub-Saharan region higher education is considered a prized venture and enrolling into gender-determined fields is a daunting choice due to harsh culture, gender unfriendly admission policies, and hostile academic environment (Nwaogwugwu, 2003; Onokala & Onwwah, 2001). Several researches such as Lund, (1998); Rathgeber, (2002); UNESCO (2006), and African Regional Forum, (1999) found gender imbalance especially in the fields of science and technology a major issue in African higher education systems particularly for those countries in the Sub-Saharan region. UNESCO (2006) reported that women participation in science and technology fields are limited due in part to poverty and lack of education or by legal, institutional, and cultural beliefs and practices. Sexual harassment coupled with other gender-related problems jointly militate against the progress of women in higher education in Africa (Adedokun, 2004; Effa-Chkwuwuma & Osarenren, 2001; Kalof et al., 2001; Leonard et al., 1989; Ladebo, 2003).
Douglas (1983) in her Cultural Theory of Risk argued that individuals associate societal harms with conduct that transgresses societal norms. This tendency, she maintained, plays an indispensable role in promoting certain social structures by influencing members to develop the tendency to avoid subversive behaviors and by focusing resentment and blame on those who defy such institutions. As indicated by this study, perception or fear of sexual harassment prevented approximately 2 out of every 5 women from volunteering or taking campus jobs (37.8%), participating in most campus activities (38.1%), or seeking academic help from instructors and peers (39.5%). About 1 out of every 5 (20%) women did not socialize with their peers and 1 out of every 4 (25.2%) participants alienated themselves from their academic community out of fear of sexual harassment and the treatments they received from male instructors and peers.

African culture, particularly the culture of the Igbos of Nigeria, exacerbated the impact of sexual harassment against women students. Igbo culture and tradition permitted discrimination of the female gender in educational settings by fostering an anti-female culture that resulted in gender insensitive curriculum and instruction and abuse of rights to solid education in violence-free environments. The study found that 3 out of every 5 (64.6%) women undergraduates have been intentionally excluded from academic and social activities because of their gender. These women have been brainwashed or so much encultured that it is almost difficult for them to identify their basic human rights. For instance, this study found that approximately 2 out 5 (39.9%) of the participants agreed or strongly agreed that they do not feel there was anything wrong with being treated differently because of their gender, including being treated negatively. This response exposed the confusion to which these women have been subjected.
As in other kinds of abuses, Nigerian society does not acknowledge sexual harassment as a violation of women’s right. The culture states that women are inferior to men and as such they have little or no rights, not even the right to exist in an abuse-free environment. Being an entity in this antifemale culture, Nigeria colleges and universities also adapt and foster abuse of women’s rights as they accommodate and or are silent about the male faculty and peers’ unethical behaviors toward women students. Women undergraduates in Nigerian higher education institutions, particularly those in Anambra State colleges and universities, are more concerned about safety than academics as they struggle on a daily basis sexual harassment from male faculty and peers. Who cares about getting education when health and life is in danger! The indirect legalization of harassment and abuse of power exhibited by Anambra State’s male faculty in the practice of “sorting” explained the seriousness of the daily upheavals that women students are exposed to in their learning environments. Sexual harassment is one of the many types of gender violence experienced by African women, and culture (as the study suggested) is the key factor to violence against women in this continent. A culture that has no respect for life and/or the subjects is not a culture at all. The finding therefore, recommended that Igbo culture in all its essence should undergo modification or transformation to incorporate every citizen no matter the gender. Every human being (male and female) is a citizen of this earth. No one is an alien and so there should be equal treatment and respect for all gender and persons.

It was expected in this study, based on the nature of Igbo culture and gender socialization that women in the fields of science and technology would experience more of the behaviors that are consistent with sexual harassment. The two hypotheses tested indicated that Academic Field was inversely related to perceived sexual harassment and adjustment to behavioral exposure of the participants to potential harassment situations. This outcome was unexpected. Further
analysis of the data found that participants in the male domain fields have high GPA. The average GPA of the study participants both those in the male and female dominated fields was 3.04 and the average GPA of the participants in the male domain-fields was 3.25. Also, GPA was found as a predictor to Perceived Sexual Harassment. These findings suggested that participants in the fields of science and technology are higher achievers. That is, they are intellectually bright enough to handle their academic tasks in the midst of other perplexing situations. They have less need of academic help from either instructors or peers. For these reasons, they have less exposition to the unethical behaviors of male faculty and peers. In order word, these young women due to their intellectual ability can maneuver environmental conditions easily than those who due to their poor intellectual ability depend on others to accomplish their academic tasks and goals. Are these women really high achievers or are their high GPAs products of “sorting”? Nwaogwugwu (2007) indicated that student in Anambra State colleges and universities pay their way through examination either by sexual gratification, gifts, or money. Considering this practice, it could be possible that women undergraduates sort in other to get good grades. German pharmacologist Hugo Schultz’s (1888) (cited in Calabrese, 2004) investigated the development and evolution of human psychological qualities. He found that the ability to confront adverse situations and grow and mature as a result of them is an innate human quality. That is, all human being are born with the potential and predisposition to develop a resilient personality. SciVee (2008) reported that cognitive psychologists and neuroscientist discovered that human resiliency is strengthened when an individual is exposed to adversity and pain in their lives. As indicated in the review of literature, Igbo women in the fields of science and technology are regarded as outliers (Allele-Williams, 1989; Alutu & Eraikhuen, 2004; Ezumah 2007). Also, women in the fields of science and technology were found to exhibit some traditionally
masculine traits and qualities such as aggressiveness, dominance, energetic, forcefulness and power (Tannen, 1987, 1990; Weichselbaumer, 2000). Therefore, it could be argued that women undergraduates in the male-dominated fields are most likely to develop these qualities to enable them survive the difficulty in their learning environment.

Faculty-student and peer-peer contacts were hypothesized in this study as the key factor in the harassment experienced by women undergraduates. Women undergraduates encounter harassment as they seek academic help from faculty and peers. This study identified high levels of behaviors that could be interpreted as harassment among the participants. Approximately 2 out of 3 (64.1%) of the participants have been touched inappropriately by a faculty member. Also, 7 out of 10 (71%) of the participants have experienced inappropriate gestures directed to them and 4 out of 5 (80.2%) have had inappropriate jokes told in front of them. Astin’s (1984) Theory of Student Involvement, a theoretical framework used for this study argued that faculty-student contact is important for good academic integration. Astin (1993) also confirmed the positive impact of faculty involvement with students thereby strengthening the case for increased faculty involvement with students outside of the classroom. This recognition of the importance of faculty involvement with students encouraged faculty to extend their professional roles into more personal realms, stimulating instructors to interact with students in more informal settings. Astin argued that students who get involved in the learning process through continuous interaction with instructors and peers excel in their studies. Astin believed that the most persuasive types of involvement are “academic involvement, involvement with faculty, and involvement with student peer groups” (Astin, 1996, p. 126). Due to the growing ethical and legal concern over the potential exploitation of students, faculty members are discouraged from developing personal relationships with their students. Although some colleges and universities across the globe
encouraged faculty to be active advisors and mentors to their students, at the same time, these professionals are instructed to avoid those situations or behaviors that might appear exploitive. Brown and Krajer (1985) argued that the multiplicity of roles imposed on the faculty has exposed the faculty to the risk of developing personal relationships with students. Due to power difference between the faculty and students, students are usually at greater risk for exploitation as they enter into relationships with their instructors outside the classroom.

In Africa especially in Nigeria where there is absence of policy initiatives and the majority of the teaching and nonteaching staff and students are males, women students are in greater danger of encountering unethical behaviors from faculty and peers. As expected in the study, faculty and student gender ratios have a direct relationship with perceived sexual harassment and adjustment to behavioral exposure of women undergraduates. As indicated by the Association of African Universities (AAU) and Forum of African Women Educationalists (FAWE) (2000) over the years, African universities have produced mainly male managers. More than 90% of staff of African universities, 80% of teachers, and 75% of students enrolled on the African colleges and universities are male. Colleges and universities in African continent are in dire need of women faculty and staff to serve as role models for women students and also to advocate for women students in the matters of education and social affairs. The shortage of women faculty, staff, and students accentuated the marginalization and underutilization of women in both education and national developments. As African population is more than 50% female, there is the urgent need for Africa, as well as Nigeria (60% women and girls), to create strategies for ensuring the sustainable involvement of the African female population in all areas of development.
The Education for All (EFA) (2003) and Millennium Development Goals (MDG) (2003) preposition to eliminate gender disparity in primary and secondary education as well as in all levels of education by 2015 was considered a basic human right and human development goal. MDG (2003) found that in Sub-Saharan Africa the disparity between male and female primary and secondary school enrollments has improved only slightly since 1990. Recently, MDG indicated that the disparity in African higher education particularly those in the Sub-Sahara region have not shown a recognizable improvement. Achieving gender parity in African higher education especially in Nigerian higher education would be the first concrete step in addressing the issue of harassment. The findings in this study indicated that 44.5% of the participants do not report sexual harassment incidents because the disciplinary committees are comprised of men. More involvement of women in the faculty and staff would encourage women to report their experiences of harassment and hopefully the perpetrators would be subjected to punishment.

As this study indicated, many women undergraduates have indeed experienced from the faculty and students behaviors that are consistent with harassment. Such an encounter impacted faculty-student and peer-peer relationships as well as students' disposition to focus on their academic and social developments. The findings in this study indicated that the perception of or fear of sexual harassment prevented approximately 2 out of every 5 women from volunteering or taking campus jobs (37.8%), participating in most campus activities (38.1%), or seeking academic help from instructors and peers (39.5%). About 1 out of every 5 (20%) women do not socialize with their peers and 1 out of every 4 (25.2%) women undergraduates alienated themselves from their academic community because of the fear of sexual harassment and the treatments they received from instructors and peers of the opposite sex. Pascarella and Terenzini's (1991) College Impact Models of Student Development contended that students'
success in college depends on many factors among which are student’s fit within the environment in which he or she live and learn. In other word, students’ college experience become satisfactory when they feel academically and socially integrated within the environment in which they live and learn. Student’s fear or inner struggle with the college environment is manifested in the students’ impaired academic performance, avoidance of persons or aggressors, or lateness to classes, resentments and disassociation with faculty and peers interactions, dropping out of courses, altered academic career plan or dropping out of college (Leonard et. al, 1989, Ladebo, 2003; Wear & Autman, 2005). Hostile academic environment impinge upon students’ adaptation or fit within the environment in which they learn.

This study also supported other studies that found strong relationship between quality of effort, learning, and persistence with students’ perceptions of the college environment (Braxton, Sullivan, & Johnson, 1997; Kuh, Pace, & Vesper 1997; Kuh, Vesper, Connolly & Pace, 1997; Tinto, 1975; 1993; 1997). These studies indicated that perceived fit in the college environment includes involvements in activities, interactions and influence with peers (Astin, 1993); faculty (Astin, Kuh & Hu, 2001; Bean, 1985; Terenzini, Pascarella, & Blimling, 1986) and involvement in extracurricular activities (Bauer & Bennett, 2005; Pascarella & Terenzini, 1979, 2005). Pace (1984), Astin (1993), Kuh (1993), and Tinto (1987) found that the more satisfied and involved a student is in college, the more likely he or she will be academically successful and graduate. Academic and social integration and success are threatened as women undergraduates perceive hostility in their learning environment. At this point, they are more concerned with safety than focusing in their courses.

Abati (2006) and Ezumah (2003) indicated that the way Nigerian males and females were socialized makes females vulnerable to different kinds of maltreatment from males including
name calling, intimidation, sexual exploitation, and abuse. Ladebo (2003) and Ladebo (2003) indicated that sexual harassment was a foreign word in Nigeria and so there were no policy initiatives that addressed it. It was culturally acceptable for Nigerian men to indulge in behaviors consistent with sexual harassment. Nigerian gender socialization makes it difficult to define sexual harassment. It is possible that male faculty and students do not perceive their actions as a violation of women’s right. Due to obscurity in what constitutes sexual harassment in Nigeria it is also possible that women can mistakenly take an honest action to be harassment. The findings in this study suggested that sexual harassment should be definitely defined above and beyond the influence of Nigerian cultural beliefs and practices because in the absence of the definition of sexual harassment there is increased tendency for faculty to indulge in behaviors that could be interested as harassment. Again, a wealth of studies analyzed undergraduate students’ perceptions of sexual harassment and gender differences on how sexual harassment is perceived. These studies found that women are more likely than men to view an act as harassment (Dietz-Uhler & Marrell, 1992; Marks & Nelson, 1993; Popvich, Gehlsor, Jolton, Somers & Godinho, 1992). Establishing a plausible definition of sexual harassment would assist women in determining whether their experiences are harassment.

Culturally-embedded gender stereotypes were found to be prevalent in the participants’ colleges and universities. While possibly conditioned to respond negatively to overt statements of male chauvinism, participants perceived more subtle attacks on the equality of women positively. Responses to overt statements of inequality were very polarized. More subtle statements elicited either a split response or an opposite response. Most importantly, cultural gender stereotypes were found to influence how participants perceived and reacted to male faculty and peer harassment behaviors. For instance, about 1 out of 2 (48.4%) of the participants
agreed or strongly agreed that if women are treated negatively by a man, they probably did something to deserve it.

Unlike Africa, other developed countries of the world have progressed adapted cultures that are more inclusive. Hence, women in these countries have become quite independent, cruel, and eager to leave the comfort of their homes to make a living. Men are slowly taking part in the care of the children and home. Roles are becoming shared instead of separated. With the changes in the economic world and the emphasis society places on education and career women and men are now being forced to establish parallel roles. Although African countries are now laying emphasis on education and career, their cultures, with regard to gender roles and expectations, have not been influenced by this shift. African cultures particularly Igbo culture of Anambra State are still highly stereotyped. Women are still perceived to be weak, less intelligent, and much more temperamental than men. Women undergraduate participants' responses indicated how much their beliefs and values have been influenced by cultural stereotypes on their learning environment. As the Fourth World Conference on Women (Beijing, 1995) indicated regarding the equality of gender, in order to ensure sustainable development in Africa especially in Nigeria, it is imperative to recognize the importance of the two sexes (male and female) as complementary biological entities. It is important to respect full equity and equality of each of the two genders by upholding the social roles that men and women assume in the society.

Implication to Policy and Practice

The findings in this study not only supported the research studies and reports reviewed in this study but it also opened a new dimension for understanding the scope of the problem of sexual harassment in Africa particularly in Nigeria. The study found that every woman in Anambra State colleges and universities battles with the problem of harassment. The study
recognized the accelerating importance of the role of culture in the definition and perception of sexual harassment in African setting as well as its influence on the descriptive harassment incidents experienced by women undergraduates and how they tackle the problem. These factors have implications for policy and practice.

In summary, it is critical to do research when there is no common definition of a concept. A common definition enables the institutional leaders to establish policies and procedures that would minimize or eradicate harassment problem. It would also form a basis for determining the impact of harassment on students' academic and social life as well as on the functioning of the academic and institutional community. Also, a common definition enables researchers to better investigate the problem. Without a definition at the institutional levels and across the academic disciplines, the implementation and enforcement of the policy will continue to be a challenge and addressing the problem will never be realized.

According to this study, the independent variables GPA, Behavioral Exposure Index, and Culturally-Embedded Gender Stereotypes are predictors of Perceived Sexual Harassment. However, according to research by Nwaogwugwu (2007), students in Anambra State colleges and universities pay their way through examination with sexual gratification, gifts, and/or money through the process of sorting. With this practice it seems difficult to determine the impact of GPA to the perception of sexual harassment. The high GPA of the participants may be a result of sorting and this to some extent has biased the result. At this point, GPA appeared not to be a reliable measure of sexual harassment. The impact of sorting on students' GPA needs to be investigated so as to accurately measure the relationship of GPA to the dependent variable Perceived Sexual Harassment. Again, addressing culturally-embedded gender stereotypes may be unattainable to policy intervention. In Igbo land tradition was considered sacred and cannot be
questioned or altered. Modification of Igbo culture was not a foreseeable event and this difficulty will also be reflected on the institutional culture because institutions are part of the wider society.

Baxter and Kane’s (1995) cross-national survey found that traditional attitudes were correlated with women’s degree of dependence on men in the society. African gender socialization disempowered women from functioning independently and competitively. Undergraduates are expected to be independent, strategic, and void of interpersonal support. These expectations are antithetical to traditional female socialization in Africa particularly among the Igboos of Nigeria. The differences in the socialization of males and females in Africa, particularly in Nigeria, which reduced women to help-seekers and help-givers rather than self-reliance, exposed them to behaviors that are consistent with harassment as they seek help from male faculty and peers. As the findings indicated, approximately 2 out of 3 women undergraduate participants (63.7%) have been offered good grades for sexual favors by their instructors. Although the study indicated that the attitude of the faculty towards quality assurance was negative, the percentage of women students who succumbed to this manipulation was quite high. It raises concern as well as questions as to why these women gave in to these demands. It is possible that women undergraduates chose to go with the offer instead of taking a constructive approach to their education. Hence, the main challenge to policy and practice is how to motivate women undergraduates to be accountable for their education. Astin (1984) states that, the intended end of institutional and pedagogical practices are to achieve maximum student involvement and learning. To accomplish this task students are to be motivated to allot time and energy in the learning process (p.305). Astin postulated that all institutional policies and practices can be judged by the degree of involvement they foster in students. Astin’s statement suggested a collegial work between the administration, faculty and staff members. That is, all
faculty from instructors to counselors, have to work with the same goal in mind, unifying their energies into making students more involved in the college environment (p. 307). Also, culture is not easily changed but it could be modified. Nigerian culture and its method of enculturation need to be modified to enable women to be independent from the onset of their lives.

Geertz (1983) argued that being a member of a disciplinary community involves a sense of identity and personal commitment. Becher and Trowler (2001) argued that the process of identity and commitment development starts at the undergraduate level (p. 47) and students within the disciplinary community are conditioned at the earliest stage of their education through the process of socialization to uphold the traditions of their academic fields. Their enculturation into their academic fields shapes the way they view and react to their environment. Following Becher and Trowler’s (2001) insightful statement it is highly important that the needs of undergraduate students should be the top priority for institutions. As indicated by the findings in this study 1 out of 4 (25.2%) women undergraduates did not feel like part of the academic community because of the fear of sexual harassment and the treatment they receive from male faculty and peers. It is possible that women undergraduates yielded to the overpowering appeal of the faculty and peers in order to feel that they belong to their disciplinary community. There is increased likelihood that women students will spend more of their time and energy trying to impress male faculty, staff, and peers instead of focusing on their studies. Overall, both faculty and women students’ attitude toward academic work may fluctuate. Popham (2005) and Royster, Harris and Schoeps (1999) found that students’ attitudes toward their educational process lead to academic success. Instructor’s attitudes and beliefs also were found to influence student’s academic success (Beswick, 2006, 2007; Grouws & Cramer, 1989; Schoenfeld, 1988; Swan, Bell, Phillips, & Shannon, 2000; Uusimaki & Nason, 2004; Wilkins & Brand, 2004). Therefore,
undergraduate formation has to be taken seriously. An atmosphere that nurtures positive attitude toward work as well as toward people is needed and it is the responsibility of the entire academic community (teaching, nonteaching staff and students) to make that happen.

Positive academic and social environments require creating a feasible policy that holds all participants accountable for their actions as well as guards and guides the attitudes and relationships of the faculty and staff with students. It also demands that teaching and nonteaching staff uphold and implement the institutional policy and inculcate it to their students. At present only a few of the Nigerian colleges and universities have policy initiatives that address sexual harassment (Adedokun, 2004 & Ladebo, 2003). This is a reflection of Nigerian culture. Culture is a mental programming that influences people’s way of thinking, feeling, and responding to the environment (Hofstede, 1994). People tend to weigh situations through the lens of their beliefs and values, both cultural and religious. Nigerian cultures, especially the traditions of the Igbos of Anambra State, have no prescription for harassment because they do not believe in the concept. For institutions to have a policy on harassment, they must first acknowledge that harassment is a violation of women’s right. Policy will be established and enforced when the concept is upheld as a crime. The policy would be enforced if the administration has sound moral judgment and is conforming to the accepted standard of conduct designed by the institution. It becomes problematic when individuals in the position to create and enforce policy are the perpetrators. Kecel (2005) postulated that an individual’s choice to respond to a situation is controlled by the perception and understanding of the potential pain and punishment that are perceived in the situation. Absence of workable policy contributes to the unprofessional attitudes of the faculty who prey on female students. The challenge for colleges and universities is to establish and enforce feasible policy that would guide faculty, staff, and students’ behavior. In conclusion, for
higher education in Africa to be truly effective or functional, and for women’s successful participation in higher education it is incumbent upon African higher education stakeholders and participants especially in Nigeria to pay special attention and adopt measures that overcome gender-based discriminations especially sexual harassment of women students.

Recommendations

Many of the recommendations that follow are consistent with the results found in this study, as well as the work of Astin, and Terenzini and Pascarella. Astin (1985) argued that the quality and quantity of the student’s involvement influences the amount of student learning and development (Astin, 1984, p.297). He indicated that true involvement requires student investment of energy in academic, relationships and activities related to the campus. Pascarella and Terenzini’s (1991) College Impact Models of Student Development contested that students’ success in college depends on students’ fit within the environment they live and learn. Based on Astin and Terenzini and Pascarella’s arguments, the following recommendations are made.

The most important approach in addressing the sexual harassment in Anambra State colleges and universities is to create and enforce a feasible policy on harassment.

Development of campus service programs that would foster continuing pursuit of academic, and facilitate personal growth and development is needed. Examples of such programs are academic support and advancement programs that would focus on academic advising, academic instructional support, academic engagement and enrichment, and community building. These programs would help to create an inclusive campus climate where all members of the campus community feel valued, respected, and free to participate and achieve their highest academic potential as well as limit unnecessary faculty-student and peer-peer contact that exposes students to danger of harassment.
Launch self-awareness and healthy behavior programs to educate students on the dignity of human beings irrespective of gender, class and age.

Culture can be modified but not changed. Inclusive culture that respects and upholds human dignity is desperately needed in Igbo land. Anambra State as well as Nigeria cannot progress with the ancient mentality of gender that brings disrespect and dishonesty. To reflect this modification, institutions could start by developing all-inclusive policies that foster respect for self and others.

Strong and visible academic and administrative support at all levels, from the department chair to the president, is required. A visible sign of this institutional support would be to have a humanitarian office (an office that promotes human welfare and social reform).

Most governance structures are male dominated in Nigerian as well as in African colleges and universities. The equal participation of women and men is needed in a democratic institution. More female staff is needed to participate in the decision-making process of the institutions. Finally, gender specific knowledge should be integrated in the curricula.

Implications for Future Research

Nigeria as a nation has no definition of harassment. More so, Nigeria has not yet perceived harassment as a crime. For this reason there is no sophisticated database of empirical studies on harassment. Also, Igbo culture of Anambra State is strongly embedded in the strength of patriarchy. In Anambra State women constantly struggle for their rights. Sometimes it is difficult for them to spend a day without the threats of men’s power and domination. The major challenge to this study was to have enough research work to help the researcher understand the problem of harassment of women students in Anambra State broadly.
Culture serves as a tool that molds the way people think, act, and communicate with each other. Igbo culture of Anambra state supports discrimination of female gender. Culturally-embedded gender stereotype was a predictor of perceived harassment in this study. Therefore, a qualitative study on cultural stereotypes and how these shape women's perceptions and response to harassment is suggested.

The research findings in this study suggest that more empirical studies on Nigerian women who pursue careers in science and technology are needed. The study showed that women participants in the male dominated fields saw themselves as less harassed than their counterparts in the female dominated fields. A follow-up study that would determine how strong women self-select into the fields of science and technology is needed.

The differences in academic disciplines suggested that faculty characteristics are different as regard to beliefs, values, and perception. Clark (1963) posited that faculty subcultures form mostly around disciplines. The academic discipline a faculty member embodies has deep-seated impact on their behavior, perception and how they relate with people within the academic institution. A qualitative study that compares the faculty in the fields of science and technology with those in non-science and technology fields is required.

The findings in this study questions the integrity of the education offered in Anambra State colleges and universities. The study showed that approximately 2 out 3 women undergraduates (63.7%) have been offered good grades or help for sexual favors by their instructors. An observational study that measures faculty and students attitudes toward quality assurance is needed.

Ladeho (2003) found that most victims of sexual harassment exhibit avoidance behavior which includes avoiding the aggressor or the environment that promotes such behavior. The
findings also indicated that perception or fear of sexual harassment has prevented approximately 2 out of every 5 women from volunteering or taking campus jobs (37.8%), participating in most campus activities (38.1%), or seeking academic help from instructors and peers (39.5%). Now, 2 out of every 5 (44.5%) women prefer not to report sexual harassment to disciplinary committee because they are men. These findings suggested a qualitative study on the impact of harassment on women students' social and psychological health.

As noted by Nwaogwugwu (2007), students in Anambra State colleges and universities pay their way through examination either by sexual gratification, gifts, and/or money (sorting). The indication of GPA as a predictor to perceive sexual harassment appeared to be questionable. A qualitative study that would explore the characteristics or the distinguishing traits of students with high GPAs in Anambra State colleges and universities are needed.

Freud's (1956-1939) theory of personality postulated that adjustment to behavioral exposure of women undergraduates prevent the ego from being overwhelmed. Freud argued that it is natural for individuals to defend themselves from situations that are threatening to them. The findings indicated that 50% of the variance in perceived sexual harassment was accounted for by the study variables while only 12.5% of variance in the adjustment to behavioral exposure was accounted for by the study variables. These findings call for a further research that would investigate why adjustment to behavioral exposure is less predictable.

Finally, the sample in this study was disproportionately located in one single institution. So the report in this study may not be a good representation of the state. A follow-up study that would recruit equal participants from all colleges and universities in the state is needed.


Gruber, J. E. (1992). A typology of personal and environmental sexual harassment:
Research and policy implications for the 1990s. Sex Roles, 26, 447-464.


Matchen, J., & DeSouza, E. (2000). The sexual harassment of faculty members by


Ndlovu, S. (2001) 'Femininities amongst resident female students at the University of Zimbabwe', in R. B. Gaidzanwa, Speaking for Ourselves: Masculinities and Femininities amongst Students at the University of Zimbabwe, Harare: University of Zimbabwe.

Ndlovu, S. (2001) 'Femininities amongst resident female students at the University of Zimbabwe', in R. B. Gaidzanwa, Speaking for Ourselves: Masculinities and Femininities amongst Students at the University of Zimbabwe, Harare: University of Zimbabwe.


Royster, D., Harris, M., & Schoeps, N. (1999). Dispositions of college mathematics


Appendix A

Approval letter from Institutional Review Board to conduct Research
Sr. Carina M. Okeke
123 Myrtle Avenue
Irvington, NJ 07111

Dear Sr. Okeke,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "Impact of Sexual Harassment on Women Undergraduates' Educational Experience in the Fields of Science and Technology in Anambra State of Nigeria." Your research protocol is hereby approved as revised through exempt review. The IRB reserves the right to recall the proposal at any time for full review.

Please note that, where applicable, subjects must sign and must be given a copy of the Seton Hall University current stamped Letter of Solicitation or Consent Form before the subjects' participation. All data, as well as the investigator's copies of the signed Consent Forms, must be retained by the principal investigator for a period of at least three years following the termination of the project.

Should you wish to make changes to the IRB approved procedures, the following materials must be submitted for IRB review and be approved by the IRB prior to being instituted:

- Description of proposed revisions;
- If applicable, any new or revised materials, such as recruitment fliers, letters to subjects, or consent documents; and
- If applicable, updated letters of approval from cooperating institutions and IRBs.

At the present time, there is no need for further action on your part with the IRB.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,

Mary F. Ruzycki, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Martin Finkelstein
Appendix B
Letter of Consent to Use Institution’s Facility
Sr. Carina Maris Okeke  
123 Myrtle Ave  
Ivlington, New Jersey 07111

Nnamdi Azikiwe University  
Awka, Anambra State  
P. M. B. 5052  
Awka – Nigeria

Dear Sir/Madam,

Letter of Permission to Recruit Dissertation Study Participants

My name is Carina Maris Okeke. I am a doctoral student of Seton Hall University in South Orange New Jersey, United States of America. I am conducting a dissertation research on the impact of sexual harassment on women undergraduates’ educational experience in Anambra State colleges and universities.

The purpose of this research is to identify the nature of sexual harassment experienced by women undergraduates in the State’s colleges and universities. The main focus is to determine how academic field impact the nature and frequency of sexual harassment against women undergraduates in Anambra State higher institutions.

I am writing to ask for permission to recruit my study participants from your undergraduate women who enrolled in the 2009-2010 academic year in the fields of Arts, Education, Postgraduate Studies, Social Studies, Law, Medicine, Natural Sciences, Engineering Technology, Environmental Sciences and Management Sciences. The prospective participants will be asked to complete the required Sexual Harassment on Campus Survey (SHCS) questionnaire designed specifically for this study which will take approximately 15 minutes. I planned to conduct my study in February 2010.

There are no known risks associated with this research. Participants’ responses will be anonymous and kept strictly confidential. This means their responses will not be linked to participant’s name or identity.

My mentor is Dr. Martin J. Finkelstein. If you have any questions or concerns about this study or if any problem arises please contact Sr. Carina Maris Okeke at slucy2002@yahoo.com or Dr. Martin J. Finkelstein at Seton Hall University at 973 275-2056 or finkelma@shu.edu. I hope my request will be given a favorable consideration.

Sincerely,

Sr. Carina Maris Okeke
Appendix C

Letters of Consent from Sample Institutions
OFFICE OF THE REGISTRAR

Our Ref: NAU/R/VI/285

13th March, 2009

TO WHOM IT MAY CONCERN

REV. SR. CARINA MARIS OKEKE:

This is to certify that SR. CARINA MARIS OKEKE is granted the permission to do her Doctoral Degree research on the Impact of Sexual harassment on Women undergraduate’s Experience in our Institution.

For more information, contact the University with the above address.

[Signature]

REGISTRAR
Appendix D

Letter of solicitation to study participants
Dear Participants,

I am a doctoral student of Seton Hall University in South Orange New Jersey, United States of America.

The purpose of this research is to identify the nature of sexual harassment experienced by women undergraduates in the State’s colleges and universities. The main focus is to determine how academic field impact the nature and frequency of sexual harassment against women undergraduates in the fields of science and technology in Anambra State higher institutions.

Your participation in this study if you agree will involve completing the required Sexual Harassment on Campus Survey (SHCS) questionnaire designed specifically for this study.

The amount of time required for your participation will be 15 minutes.

There are no known risks associated with this research. There are no monetary benefits to you for participating in this research. However, the findings of this study will contribute to our understanding of the educational experience of women students in Nigeria.

Your responses will be anonymous and kept strictly confidential. This means your responses will not be linked to your name or identity. All surveys will be handled with discretion and stored securely in USB memory key and locked in a safe. Your responses will be analyzed together with responses received from all other female students. The survey data will be strictly used for the completion of this dissertation research and only the researcher will have access to the data.

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time by simply throwing away the survey. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

if you have any questions or concerns about this study or if any problem arises please contact Sr. Carina Mari Okeke at jsluvc2002@yahoo.com or Dr. Martin Finkelstein at Seton Hall University at 973 275-2056 or finkelma@shu.edu. If you have any questions or concerns about your rights as a research participant, you may contact the Seton Hall University IRB Director Dr. Mary F. Ruzicka, Ph.D at irb@shu.edu

Sincerely,

Sr. Carina Mari Okeke

College of Education and Human Services
Department of Education Leadership, Management and Policy
Tel 973.761.9337
Appendix E

Sexual Harassment on Campus Survey Instrument
Instructions: The following survey asks a variety of questions pertaining to your perceptions, experiences, and cultural beliefs as a female student. Each section has a unique set of instructions, so please read the instructions for each section carefully. Some questions may be difficult to answer, but please be completely honest with all your answers. Your responses will be kept strictly confidential and will not be linked to your name or identity. All surveys will be handled with discretion and stored securely. Access to survey data will be strictly used for the completion of this dissertation research.

Please do not put your name, phone number, email or resident address on the questionnaire. Your responses will be anonymous. I am not interested in individual responses. Your responses will be analyzed together with responses received from all other female students. Your honest opinion on each and every one of the statements or questions is appreciated. You may skip any question that you are uncomfortable answering. Please do not discuss your answers with other people. It is your opinion that matters. Thank you for your help.

Part I. Background Information

Instructions: Please answer the following background questions to the best of your ability. Please choose only one answer for each question.

1a. What school are you currently attending?
   A. Nnamdi Azikiwe University, Awka
   B. Madonna University, Okija
1b. What year are you in?
A. Freshmen  B. Sophomore  C. Junior  D. Senior

1c. What is your current GPA?

1d. Where do you currently live as a student?
A. On-campus dormitory  B. Off-campus dormitory  C. Off-campus apartment  D. Family House

1e. What is your current living arrangement?
A. I live alone  B. I live with a roommate  C. I live with my family  D. I live with my spouse  E. I live with my friend  F. I live with my kids

1f. What country are you from? (Please Specify)

1g. What state are you from? (Please Specify)

1h. What tribe are you from? (Please Specify)

1i. What program are you currently enrolled in?
A. Arts  B. Education  C. Engineering Technology  D. Environmental Sciences  E. Health Science & Technology
Part II. Culturally-Embedded Gender Stereotypes

Instructions: Indicate your level of agreement with the following statements to express how accurately each statement describes your experiences as a female student. It is important to be completely honest in your responses. Please mark only one answer for each statement.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>I feel that students of the opposite sex are better students and more able to succeed in my field of study.</td>
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<td>3.</td>
<td>I feel that students of the opposite sex are better able to help me academically.</td>
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<td>4.</td>
<td>I don’t feel there is anything wrong with being treated differently because of my gender, including being treated negatively.</td>
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<td>5.</td>
<td>Women should not be in certain fields of study; only men should be in certain fields of study.</td>
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<td>6.</td>
<td>Sometimes women deserve to be sexually harassed because they are not equal to men.</td>
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<td>7.</td>
<td>Sometimes women deserve to be sexually harassed because of the way they dress.</td>
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</tbody>
</table>
8. If women are treated negatively by a man, they probably did something to deserve it.

9. Women should not be professionals, women should just raise families.

10. If a woman is sexually harassed, it is better to just ignore it and not report it.

Part III. Academic and Social Comfort

Instructions: Indicate your level of agreement with the following statements to express how accurately each statement describes you as compared to your male peers. It is important to be completely honest in your responses. Please mark only one answer for each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>11. I feel I have the opportunity to compete for scholarships.</td>
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<td>12. I feel I receive the help I should receive in my classes.</td>
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<td>13. I feel my papers and tests are graded fairly.</td>
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<td>14. I feel I am respected by my peers and other students.</td>
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<td>15. I feel I am respected by my instructors.</td>
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<td>16. I feel I am respected by department faculty and staff (Instructors, Office assistants and Administrators).</td>
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<tr>
<td>Number</td>
<td>Statement</td>
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<td>17.</td>
<td>I feel I have the opportunity to advance in my field.</td>
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<td>18.</td>
<td>I can freely share my opinions in class.</td>
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<td>19.</td>
<td>I can freely participate in class discussions.</td>
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<tr>
<td>20.</td>
<td>I can freely ask questions in class.</td>
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<td>21.</td>
<td>When I participate in group projects, my contributions are accepted.</td>
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</table>

**Part III Behavioral Exposure Index**

**Instructions:** Please indicate the frequency with which you have experienced the following behaviors during interactions with male students, male faculty members, or male administrators. It is important to be completely honest in your responses. Please mark only one answer for each statement.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
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</thead>
<tbody>
<tr>
<td>22.</td>
<td>Touching inappropriately by a faculty member</td>
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<tr>
<td>23.</td>
<td>Offering of good grades for sexual favors</td>
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<td>24.</td>
<td>Telling inappropriate jokes in front of you</td>
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<tr>
<td>25.</td>
<td>Making inappropriate comments about your gender</td>
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<tr>
<td>26.</td>
<td>Speaking negatively about your gender</td>
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</tbody>
</table>
27. Directing inappropriate gestures towards you
28. Insulting or sarcastic criticism directed towards you
29. Spreading untrue rumors about you
30. Using angry tone when talking to you
31. Humiliating or embarrassing you
32. Speaking negatively about you behind your back
33. Intentionally excluding you because of your gender

Part IV. Participants’ Judgment of the Extent to Which They Feel Sexually Harassed

Instructions: Indicate your level of agreement with the following statements to express how accurately each statement describes you as compared to your male peers. It is important to be completely honest in your responses. Please mark only one answer for each statement.

34. I have been denied help or punished with poor grades for denying unwelcomed sexual advances from my lecturer.

Part IV. Participants’ Adjustment to Behavioral Exposure to Potential Harassment

Instructions: Indicate your level of agreement with the following statements to express how accurately each statement describes your experiences as a female student. It is important to be completely honest in your responses. Remember that your responses will remain completely confidential. Please mark only one answer for each statement.
35. I do not volunteer or take campus jobs because of fear of sexual harassment.

36. I do not participate in most campus activities because of fear of being sexually harassed.

37. I do not ask for academic help from lecturers and peers of the opposite sex for fear of being sexually harassed.

38. I do not socialize with my peers for fear of being sexually harassed.

39. I do not feel like part of the academic community because of how I am perceived and treated by lecturers and peers of the opposite sex.

40. A disciplinary committee comprised of men would not keep me from reporting sexual harassment.

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**Part II. Demographic Questions**

**Instructions:** Please answer the following questions to the best of your ability by either circling the answer that best describes you and/or your situation or filling in the blank. Your answers will remain completely anonymous and confidential. Please choose only one answer for each question.

41. What is your age?
42. What is your marital status?
   A. Single   B. Married   C. Divorced   D. Widowed

43. How many children do you have?