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Beyond the Drafting Table; Women's Journey in Architecture as a STEM Career

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Abstract: Architecture as a STEM career presents a promising yet challenging path for women pursuing professional growth in the field, as they remain under-represented, particularly in leadership roles and professional practice, despite their increasing presence in architectural education. This study investigates the experiences, motivations, and challenges faced by women in architecture in the educational setting of Nigeria. Using a quantitative research approach, data were collected from 137 respondents through structured questionnaires, representing a 97.93% response rate. The findings reveal that passion for design and creativity (73.7%) was the predominant motivation for women choosing architecture. While 80.5% of respondents reported experiencing or observing gender-related challenges, these were not ranked as primary barriers when specific obstacles were identified; instead, financial constraints, limited resource access, and work–life balance emerged as the most significant challenges. Remarkably, 89.5% of participants expressed satisfaction with architecture as a career choice, with no reported dissatisfaction. Creativity (28%), continuous learning (24.2%), and societal impact (20%) were found to be the most rewarding aspects of their architectural careers. Statistical analyses revealed no significant association between academic level and career satisfaction or between institution attended and experiences of gender-related challenges. The correlation analysis demonstrated that intrinsic motivators like passion for design have stronger relationships with career satisfaction than extrinsic factors like financial stability or family influence. These findings contribute to understanding women's experiences in architectural education in Nigeria and have implications for educational institutions, professional organizations, and policymakers seeking to enhance women's participation and advancement in architecture. The research highlights the importance of addressing structural barriers while nurturing the creative and professional aspects that draw women to the field.

Keywords: architecture; STEM; architectural education; career satisfaction; female architects

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1. Introduction

Architecture stands as a distinctive discipline within the broader landscape of STEM (Science, Technology, Engineering, and Mathematics) fields, uniquely blending technical expertise with creative expression and critical problem solving. Unlike many STEM disciplines that primarily emphasize technical proficiency, architecture demands an integration

of artistic sensibility with scientific knowledge, creating a professional domain that bridges multiple ways of thinking and working [1]. This multifaceted nature positions architecture as both a career and a profession, requiring not only specialized education and technical training but also continuous professional development, mentorship, and the cultivation of professional networks over time [2]. Architecture as a profession extends far beyond the mere acquisition of employment; it necessitates the development of expertise, reputation, and influence to contribute meaningfully to the design and shaping of the built environment [3]. The journey toward becoming an established architect involves a complex interplay of formal education, practical experience, professional licensure, and ongoing engagement with evolving industry standards and practices [4]. This comprehensive professional pathway distinguishes architecture from many other occupations, positioning it as a lifelong commitment to both personal development and societal contribution [5].

Globally, STEM disciplines have been recognized for their vital role in advancing technological innovation, economic development, and societal progress [6]. However, persistent gender disparities have characterized these fields, with women's participation historically limited across various disciplines [7]. Despite concerted efforts to address these gaps, significant imbalances remain, particularly in fields requiring technical specialization and professional certification [8]. In 2021, women made up 14.5% of the engineering workforce in the UK [9], while in higher education, 19.7% of engineering students were female in 2020 [10]. Architecture, with its unique blend of artistic and technical demands, presents a distinctive case within this broader context of gender disparity in STEM. It has been long regarded as a male-dominated profession, with women traditionally occupying marginalized roles. The under-representation of women in architecture has been documented across diverse geographical and cultural contexts. According to data from the International Union of Architects [11], women constituted merely 29% of registered architects globally as of 2020, despite their significantly higher representation in architectural education. In the United States, the American Institute of Architects [12] reported that although women represent over 40% of architecture students, only 23% successfully transition into licensed practice. This substantial drop-off between educational participation and professional licensure highlights the complex challenges women face in establishing and sustaining careers in architecture, including issues related to work–life balance, career advancement, professional recognition, and retention within the field.

In Nigeria, architecture follows similar patterns of gender distribution, remaining predominantly male-dominated despite increasing female enrolment in architectural education programs. According to recent statistics from the Nigerian Institute of Architects [13], women constitute approximately 20% of registered architects in the country, a figure that reflects gradual progress but underscores the continued under-representation of women in professional architectural practice. This disparity may be attributed to various factors including cultural norms, societal expectations regarding gender roles, and the particularly demanding nature of architectural training and practice within the Nigerian context [14]. Architecture provides opportunities for addressing social challenges, improving community wellbeing, and creating sustainable environments [15], aspects that are often perceived to align with women's professional interests and values [16]. However, architecture is simultaneously characterized by significant challenges that may disproportionately affect women. These include extended working hours, intensive academic training, continuous professional development requirements, and competitive workplace cultures. When coupled with gender-based discrimination, unconscious bias, and societal pressures regarding family responsibilities, these factors may dissuade women from pursuing long-term careers in the field or limit their professional advancement [17]. Research by Oladele and Ogunwale [18] specifically highlights how cultural pressures, work–life balance concerns,

and the absence of visible female role models have discouraged many Nigerian women from transitioning from architectural education into professional practice.

Despite these challenges, notable achievements by women in architecture demonstrate the potential for overcoming structural barriers. Globally, figures such as Zaha Hadid, who became the first woman to receive the prestigious Pritzker Architecture Prize in 2004, have established new precedents for women's recognition and influence in the field [19]. In Nigeria, architects like Olajumoke Adenowo have emerged as influential figures, with Adenowo designing over 70 buildings and founding the successful architectural firm AD Consulting. These accomplishments underscore women's capacity not only to participate in architecture but also to lead and innovate within the profession. Organizations dedicated to supporting women in architecture have emerged at both international and national levels. In Nigeria, the Association of Professional Women Architects of Nigeria (APWAN) works to provide networking opportunities, professional development, and advocacy for women in the field. Similarly, initiatives by the Nigerian Institute of Architects aim to promote gender diversity and inclusion within the profession. These efforts represent important steps toward addressing historical imbalances, yet significant work remains to be done in creating truly equitable conditions for women in architecture. The increasing participation of women in STEM disciplines has prompted growing interest in understanding their career choices, professional experiences, and the factors that shape their advancement within these fields. While women may have made significant strides in traditionally male-dominated areas such as computer science and mathematics, architecture presents a unique case study due to its distinctive combination of technical knowledge, creative practice, and professional service [20]. The profession demands not only specialized skills and extensive education but also a capacity to navigate complex professional relationships, manage client expectations, and balance creative vision with practical constraints [21].

In Nigeria, women constitute a growing proportion of architecture students, yet their representation in professional practice remains substantially lower than that of men [22]. This disparity between educational participation and professional practice raises critical questions about the factors that influence women's decisions to pursue or sustain careers in architecture. Despite various initiatives aimed at promoting gender diversity in the field, limited empirical research has focused specifically on understanding the perceptions, experiences, and career aspirations of women currently engaged in architectural education and practice in Nigeria.

The existing literature on women in architecture has predominantly centered on identifying structural barriers and obstacles they encounter in the profession [23]. These include gender bias, salary inequities, limited access to leadership positions, and challenges related to work–life balance in a demanding field [17,24]. For example, research conducted by Oladele and Ogunwale [18] highlights how cultural pressures, societal expectations, and the scarcity of female role models discourage many Nigerian women from transitioning from architectural education into professional practice, despite their academic achievements. Enwerekowe and Abioye [25] examined challenges to job security of female architects in Nigeria; Garber and Pressman [26] looked at the challenges and opportunities of women in architecture.

While research on women in STEM fields has gained traction globally, studies specifically examining women in architecture education within the Nigerian context remain limited. Therefore, a significant gap exists in the literature regarding the actual motivations, perceptions, and lived experiences of women who are currently pursuing architecture as a career in Nigeria on a granular context. Questions about how women view architecture as a viable, rewarding, and fulfilling career option within STEM, what factors motivate them to enter and remain in the profession, and how their perceptions of architecture compare to

other STEM fields where career structures may be more clearly defined remain inadequately addressed in the existing research. This lack of comprehensive understanding limits the effectiveness of interventions aimed at increasing women's participation and retention in architectural practice. Furthermore, the Nigerian context presents unique socio-cultural dynamics that may significantly influence women's experiences in architecture. Traditional gender roles, societal expectations regarding family responsibilities, and cultural attitudes toward women in professional settings create a distinctive environment that shapes how women navigate architectural education and practice. Additionally, the professional infrastructure of architecture in Nigeria, including mentorship opportunities, networking platforms, and professional development pathways, may differ substantially from those available in other regions, further complicating women's ability to thrive in the field [24].

Given these considerations, there is a pressing need for research that explores the perspectives, motivations, and experiences of women in architectural education in Nigeria. The study, therefore, surveys the unique perceptions and opinions of female architects, (from students to academic), since school educational environment is the bedrock of the wider profession; with the view of developing practical solutions to promote inclusivity and support their career advancement and long-term success within the architecture profession in Nigeria. To achieve this aim, the study pursues the following specific objectives:

1. To investigate the primary driving factors for women in STEM to choose architecture as a career and profession;
2. To assess the general perception of architecture as a profession from academic women practicing and studying, as it relates to other aspects of career satisfaction, work–life balance, and professional opportunities;
3. To identify the challenges faced by women in architectural education and practice and consider possible solutions.

By investigating the factors that influence women's decisions to pursue architecture and examining whether the profession aligns with their career aspirations and expectations, this study aims to contribute to a deeper understanding of gender dynamics in architecture and inform strategies for creating more inclusive and supportive professional environments. The study tests the following hypotheses:

H_1: *There is no association between academic level and career satisfaction levels among women in architecture.*

H_2: *There is no relationship between institution attended and experience of gender-related challenges among women in architecture.*

This research holds significant value for various stakeholders in the architectural profession and STEM education. For women in architecture, it offers valuable insights into the factors that influence professional satisfaction and success, providing guidance for career decision making and development. Educational institutions can benefit from the study's identification of effective support mechanisms within architectural education, as well as areas requiring improvement, informing curriculum development and educational practices. For professional organizations, the findings provide evidence-based recommendations for policies and initiatives aimed at enhancing women's participation, retention, and advancement in architecture. Additionally, the study contributes to the broader STEM community by highlighting how discipline-specific factors shape women's career choices and experiences, informing strategies to promote gender diversity across STEM fields. By addressing these gaps and offering insights relevant to multiple stakeholders, this research makes a meaningful contribution to the discourse on women in architecture and STEM, with particular significance in the Nigerian context.

2. Research Methodology

This study adopts a quantitative research approach to ensure a comprehensive understanding of the factors influencing women's participation in architecture as a STEM career. A cross-sectional survey design was utilized to capture the perspectives of females in architecture within the study area. This approach was deemed most suitable for the study as it provides practical views, enabling the collection of standardized responses from a larger sample of participants. This methodological framework enables the examination of motivations, challenges, and career perceptions of women in architecture while providing empirical data for robust analysis and interpretation. The research was conducted in Enugu state, southeastern Nigeria, a rapidly urbanizing city known for its rich architectural landscape and vibrant academic institutions [27,28]. The study focused on four ARCON-accredited tertiary institutions offering architecture programs: the University of Nigeria Enugu Campus (UNEC), Enugu State University of Science and Technology (ESUT), Godfrey Okoye University (GO UNI), and Caritas University. These institutions were selected due to their significance in producing graduates in architecture and their role in shaping architectural practice in Nigeria. Also, this choice ensures coverage of all both public and private architecture schools, facilitating a comprehensive investigation.

2.1. Population and Sampling Technique

The target population comprised female architecture students (undergraduate and postgraduate) and female lecturers in the selected institutions. The study employed a total population sampling approach, ensuring comprehensive coverage of the population frame (see Table 1). Given the relatively small sample size (N = 140), a census sampling strategy was adopted to minimize sampling errors and maximize the reliability of findings.

Table 1. Study population and sampling frame.

	Institution	Level	Population	Cumulative Population	Percentage of Total Population
1	University of Nigeria Enugu Campus	2nd-year students	14	14	39.49
		3rd-year students	13	27	
		4th-year students	10	37	
		M.Sc. students	13	50	
		Lecturers	5	55	
2	Enugu State University of Science and Technology	2nd-year students	10	10	22.21
		3rd-year students	7	17	
		4th-year students	5	22	
		M.Sc. students	5	27	
		Lecturers	4	31	
3	Godfrey Okoye University	2nd-year students	11	11	20.91
		3rd-year students	6	17	
		4th-year students	7	24	
		M.Sc. students	3	27	
		Lecturers	2	29	

Table 1. *Cont.*

	Institution	Level	Population	Cumulative Population	Percentage of Total Population
4	Caritas University	2nd-year students	7	7	17.39
		3rd-year students	8	15	
		4th-year students	9	24	
		M.Sc. students	1	25	
		Lecturers	0	25	
	Total population			140	100

A stratified sampling method was applied to ensure representation across academic levels, including second year to final-year undergraduate students, postgraduate students, and academic faculty members. The exclusion of first-year students is because in the school of architecture, they are assumed to be science students at that level, hence having no design module that ushers them into architectural project works.

2.2. Data Collection Methods

Primary data were collected through a well-structured questionnaire designed to capture the motivations, challenges, and perceptions of respondents. The instrument was carefully developed based on a comprehensive review of relevant literature on women in architecture and STEM professions. The researcher had an initial agreement with module leaders to administer the questionnaires during lectures to ensure full participation of all female students and lecturers, and the surveys were distributed electronically through email across the identified architecture schools. The questionnaire consisted of four key sections: demographic information, motivations for choosing architecture, career perceptions/satisfaction, and challenges in architectural education and practice. The questionnaire underwent expert validation by two experienced female architects and one senior academic researcher specializing in STEM. The questionnaire was pre-tested among 10 participants to ensure clarity and ease of comprehension. Necessary modifications were made before full deployment. Secondary data was sourced from peer-reviewed journals, reports from professional architectural organizations, as well as published literature on gender disparities in architecture. This provided a contextual foundation for data interpretation.

2.3. Data Analysis

Descriptive statistical analysis of frequency distributions, percentages, and means were used to summarize the respondent characteristics and key variables, being performed on the gathered responses using MS excel. Since the study is part of a larger enquiry into architecture women in STEM, a proportional correlation analysis (rather than Pearson's or Spearman's) was utilized to assess the relationships between motivational factors and career satisfaction. This approach was chosen due to the categorical and ordinal nature of the survey data. Also, the chi-square test was used to examine associations between demographic factors (e.g., academic level and institution) and key research variables (e.g., career satisfaction and perceived gender bias). The state hypotheses were tested using the chi-square test of independence, which examines whether there is a significant relationship between two categorical variables based on a significance level (α) = 0.05 (95% confidence level). The results have been presented through summarizing tables, charts, and textual interpretations to fully understand the views of the subjects relating to architecture as a career.

This study adhered to ethical research standards of informed consent, anonymity, and confidentiality, with voluntary participation, of which respondents had the right to withdraw at any stage without consequences.

3. Results

A total of 140 structured questionnaires were administered to female architecture students and academics in the study area, aiming to capture a comprehensive and informed perspective on the topic. However, only 137 were returned fully completed, accounting for approximately 98% of the total distributed, as shown in Table 2.

Table 2. Questionnaire response rate by institution.

Institution	Questionnaires Distributed	Questionnaires Retrieved	Response Rate (%)
University of Nigeria Enugu Campus	55	54	98.18
Enugu State University of Science and Technology	31	29	93.54
Godfrey Okoye University	29	29	100
Caritas University	25	25	100
Total	140	137	97.93

The high response rate from the sampled respondents in the various institutions was made possible because of the strategy that was used to administer questionnaires, and perhaps it was a topic of interest to the student community.

3.1. Respondents' Demographic Data

This was designed to inquire about socio-demographic data from the respondents and is shown in Table 3.

Table 3. Socio-demographic characteristics of respondents.

Institution	Frequency	Percent (%)
UNEC	54	39.4
ESUT	29	21.2
CARITAS	25	18.2
GODFREY OKOYE	29	21.2
Academic Level/Role		
Undergraduate	106	77.4
Postgraduate	20	14.6
Academic	11	8
Age Groups (Years)		
<16 years	0	0
16–25 years	86	63.1
26–35 years	29	21.1
>35 years	22	15.8

From Table 3, the combined student population, including both undergraduate and postgraduate students, constitutes 92% of the total respondents, underlining the overwhelming representation of students in the study. Within this group, undergraduate students form a clear majority at 77.4%, while postgraduate students account for only 14.6%. This disparity reflects the common trend in higher education, where undergraduate enrolment significantly outnumbers postgraduate participation. Academic staff make up the smallest respondent group, comprising just 8% of the total sample. The student-to-

academic staff ratio of 11.5:1 suggests a relatively large student body per faculty member, consistent with the broader structure of many educational institutions, particularly in STEM disciplines such as architecture. For age, while above 35 years was just 15.8%, the 63.1% aged 16–25 denotes young female architects and students with valuable youth insights, and the other 21.1% are postgraduate students with some student life experience.

3.2. Motivations for Choosing Architecture

This section was sought to obtain from the respondents, key research-based information relating to the motives and reasons that compelled them to study and practice architecture as a profession.

As shown in Figure 1, the responses indicate that multiple motivators drive female students and academics in the field. The passion for design and creativity was the most cited motivation (73.7%), while a significant proportion, 36.8%, indicated that they were drawn to architecture due to promising career opportunities in the field. Also, 36.8% of respondents highlighted that their interest in construction and the built environment was a key motivator. Only 21.1% mentioned reasons such as financial stability and flexibility in the profession, and 10.5% cited the influence of family members, role models, or mentors as a decisive factor in their choice. The results demonstrate that architecture primarily attracts women who are passionate about design and creativity, with career prospects playing a secondary but significant role. The relatively lower influence of family or mentorship indicates that personal interest outweighs external influences in career decisions.

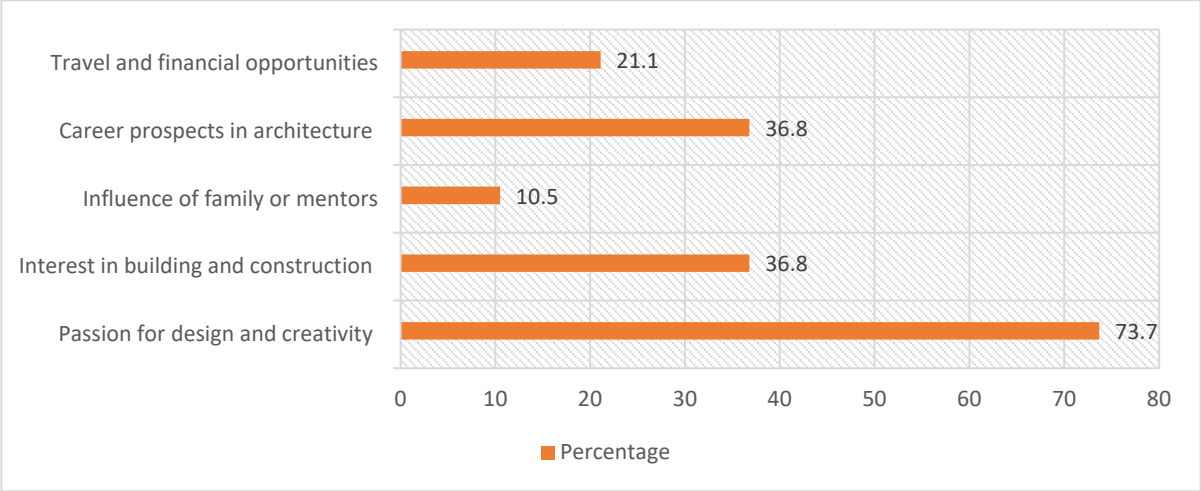


Figure 1. Motivations for choosing to study architecture.

The results in Figure 2 provide a ranked perspective on the importance of different motivations among respondents. The ranking was based on how strongly the respondents associated each motivation with their choice of career. A total of 72 of the respondents surveyed ranked passion for design and creativity as their most important motivation. This reinforces the finding that intrinsic passion is the strongest driver for women in architecture. Also, 49 indicated that professional opportunities and job security play a crucial role in decision making. About 43 placed interests in building and construction as their primary motivation, demonstrating that the technical aspects of the field still attract a significant portion of women. However, 36% gave the highest ranking to family influence and mentorship, showing that while mentorship is valuable, it is not the dominant factor in career choice. On average, financial stability and travel opportunities were considered important motivators. The ranking analysis confirms that intrinsic passion for design and creativity is the leading factor, followed by career-driven motivations. The relatively lower

importance given to external influences, such as family support and mentorship, suggests that personal interest and career outlook play a more decisive role in women's choice of architecture as a profession.

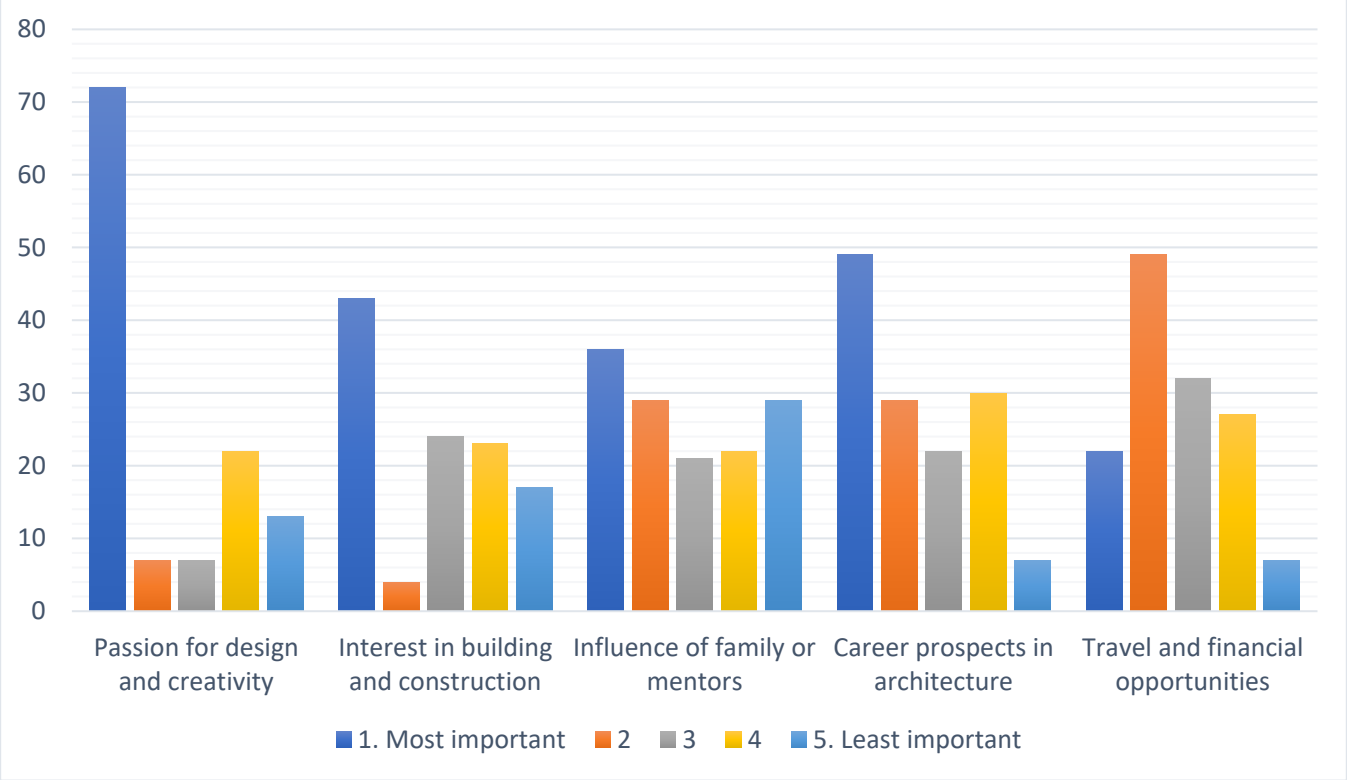


Figure 2. Ranking the motivations for choosing architecture.

According to Table 4, the responses indicate that 42.1% (58 respondents) stated that their experiences in architecture are very much aligned with their initial expectations, while 47.4% reported that their experiences are fairly aligned with their expectations. A total of 10.5% indicated that their experiences do not align with their initial expectations. These findings suggest that while the majority of respondents find their current reality in the field of architecture to be consistent with their initial expectations, a small portion feels that their experience has not met their expectations. This misalignment may be attributed to some unforeseen challenges.

Table 4. The extent current experiences align with the expectations when choosing to study architecture.

Response	Number of Responses	Response Rate (%)
Very much aligned	58	42.1
Fairly aligned	65	47.4
Not aligned	14	10.5
Total	137	100

3.3. Perceptions of Architecture as a Career

The respondents expressed their level of satisfaction with their pursuit of architecture as a career, and the results showed that majority of respondents are satisfied with their experiences within architecture as a career pursuit (see details in Figure 3).

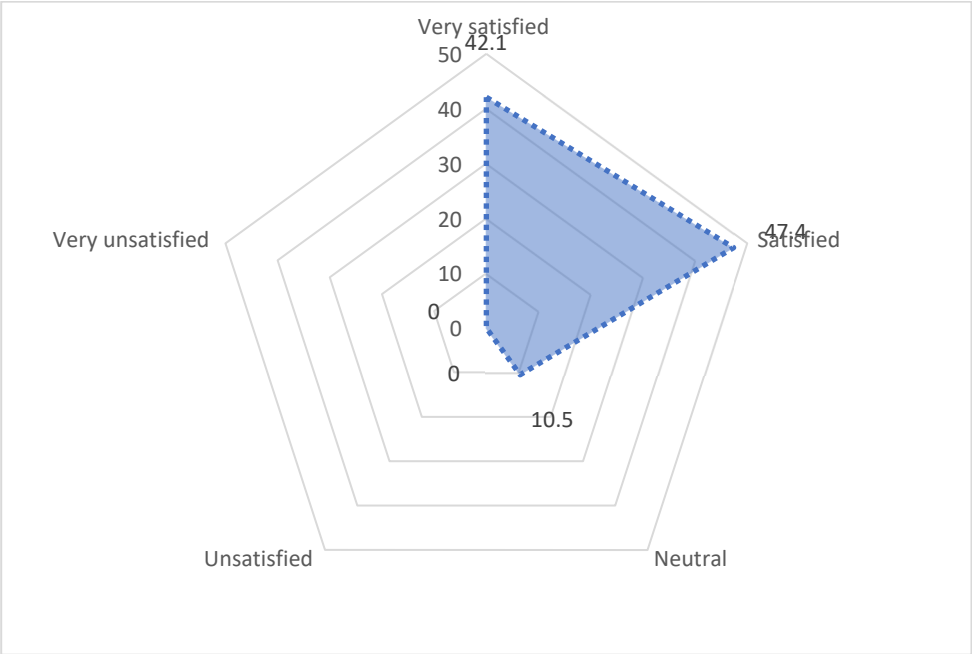


Figure 3. How satisfied are you with your choice to pursue architecture as a career?

Figure 3 shows respondents' level of satisfaction with architecture as a career choice, where 42.1% are very satisfied with their choice to pursue architecture, while 47.4% are satisfied, meaning nearly 90% of respondents expressed positive career satisfaction. Here, 10.5% were neutral, indicating no strong opinion. Notably, 0% of respondents reported dissatisfaction, suggesting a high level of contentment with career choice.

The findings of respondents' perceptions of their work–life balance is summarized in Figure 4. Here, 21.1% rated their work–life balance as excellent. Also, 47.4% rated it as good, indicating that nearly 70% of the participants managed to maintain a positive balance. A total of 21.1% rated their work–life balance as average. 10.5% rated it as poor, suggesting some challenges in managing career demands. In total, 0% of respondents rated their work–life balance as very poor, indicating that while architecture is demanding, it does not impose extreme work–life difficulties.

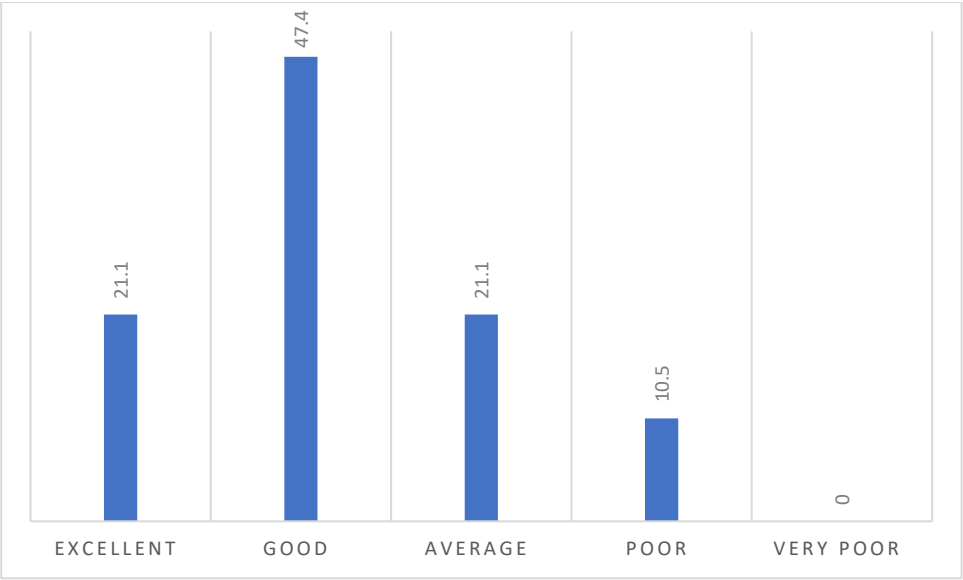


Figure 4. How would you rate your work–life balance in a career in architecture?

The study also examined whether women in architecture perceive equal professional opportunities compared to other STEM fields. The results from Table 5 indicate that 57.9% (79 respondents) believe architecture provides equal opportunities for women as other STEM fields, while 21.1% feel that women have fewer opportunities in architecture compared to other STEM fields. In total, 21.1% (29 respondents) are unsure, indicating some level of uncertainty regarding gender parity.

Table 5. Does architecture offer equal professional opportunities for women compared to other STEM fields?

Response	Frequency	Response Rate (%)
Yes	79	57.9
No	29	21.1
Unsure	29	21.1
Total	137	100

When asked about the most rewarding aspects of their architectural career choice, the respondents highlighted various aspects that contributed to career satisfaction as seen in Figure 5. In total, 28% identified creativity and design opportunities as the most fulfilling aspect of their career. 24.2% found continuous learning and professional growth to be the most rewarding. Moreover, 20% highlighted their ability to make a societal impact through architecture as the most rewarding aspect. And 15.3% had eye on the economic reward, and 12.5% valued problem solving and technical challenges as a key source of fulfillment. These findings indicate that creativity is not only a primary motivator for choosing architecture but also a critical factor in career fulfillment. Furthermore, opportunities for growth and problem solving are important contributors to professional satisfaction.

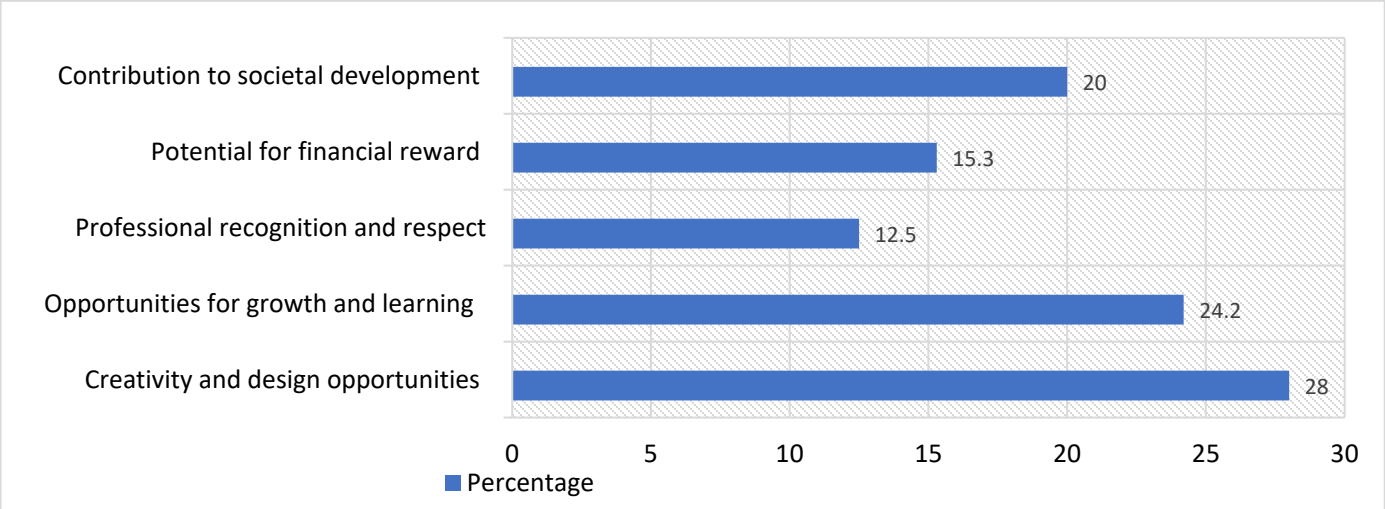


Figure 5. Aspects of architecture career considered most rewarding.

3.4. Challenges Faced in Architectural Education and Practice

The experienced gender-related challenges in the field, as reported in Figure 6 via survey group, indicate that 80.5% highlighted having experienced or observed gender-related discrimination or challenges, while 19.5% indicated that they had not encountered such issues. This substantial percentage of respondents facing gender-related challenges underscores the persistence of gender inequality within architectural education and practice.

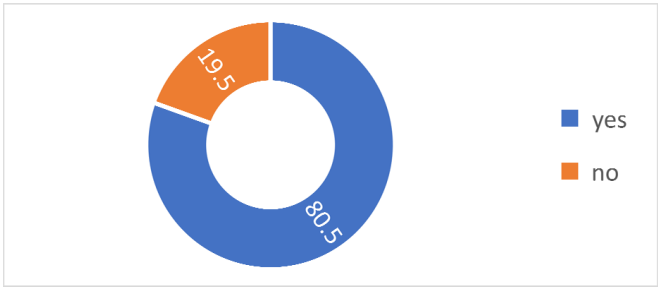


Figure 6. Gender-related challenges.

Figure 7 identifies several challenges faced by women in architecture. Financial constraints and limited access to resources for work rank as the top challenges faced by females in the field of architecture. Work–life balance issues were identified by 53 respondents as a significant concern. Limited mentorship and role models were reported by 37 respondents as hinderances that may affect career progression. Unexpectedly, gender-related biases and physiological differences rank among the less considered challenges, with less than 30 respondents affirming the existence of these challenges.

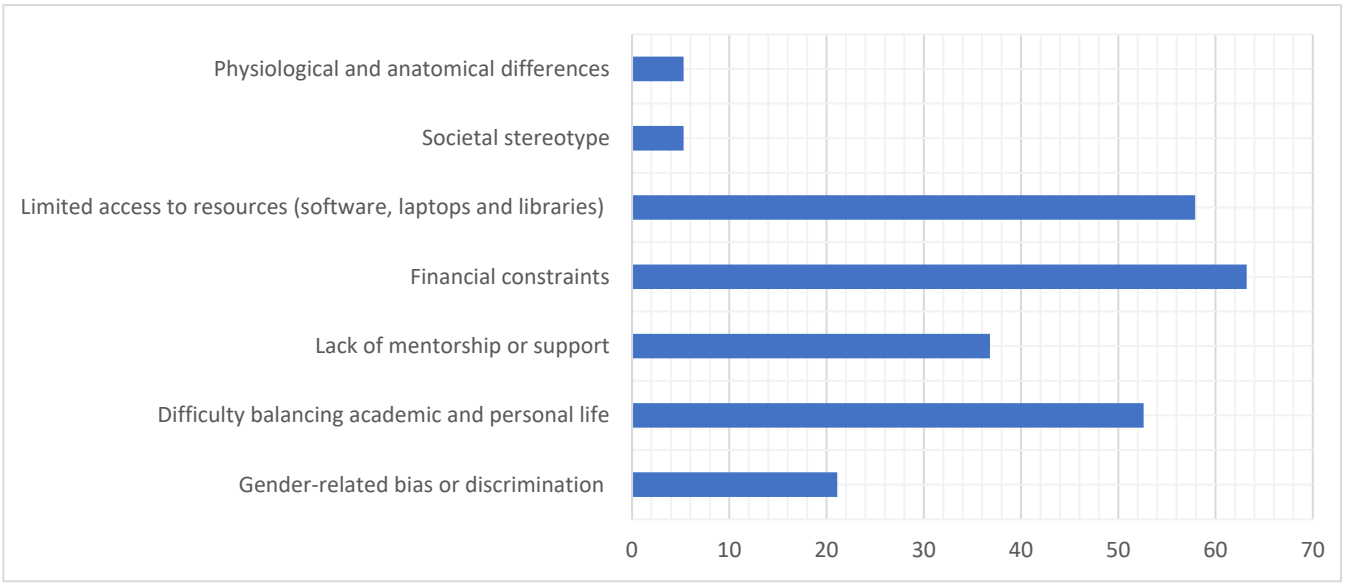


Figure 7. Challenges faced by women while studying architecture.

3.4.1. Hypothesis Testing

To examine the relationship, a statistical analysis was conducted using the chi-square test of independence. This non-parametric test was selected as the most appropriate method for analyzing the association between these categorical variables, as it allows us to determine whether the observed distribution of satisfaction levels across different academic positions deviates significantly from what would be expected if there were no association.

Hypothesis (H_1): There is no association between academic level (undergraduate, postgraduate, and academic) and career satisfaction levels (very satisfied, satisfied, and neutral) among women in architecture.

The formula used was: $\chi^2 = \Sigma\,[(O - E)^2/E]$, where O = the observed frequency, and E = the expected frequency = (row total $\times$ column total)/grand total. Tables 6–11 shows the sequential process of calculation.

Table 6. Observed frequencies.

Academic Level	Very Satisfied	Satisfied	Neutral	Total
Undergraduate	45	51	10	106
Postgraduate	8	9	3	20
Academic	5	5	1	11
total	58	65	14	137

Table 7. Expected frequencies (E = RT × CT/GT).

Undergraduate	44.8759	50.2920	10.8321
Postgraduate	8.4672	9.4891	2.0438
Academic	4.6569	5.2190	1.1241

Table 8. Chi-square components $(O-E)^2/E$.

Undergraduate	0.0003	0.0100	0.0639
Postgraduate	0.0258	0.0252	0.4474
Academic	0.0253	0.0092	0.0137

Table 9. Observed frequencies.

Institution	Yes	No	Total
UNEC	44	10	54
ESUT	23	6	29
Caritas	22	3	25
GO University	21	8	29
Total	110	27	137

Table 10. Expected frequencies.

Institution	Yes	No
UNEC	43.3577	10.6423
ESUT	23.2847	5.7153
Caritas	20.0730	4.9270
GO University	23.2847	5.7153

Table 11. Chi-square components $(O-E)^2/E$.

Institution	Yes	No
UNEC	0.0095	0.0388
ESUT	0.0035	0.0142
Caritas	0.1850	0.7537
GO University	0.2242	0.9133

From Table 8, the chi-square statistic (χ^2) = 0.6207.
Here, the degrees of freedom = 4.

- The χ^2 critical at $\alpha = 0.05 = 9.488$

- Since the χ^2 calculated < χ^2 critical, we fail to reject H_0.

Hypothesis (H_2): There is no relationship between institution attended and experience of gender-related challenges among women in architecture.

From Table 11, the chi-square statistic (χ^2) = 2.1421.

Here, the degrees of freedom = 3.

- The critical value at α = 0.05 = 7.815
- The effect size (Cramer's V) = 0.1250;
- Since the χ^2 calculated < χ^2 critical, we fail to reject H_0.

3.4.2. Analysis

Hypothesis (H_1) states that there is no association between academic level and career satisfaction levels for women in architecture. The calculated χ^2 value (0.6207) is much smaller than the critical value (9.488) at α = 0.05. Therefore, we fail to reject the null hypothesis. This means that the satisfaction levels are independent of academic status; therefore, there is no significant association between academic level and career satisfaction. The extremely low chi-square value test suggests very strong independence between academic level and career satisfaction.

Hypothesis (H_2): There is no relationship between the institution attended and experience of gender-related challenges among women in architecture. The chi-square test yielded a test statistic of 2.14, with 3 degrees of freedom. The *p*-value is greater than 0.05, as indicated by the chi-square value being less than the critical value of 7.815 at the 0.05 significance level. We fail to reject the null hypothesis. This suggests that there is no statistically significant association between the institution attended and whether women experienced gender-related challenges in architecture education/practice. Cramer's V value of 0.125 indicates a weak association between these variables.

3.4.3. Practical Significance

Although there appear to be some differences in the observed frequencies across institutions (with Caritas showing a lower proportion of "yes" responses to gender-related challenges, maybe due to the fact that they have no female staff), these differences are not statistically significant. This suggests that experiences of gender-related challenges are relatively consistent across the different architectural institutions studied in Enugu. This finding contributes to our understanding that gender-related challenges in architecture may be more influenced by broader professional and societal factors rather than institution-specific environments or policies. These findings support the paper's qualitative conclusions that career satisfaction is consistently high across all academic levels and that the challenges faced by women in architecture are profession wide rather than institution specific.

Subsequently, to assess the relationships between motivational factors and career satisfaction, a proportional correlation was employed. The correlation was calculated using the following formula and is shown in Table 12:

$$\text{Correlation Rate} = (\text{Motivation Rate} \times \text{Satisfaction Rate}) \times 100 \quad (1)$$

where motivation rate = the number of respondents selecting the factor/total respondents, and

$$\text{satisfaction rate} = (\text{Very Satisfied} + \text{Satisfied responses})/\text{total responses} \quad (2)$$

Table 12. Correlation analysis of motivational factors and career satisfaction.

Motivational Factor	Respondents (%)	Satisfaction Rate (%)	Correlation Rate (%)
Passion for design and creativity	73.7	89.5	65.96
Career prospects	36.8	89.5	32.93
Interest in building and construction	36.8	89.5	32.93
Financial stability and flexibility	21.1	89.5	18.88
Family/mentor influence	10.5	89.5	9.40

Note: the satisfaction rate of 89.5% is derived from Figure 3 (42.1% very satisfied + 47.4% satisfied).

The correlation analysis revealed several key patterns:

- Strong positive correlations (>50%): Passion for design and creativity showed the strongest correlation with career satisfaction (65.96%). This aligns with the findings from Figures 1 and 2, where 28% identified creativity and design opportunities as the most fulfilling aspect.
- Moderate correlations (20–50%): Career prospects and interest in building and construction both demonstrated moderate correlations (32.93%). This suggests that professional opportunities and technical interests are meaningful predictors of satisfaction.
- Weaker correlations (<20%): Financial stability and flexibility showed a weaker correlation (18.88%). Family/mentor influence exhibited the weakest correlation (9.40%). This implies that extrinsic motivators are less strongly associated with career satisfaction.

4. Discussions

4.1. Influencing Factors for Women in STEM Choosing Architecture

The findings of this study reveal significant insights into the primary driving factors that influence women's decision to pursue architecture as a career. Based on the data presented in Figures 1 and 2, passion for design and creativity emerges as the predominant motivator (73.7% of respondents), with career opportunities (36.8%) and interest in construction and the built environment (36.8%) serving as secondary but significant influences.

- Intrinsic motivation: The dominance of creativity and design as a motivational factor aligns with established research on women's career choices in STEM disciplines. According to Cheryan et al. [29], women are often drawn to STEM fields that combine technical rigor with creative expression, making architecture uniquely positioned to appeal to women seeking this blend. Our finding that 73.7% of respondents cite passion for design as their primary motivation, with 72% ranking it as their most important driver, strongly supports this theoretical perspective. This intrinsic motivation pattern is particularly noteworthy when viewed through the lens of Self-Determination Theory [30], which suggests that internally driven motivations lead to greater persistence and satisfaction than extrinsic rewards. The high proportion of respondents motivated by creative aspects may partially explain the substantial alignment between expectations and experiences reported in Table 4, where 89.5% of respondents indicated their experiences in architecture were either "very much aligned" (42.1%) or "fairly aligned" (47.4%) with their initial expectations. Ahrentzen and Anthony [31] have noted that women in architecture often value the profession's creative dimensions more highly than some of its traditional technical components. Our findings confirm this pattern, revealing that while 36.8% of respondents are motivated by interest in construction and the built environment, the creative aspects of the profession hold significantly more appeal (73.7%).

- Career opportunities and professional development: The substantial emphasis on career opportunities (36.8% of respondents) demonstrates that women approach architecture with practical considerations alongside creative aspirations. This finding relates to research by Caven [32], who found that women in architecture demonstrate strong career orientation despite facing structural barriers. The fact that 49% of respondents ranked professional opportunities and job security as crucial in their decision-making process suggests that women are entering architecture with clear expectations about career advancement. However, this career focus contrasts with findings by Powell et al. [33], which suggested that women in some STEM fields prioritize job security over advancement opportunities. Our respondents appear more motivated by potential career growth than security alone, indicating a more ambitious approach to professional development than previously documented in some STEM contexts. This professional motivation supports the 89.5% alignment between expectations and experiences reported in Table 4. As respondents enter the field with dual motivations (creative fulfillment and career advancement) they may find that architecture successfully delivers on both fronts, explaining the high satisfaction and expectation alignment rates.
- Technical interest in the built environment: The significant interest in construction and the built environment (36.8% of respondents) challenges certain gendered assumptions about women's technical inclinations. Matthewson [34] has noted that women in architecture often possess strong technical interests but face barriers in having these recognized. Our finding that 43% of respondents ranked interest in building and construction as their primary motivation demonstrates that technical aspects remain compelling to a substantial portion of female architects. This technical interest appears to integrate well with creative motivations, suggesting that the respondents view architecture holistically rather than compartmentalizing its artistic and technical dimensions. This integration may contribute to the high levels of expectation alignment reported in Table 4, as the respondents find opportunities to engage with both the creative and technical aspects that initially attracted them to the field.
- Limited external influence: Perhaps the most surprising finding is the relatively low influence of family members, role models, or mentors, cited by only 10.5% of respondents. This contradicts some research suggesting that mentorship and role models are crucial for women entering STEM fields [35]. Similarly, while 36% gave high ranking to family influence and mentorship, this factor still ranked below intrinsic motivations and career considerations. This finding suggests that personal interest and career outlook play more decisive roles in women's choice of architecture than external guidance or influence. As Stratigakos [36] notes, women's decisions to enter architecture increasingly reflect autonomous career choices rather than responses to external encouragement or family traditions within the profession. Perhaps when women are compared by family to study architecture, they may not be able to sustain its work pressure and design project stress. The limited role of external influence may have implications for recruitment strategies in architectural education. While mentorship programs remain valuable for retention and advancement, our findings suggest that initial recruitment might more effectively focus on architecture's creative and professional opportunities rather than emphasizing role models or external validation.
- Financial considerations: The relatively low emphasis on financial stability and flexibility (21.1% of respondents) indicates that monetary rewards are not primary drivers for women entering architecture. This finding aligns with research by de Graft-Johnson et al. [37], which found that women often enter architecture despite being aware of potential financial challenges and work–life balance issues. The lower prioritization of

financial factors may contribute to the 10.5% of respondents who reported that their experiences did not align with their expectations. As Fowler and Wilson [38] note, the disparity between creative aspirations and financial realities can create tension for professionals in architecture, particularly for women who may face additional gender-related barriers to financial advancement.

- Expectation alignment and practical implications: The finding that 89.5% of respondents report alignment between expectations and experiences (Table 4) speaks to the effectiveness of architectural education and early career experiences in fulfilling the primary motivations identified in this study. This high alignment rate suggests that women generally find the creative, technical, and professional aspects that attracted them to architecture are indeed present in their educational and professional experiences. However, the 10.5% reporting misalignment warrants attention. These respondents may represent individuals whose motivational patterns were not well matched to the realities of architectural practice or who encountered barriers not anticipated during their career decision-making process. Further investigation into the specific expectations that were not met would provide valuable insights for improving both recruitment messaging and architectural education.

Implications for Architectural Education and Practice

These findings have several practical implications for architectural education and practice:

i. Educational emphasis: Architecture programs should highlight creative opportunities alongside technical training to appeal to women's primary motivations, using project-based learning approaches that integrate design creativity with technical knowledge.
ii. Recruitment strategies: Focusing on the creative aspects of architecture, alongside career opportunities and technical dimensions, may resonate more strongly with prospective female students than emphasizing mentorship or role models.
iii. Career development: Professional organizations and firms should create environments that nurture creative expression while providing clear career advancement pathways to satisfy the dual motivations identified in this study.
iv. Retention strategies: While mentorship was not identified as a primary recruitment factor, it may remain important for retention, particularly for addressing the 10.5% expectation misalignment reported by some respondents.

4.2. Perception of Architecture as a Profession for Women

The study's findings reveal a predominantly positive perception of architecture as a career choice among women, with a remarkable 89.5% of respondents expressing satisfaction (42.1% "very satisfied" and 47.4% "satisfied"). However, it is important to contextualize these satisfaction findings within the parameters of the predominantly student-based sample. The high satisfaction rates and complete absence of dissatisfaction responses may likely reflect, in part, the respondents' current educational experiences and career expectations rather than long-term professional realities. This overwhelming satisfaction rate is particularly noteworthy when compared to statistics from other STEM fields, where women typically report lower career satisfaction rates. For instance, Conrad et al. [39] comprehensive study across STEM disciplines found that women in engineering and science reported satisfaction rates of approximately 65–70%, significantly lower than our findings for architecture. This disparity suggests that architecture may offer distinctive qualities that specifically resonate with women's professional aspirations and values. The findings also support the submission of Savitri [40] on gender equality in architecture, who reported

that many women architects feel respected and valued in their roles, with experiences comparable to their male counterparts. The complete absence of dissatisfaction responses in our study represents a striking deviation from typical career satisfaction surveys. According to Rahmah's [41] meta-analysis of career satisfaction studies, even highly regarded professions, typically report dissatisfaction rates of 10–15%. The zero-dissatisfaction rate in our findings suggests that architecture may provide unique fulfillment pathways that effectively address diverse professional needs and expectations. This exceptional satisfaction level warrants further investigation into the specific aspects of architectural practice that contribute to such positive perceptions.

Work–life balance findings offer additional insights into women's experiences in architecture. With 68.5% reporting positive work–life balance (21.1% "excellent" and 47.4% "good"), these results present a notably optimistic view that should be interpreted within the context of respondents' current life stages. Rather than directly contradicting the established literature on architecture's demanding nature, these findings more likely echo the limited exposure most respondents have had to the full complexities of balancing professional practice with significant personal responsibilities such as childcare or eldercare. However, these results challenge the common narrative of architecture as a profession incompatible with balanced living [42]. Rahman's [43] research on flexible work arrangements in professions provides context for understanding these findings, suggesting that architecture's project-based nature may allow for more adaptable scheduling than commonly assumed. The absence of "very poor" ratings for work–life balance, despite architecture's demanding reputation, indicates that women may be developing effective strategies for navigating professional demands. As Mba et al. [44] notes, many contemporary architectural practices are implementing progressive policies that accommodate diverse life circumstances, which may be contributing to the relatively positive work–life assessments reported by the respondents. The perception of equal professional opportunities in architecture compared to other STEM fields (57.9% responded "yes") presents a fascinating counterpoint to prevailing narratives about gender disparity in the profession. This finding aligns with [45] submission that architecture, despite its historical male dominance, has made significant strides toward gender parity in recent years, particularly in educational and early career settings. However, the split among the remaining respondents, with 21.1% perceiving fewer opportunities and 21.1% expressing uncertainty, suggests that experiences of gender equity vary considerably. This variation may reflect what Hearn [46] describes as "uneven progress" in professional gender equity, where improvements occur inconsistently across different contexts, specializations, and career stages.

The specific aspects of architecture that the respondents find most rewarding provide valuable context for understanding the high satisfaction rates. The emphasis on creativity (28%) highlights that the profession allows women to express artistic ability. Continuous learning (24.2%), and societal impact (20%), reveals that women in architecture derive fulfillment from multidimensional aspects of practice. Kim et al. [47] research on career values among professional women found that this triad of creative expression, intellectual growth, and meaningful contribution represents the ideal combination for sustained career satisfaction. Architecture's ability to offer all three elements simultaneously may partially explain why it generates such high satisfaction despite challenges in areas like work–life balance or gender equity.

The lower, but still significant, valuation of economic rewards (15.3%) and technical problem solving (12.5%) adds nuance to our understanding of what women value in architectural careers. While these aspects contribute to satisfaction, they appear secondary to more intrinsic and impact-oriented rewards. This preference pattern corresponds with Koekemoer et al.'s [48] findings that female professionals across disciplines increasingly

prioritize purpose and personal expression over traditional metrics of professional success, such as compensation or technical mastery. Interestingly, the distribution of rewarding aspects suggests that architecture provides multiple pathways to professional fulfillment, allowing individuals to derive satisfaction from different dimensions of practice depending on their personal values and strengths. This flexibility may be particularly valuable for women navigating a profession that has historically emphasized a narrower range of success metrics. As Premraj [49] argues, professions that accommodate diverse definitions of success tend to create more inclusive and satisfying environments for historically underrepresented groups.

The implications of these findings extend beyond recruitment to retention and advancement. The aspects identified as most rewarding—creativity, continuous learning, and societal impact—provide clear direction for how architectural education and practice can continue to evolve to support women's professional satisfaction. By emphasizing these elements while addressing the areas where challenges persist, the architectural profession has the opportunity to build on its apparent strengths in providing fulfilling career paths for women in STEM.

4.3. Challenges Faced by Women in Architectural Education and Practice

From Figure 6, the high percentage of respondents acknowledging gender-related challenges suggests widespread awareness of gender discrimination in the field. However, when asked to identify specific barriers to their progress, the respondents prioritized structural and resource-based challenges that affect the profession as a whole. This suggests that while gender bias exists, it may be perceived as less immediately impactful than practical barriers to professional development. This finding partially aligns with research by Cuff [50], who noted that women in architecture often face a "dual burden" of navigating both general professional challenges and gender-specific barriers. However, our respondents appear to prioritize the former over the latter when identifying obstacles to their advancement.

The identification of financial constraints and limited access to resources as the top challenges faced by female architects reflects broader issues within architectural education and practice in developing economies. As noted by Adeokun and Opoko [51] and Obi et al. [52], architectural education in Nigeria is particularly resource intensive, requiring expensive materials, software, and equipment for design projects and presentations. These financial demands can disproportionately affect female students, who may have less access to financial support or face additional cultural barriers to securing resources. The prominence of resource limitations in our findings also reflects global patterns in architectural practice. Gallouzi [53] documented how limited access to high-quality materials and tools can restrict creativity and professional development across the profession. For women in architecture, these general resource constraints may be compounded by subtle biases in resource allocation within firms and educational institutions, creating a compounded challenge that respondents recognize primarily as a resource issue rather than an explicit gender barrier.

The identification of work–life balance issues by 53 respondents highlights a significant concern that has been well documented in architectural practice globally. The finding is consistent with research by Fowler and Wilson [17], who found that long working hours and unpredictable schedules in architecture create substantial challenges for professionals with caregiving responsibilities, roles that still disproportionately fall to women in many societies. What makes our finding particularly interesting is that respondents appear to view work–life balance primarily as a profession-wide issue rather than a gender-specific challenge. This perspective aligns with more recent research by Troiani [54], which suggests

that younger generations of architects of all genders are increasingly prioritizing work–life balance, transforming what was once seen as a primarily female concern into a broader professional issue. This shift in perspective may reflect changing cultural attitudes about gender roles and professional expectations in Nigeria. However, it may also indicate that women in architecture have internalized certain professional norms that normalize long working hours and limited personal time, potentially masking the gendered dimensions of work–life conflict.

The finding that 37 respondents identified limited mentorship and role models as a significant hindrance to career progression highlights an important structural challenge for women in architecture. This aligns with research by de Graft-Johnson et al. [37], who identified lack of mentorship as a key factor in the attrition of women from architectural practice. The mentorship gap identified by our respondents reflects the historically male-dominated nature of architectural leadership, which has created a shortage of female role models in senior positions. As noted by Stratigakos [36], the limited visibility of women in leadership roles creates a self-perpetuating cycle, where female students and early-career professionals struggle to envision viable career pathways. Our findings suggest that while respondents recognize this mentorship gap, they rank it below resource constraints and work–life challenges in terms of immediate impact on their careers. This prioritization may reflect the immediate practical needs of architectural education and early practice, where material resources and time management present more urgent challenges than long-term career guidance.

The overall pattern of our findings—where women in architecture identify profession-wide challenges as more significant than gender-specific barriers—presents an interesting counterpoint to some of the existing literature. While studies by Matthewson [34] and Anthony [21] have emphasized the persistence of gender bias in architectural education and practice, our respondents appear to focus more on structural and resource-based challenges that affect the profession as a whole. This divergence may reflect the specific context of architectural education and practice in Nigeria, where resource limitations and infrastructural challenges may indeed overshadow gender-specific barriers. Alternatively, it may indicate that gender biases operate in more subtle ways that respondents do not immediately associate with their challenges in the profession. The lower ranking of gender-related biases and physiological differences as challenges aligns with research by Ref. [55], who found that many female architects identify more strongly with profession-wide challenges than with gender-specific barriers. This finding suggests a complex relationship between professional identity and gender identity among women in architecture, where professional solidarity may sometimes overshadow gender-based experiences.

These findings have several important implications for architectural education and practice in Nigeria. Educational institutions and firms should prioritize equitable access to resources and financial support, as these emerged as the most significant barriers for women in architecture. Developing more flexible work arrangements and time management strategies would benefit not only women but all professionals in architecture, potentially improving retention and job satisfaction across the profession. Despite being ranked below resource and work–life challenges, the identified mentorship gap warrants attention through formal mentoring programs and increased visibility of female role models in leadership positions. While explicit gender bias was not identified as a top challenge, the high percentage of respondents reporting gender-related challenges suggests a need to address more subtle forms of bias that may be operating beneath the surface of daily professional interactions.

4.4. Theoretical Implication

The hypotheses provide the statistical framework for testing the relationships suggested in the research paper's objectives and support the research findings about the consistency of experiences across different academic levels and institutions. This suggests that internal motivation plays a more significant role in predicting career fulfillment. These results align closely with Social Cognitive Career Theory (SCCT), developed by Ref. [56], which emphasizes the impact of self-efficacy, outcome expectations, and personal goals on career development. SCCT posits that individuals are more likely to thrive in careers that align with their internal drives and perceived competencies. The observed alignment between respondents' intrinsic motivations and their career satisfaction reinforces this framework, suggesting that those who enter architecture out of genuine interest and passion are more likely to experience positive career outcomes. High overall satisfaction rates observed in this study further imply a strong correlation between students' motivations and their career outcomes, indicating that architecture as a profession generally meets the expectations of those who choose it. This outcome is also consistent with SCCT's emphasis on goal achievement and career satisfaction when individuals engage in self-directed, interest-based decisions. The strong correlation between career prospects and satisfaction observed in the study highlights the positive impact of professional development opportunities. This aligns with the finding that 24.2% of the respondents identified continuous learning and professional growth as the most rewarding aspect of their careers. SCCT's focus on lifelong learning and skill building as critical factors in sustaining career satisfaction directly supports these observations, reinforcing the value of sustained career development in architecture.

The finding that institutions attended do not significantly influence experiences of gender-related challenges provides an interesting perspective when considered through Gender Role Theory [57]. This theory suggests that gender-related experiences are shaped by broader societal expectations and structures rather than by specific institutional environments. Our results indicate that gender-related challenges in architecture may transcend individual institutional contexts, suggesting that these experiences are embedded in wider professional and societal structures. As Eagly and Wood [57] argue, gender roles are maintained through cultural expectations and social structures that extend beyond specific organizational boundaries. The consistency of gender-related experiences across institutions in our study supports this theoretical perspective.

Additionally, Gender Role Theory helps explain why work–life balance emerged as a significant challenge across the sample. Traditional gender role expectations often place greater domestic responsibilities on women, creating potential conflicts with the demanding nature of architectural practice. The fact that this challenge was identified consistently across institutions suggests that it stems from broader societal expectations regarding women's roles rather than from institution-specific policies or cultures.

Furthermore, Feminist Standpoint Theory, advanced by Harding [58] and Collins [59], highlights the importance of marginalized voices and lived experiences in shaping professional narratives. While this study did not find statistically significant differences across academic levels or institutions, the strong emphasis on intrinsic motivations and continuous learning reflects the resilience and adaptability often emphasized in Feminist Standpoint Theory. The finding that career development opportunities play a key role in satisfaction aligns with the theory's focus on empowering individuals through knowledge building and skill enhancement, particularly in fields like architecture, which have historically posed challenges for women and other under-represented groups.

5. Conclusions and Recommendations

This research aimed to investigate unique perceptions and opinions of women who pursue architecture as a career within STEM disciplines, focusing specifically on educational sector in Enugu state, Nigeria. The findings reveal several key insights that contribute to our understanding of women's experiences in architectural education and practice:

- The primary driving forces behind women's decision to enter architecture are predominantly intrinsic, with 73.7% of respondents identifying passion for creativity and design as their main motivation. This finding underscores the importance of architecture's unique position as a discipline that combines technical rigor with artistic expression, attracting women who seek meaningful creative outlets within STEM.
- The research findings challenge some common assumptions about gender disparities in architecture. While 80.5% of respondents reported experiencing gender-related challenges, these were not ranked as the most significant barriers by respondents. Instead, financial constraints, limited access to resources, and work–life balance issues emerged as the predominant challenges.
- The high satisfaction levels reported (89.5%) and positive work–life balance perceptions (68.5% rating it "excellent" or "good") should be interpreted within the study's context, because as respondents progress through their careers and encounter different professional and personal circumstances, these perceptions may evolve significantly.
- Work–life balance perceptions among respondents were largely positive. This finding appears to contradict the common narrative of architecture as incompatible with balanced living and suggests that the women in architectural education studied have developed effective strategies for navigating the demands of the profession.
- The perception of equal professional opportunities compared to other STEM fields was shared by a majority of respondents (57.9%), although a significant portion either disagreed (21.1%) or were uncertain (21.1%). This split perception indicates that while progress has been made toward gender equity in architecture, experiences vary considerably among women in the field.
- Statistical analysis revealed no significant association between academic level and career satisfaction, suggesting that satisfaction in architecture transcends hierarchical positions. Similarly, no significant relationship was found between institutions attended and experiences of gender-related challenges, indicating that these experiences are shaped more by broader professional and societal structures than by specific institutional environments.
- The correlation analysis between motivational factors and career satisfaction revealed that intrinsic motivators (passion for design and creativity) had the strongest correlation with satisfaction (65.96%), This pattern reinforces the importance of intrinsic motivation in predicting career fulfillment in architecture.

These findings collectively suggest that architecture offers a uniquely satisfying professional path for women within STEM, combining creative opportunities, intellectual stimulation, and meaningful impact in ways that few other technical fields can match. Despite persistent challenges, the high satisfaction rates and positive perceptions of work–life balance indicate that architecture has made significant progress in creating fulfilling career pathways for women. Based on the research findings, the following recommendations are proposed to enhance women's participation and experience in architecture:

- Educational institutions should nurture creativity in architectural programs and showcase varied success models to inspire diverse career trajectories for that accommodate different strengths, interests, and life circumstances.

- They should establish targeted scholarships, grants, and access to essential resources to address financial barriers for female architecture students.
- They should develop structured mentorship initiatives connecting female students with successful architects and introduce leadership programs to support women's advancement into senior roles.
- Educational institutions and firms should integrate practical training and adopt flexible work policies to help women manage professional and personal responsibilities effectively.
- Given the strong correlation between intrinsic motivation and career satisfaction, women should prioritize projects and roles that align with their creative passions and technical interests
- Professional bodies and employers should ensure equal access to project resources, development opportunities, and advancement pathways for women.
- Architectural firms should cultivate inclusive environments that recognize diverse contributions and ensure clear, unbiased criteria for career advancement.
- Women in architecture should actively pursue skill development, maintain records of achievements, and adopt assertive communication strategies to support career growth.

5.1. Limitations of the Study

Despite the valuable insights provided by this research, the following limitations are acknowledged:

- The study is granular in focus (Enugu state), which may limit the generalizability of findings to other Nigerian regions, and for ethical reasons, the study did not explore variations across studied institutions.
- This study primarily surveyed women in architectural education (the majority being students, with a few academics) and may not exhaustively represent large-scale industry practice.
- The cross-sectional nature of the study captures perceptions at a single point in time, limiting our ability to observe how motivations and experiences evolve throughout architectural careers.
- The study did not extensively explore how other identity factors (such as socioeconomic background, ethnicity, or religion) intersect with gender to shape women's experiences in architectural education.

5.2. Suggestions for Future Research

Based on the findings and limitations of this study, future research should study women who have left architecture to understand attrition factors, as well as those who transition between different roles within the broader architectural field, and also compare women's experiences in architecture with those in other design fields (such as interior design and landscape architecture) and other STEM disciplines to identify field-specific versus broader patterns.

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