



Analyzing Perception and Hesitation in the Context of Home Science Career Aspirations

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HIGHLIGHTS

- Stereotypes about home science, peer influence and confusion about career pathways indicating a significant relationship, impact students' perceptions towards choosing home science as a career option.
- Gender bias, limited career knowledge, uncertainty about job opportunities and lack of family support do not have a statistically significant effect on students' perceptions when considering home science as a career option.

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ABSTRACT

Home science, despite its rich potential for addressing contemporary societal needs, faces hesitation among prospective students as a viable career option. The study conducted in 2024 on 50 students from several Home Science Educational Institutions. This study adopted a descriptive approach, using structured close-ended questionnaires through quantitative analysis involving interviews and surveys to collect information. This study explored the relationship between students' perceptions of home science as a career option and the factors contributing to their hesitancy in pursuing it. A chi-square analysis was conducted. The findings indicated that stereotypes, peer influence, and confusion about career pathways significantly impact students' perceptions, contributing to hesitation in choosing home science. Conversely, gender bias, limited career knowledge, uncertainty about job opportunities, and lack of family support did not show significant relationships with students' perceptions, indicating that these factors were less influential in their decision to consider home science as a viable career option. These findings highlighted the importance of addressing stereotypes and peer pressure while providing clearer career pathways to improve the perception of home science. The study suggested that targeted interventions in these areas could encourage more students to view home science as a rewarding and viable career choice.

INTRODUCTION

Home science is an interdisciplinary academic field that promotes sustainable living and equips individuals with essential life skills. The discipline merges science and arts, covering subjects like human development, food and nutrition, home management,

community development, and textiles. While home science holds vast career potential, societal perceptions often limit its scope, particularly in countries like India. According to a study by Patel & Kumar (2016), home science is frequently viewed as a field designated for women to enhance household management skills, overshadowing its broader professional opportunities whereas, Employment

empowers women by providing financial independence, alternative source of social identity and exposure to power structures (Priyanka et al., 2019) This perception discourages students from exploring the subject beyond traditional roles. Bhatia & Reddy (2017) observed that many students are unaware of the diverse career paths available within home science, including nutrition, health management, interior design, and fashion technology. Their research pointed out that educational institutions often fail to provide detailed counselling that highlights the dynamic nature of the discipline. It has been noted that professionals and students both frequently choose not to pursue home science as their major career option, despite the field's importance in today's society. Peer pressure also reinforces this hesitancy, as students are reluctant to go against the mainstream preference for more socially acceptable career paths. Kumar & Jain (2018) conducted a study demonstrating that peer and parental influence strongly affects students' career choices. In India, home science is often discouraged by both parents and peers, who perceive it as a less ambitious path compared to fields like engineering or medicine. This pressure further deepens the reluctance among students to choose home science as a profession. Moreover, Rao & Sinha (2020) argued that the lack of modern technological integration and interdisciplinary approaches in home science curricula has made the field less appealing to students. Their study revealed that traditional skills are prioritized over emerging fields like food safety, sustainable textiles, and health management, limiting the relevance of home science in today's job market. A curriculum overhaul is needed to make the field more attractive and aligned with modern employment opportunities. Sharma (2017) observed that societal attitudes still frame home science as a female-centric field, reinforcing gender stereotypes. This perception deters both male and female students from considering home science as a viable career option, negatively impacting enrolment rates. Nair & Bose (2020) noted that while home science graduates find employment in diverse sectors, the field is still perceived to offer limited financial prospects, particularly by middle-class students, who face pressure to pursue higher-earning careers. Das (2021) highlighted that despite its interdisciplinary nature, home science lacks the professional visibility and respect it deserves, particularly in technology-driven industries. In order to promote inclusion and diversity in this area, this course emphasizes the significance of abandoning such preconceptions and encourages people of every gender to investigate and appreciate the subject. This research paper aims to provide in-depth analysis of the relationship of perception of students towards choosing home science as a career option with the factors contributing to their hesitancy in considering it as a career option.

METHODOLOGY

The research was conducted at several Home Science Educational Institutions where this course is offered during the year 2024. This study adopted a descriptive study approach, as it seeks to analyse the relationship of perception of students with the factors contributing to their hesitancy in considering it as a career option. A quantitative method approach was followed to conduct the study. The sample size of 50 students was determined based on the saturation of themes. Purposive sampling was used to select students who have experience or knowledge about home science as

career option. Data was collected from 50 Home Science students using a self-structured, close-ended questionnaire. A questionnaire was administered in the regional language to all selected students. Data was systematically processed, including coding, classification, and tabulation. Frequency analysis and chi-square tests were utilized to analyze the data and draw meaningful conclusions. To analyse the results, the perception of students is treated as the dependent variable i.e., job prospects, career growth, societal recognition. While the various hesitancy factors serve as the independent variables i.e., Stereotypes about home science, Gender bias, Peer influence, limited career knowledge etc. To statistically analyse whether the perception of students (dependent variable) is significantly related to any hesitancy factors (independent variables), Chi-square test was used. The result thus obtained was then analysed and processed in the form of tables.

RESULTS

Perception of students towards choosing home science as a career option and factors of hesitancy

The findings of the Table 1 presents a cross-tabulation of student perceptions with various hesitancy factors related to

Table 1. Cross-tabulation of perception of students and each hesitancy factor

Hesitancy Factors	Positive Perception F(%)	Negative Perception F(%)	Total F(%)
Stereotypes about home science			
Yes	05(10)	09(18)	14(28)
No	25(50)	11(22)	36(72)
Total	30(60)	20(40)	50(100)
Gender Bias			
Yes	04(08)	06(12)	10(20)
No	26(52)	14(28)	40(80)
Total	30(60)	20(40)	50(100)
Peer Influence			
Yes	08(16)	16(32)	24(48)
No	22(44)	04(08)	26(52)
Total	30(60)	20(40)	50(100)
Limited career knowledge			
Yes	07(14)	02(04)	09(18)
No	23(46)	18(36)	41(82)
Total	30(60)	20(40)	50(100)
Uncertainty about job opportunities			
Yes	03(06)	02(04)	05(10)
No	27(54)	18(36)	45(90)
Total	30(60)	20(40)	50(100)
Lack of family support			
Yes	01(02)	02(04)	03(06)
No	29(58)	18(36)	47 (94)
Total	30(60)	20(40)	50(100)
Confusion about career pathways			
Yes	04(08)	01(02)	05(10)
No	26(52)	19(38)	45(90)
Total	30(60)	20(40)	50(100)

* F: Frequency

pursuing home science as a career. Each factor was coded as binary (e.g., 1 = “Yes” for presence of the factor, 0 = “No” for absence of the factor). Among students, 28% acknowledged stereotypes, with 10 per cent having positive and 18 per cent having negative perceptions. In contrast, among the 72 per cent students who did not identify stereotypes, 50 per cent had a positive view, and only 22 per cent viewed home science negatively. Out of 20 per cent students who felt gender bias, 08 per cent had positive perceptions and 12 per cent had negative perceptions. Conversely, among 80 per cent students who did not perceive gender bias, the majority (52%) had a positive view, and only 28 per cent had a negative view. Peer influence impacted (48%) students, with a majority (32%) showing negative perceptions. Those (52%) not influenced mostly had a positive view (44%). 18 per cent students indicated limited career knowledge, with a slight majority (14%) having positive perceptions. Most students (46%) did not face this challenge, but a significant portion (36%) still had negative perceptions. Only 10 per cent students expressed uncertainty, and most (6%) had positive perceptions. Among the remaining 90 per cent students, the majority (54%) had positive perceptions. Family support was a minimal concern, with only 6 per cent students affected and the majority (58%) perceiving home science positively. 10 per cent students were confused about career paths, though 8 per cent maintained positive perceptions, while the majority (90%) without confusion leaned towards positive views (52%).

The data in Table 2 highlights the relationship of perception of students towards choosing home science as a career option with the factors contributing to their hesitancy in considering it as a career option. Here’s a detailed breakdown of the results:

Stereotypes about home science: The chi-square value for stereotypes was 4.79, which is greater than the critical value of 3.841 at a 0.05 level of significance. This indicates that stereotypes have a statistically significant impact on students’ perceptions, making it a key factor influencing their hesitancy toward choosing home science as a career.

Peer Influence: The chi-square value for peer influence was 13.67, much higher than the tabulated value of 3.841, demonstrating a strong, significant relationship between peer influence and students’ perception of home science. Peer pressure plays a substantial role in shaping negative perceptions, contributing to students’ hesitancy.

Confusion about career pathways: The chi-square value for confusion about career pathways was 5.37, again higher than the tabulated value of 3.841. This suggests a significant link between uncertainty about career prospects in home science and students’ reluctance to pursue it. Students unclear about career options tend to have negative views or hesitate more when considering home science as a career.

DISCUSSION

The present study highlights the relationship of perception of students towards choosing home science as a career option with the factors contributing to their hesitancy in considering it as a career option. The findings reveal that the field is largely seen as innovative and offering viable career paths, but efforts to further promote it,

Table 2. Calculation of observed and expected frequencies with chi-square

Hesitancy Factors	Positive Perception (χ^2)	Negative Perception (χ^2)	Total Chi-square (χ^2_{total})	Table value (0.05)
Stereotypes about home science				
Yes	O: 05 E: 8.4 $\chi^2 = 1.38$	O: 09 E: 5.6 $\chi^2 = 2.07$	Calculated value 4.79	3.841 d.f. = 1 Significant
No	O: 25 E: 21.6 $\chi^2 = 0.535$	O: 11 E: 14.4 $\chi^2 = 0.804$		
Gender Bias				
Yes	O: 04 E: 06 $\chi^2 = 0.67$	O: 06 E: 04 $\chi^2 = 1.0$	Calculated value 2.08	3.841 d.f. = 1 Non-significant
No	O: 26 E: 24 $\chi^2 = 0.167$	O: 14 E: 16 $\chi^2 = 0.25$		
Peer Influence				
Yes	O: 08 E: 14.4 $\chi^2 = 2.844$	O: 16 E: 9.6 $\chi^2 = 4.267$	Calculated value 13.67	3.841 d.f. = 1 Significant
No	O: 22 E: 15.6 $\chi^2 = 2.626$	O: 04 E: 10.4 $\chi^2 = 3.938$		
Limited career knowledge				
Yes	O: 07 E: 5.4 $\chi^2 = 0.474$	O: 02 E: 3.6 $\chi^2 = 0.711$	Calculated value 1.45	3.841 d.f. = 1 Non-significant
No	O: 23 E: 24.6 $\chi^2 = 0.104$	O: 18 E: 16.4 $\chi^2 = 0.156$		
Uncertainty about job opportunities				
Yes	O: 03 E: 03 $\chi^2 = 0$	O: 02 E: 02 $\chi^2 = 0$	Calculated value 0.00	3.841 d.f. = 1 Non-significant
No	O: 27 E: 27 $\chi^2 = 0$	O: 18 E: 18 $\chi^2 = 0$		
Lack of family support				
Yes	O: 01 E: 1.8 $\chi^2 = 0.356$	O: 02 E: 1.2 $\chi^2 = 0.533$	Calculated value 0.95	3.841 d.f. = 1 Non-significant
No	O: 29 E: 28.2 $\chi^2 = 0.023$	O: 18 E: 18.8 $\chi^2 = 0.034$		
Confusion about career pathways				
Yes	O: 04 E: 03 $\chi^2 = 0.333$	O: 01 E: 02 $\chi^2 = 0.5$	Calculated value 5.37	3.841 d.f. = 1 Significant
No	O: 26 E: 27 $\chi^2 = 0.037$	O: 09 E: 18 $\chi^2 = 4.5$		
O: Observed	E: Expected	Significance level: 0.05		

especially among male students and those unfamiliar with its potential, could help address the existing gaps in perception and awareness. The findings show a significant relationship between stereotypes and students' perceptions. Research by Sharma et al., (2021) highlights that stereotype, often associated with gendered views and societal norms discourage students from considering home science. These biases create a perception that home science is a less prestigious or 'female-centric' field, significantly impacting career choices. The significant relationship observed in this study confirms that these stereotypes continue to shape students' hesitancy, aligning with the broader literature on gender and career perceptions. Kaur & Patel (2020) & Arunachalam et al., (2020) also support this finding, showing that students who internalize such gendered views are more likely to disregard home science as a serious career option. The perception that it lacks the rigor and financial rewards of fields like engineering or medicine further deters students. Das (2021) in his study emphasizes that while stereotypes are most commonly observed in rural settings, they also persist in urban educational contexts. The significant relationship found in this study echoes these findings, demonstrating how stereotypes create a substantial barrier to students' willingness to explore home science. Furthermore, Research conducted by Bhasin & Gupta (2021) indicates that one of the key reasons for hesitation in choosing Home Science is the prevailing stereotypes associating the field with traditional gender roles. Home Science is often viewed as a "female-centric" subject, reinforcing the notion that it is limited to domestic skills, which deters students, especially males, from considering it a viable career option. The influence of peers on choosing home science as a career option is a critical factor, especially during adolescence, a period when individuals are highly susceptible to external influences. Peers often play a significant role in shaping students' opinions, aspirations, and perceptions, particularly when it comes to career decisions. Adolescents and young adults are likely to follow the choices made by their friends or classmates, valuing acceptance and fitting in. In many cases, home science may not be perceived as a "mainstream" or "popular field", especially in comparison to more traditionally prestigious courses such as engineering, medicine, or business. As a result, students may hesitate to pursue home science if it is not a favoured option within their social circle. The findings of the study align with the findings of Gupta & Verma (2019); Meinan et al., (2023) who pointed out that peer pressure, especially during adolescence, plays a crucial role in shaping career choices. Students may reject home science due to its lack of popularity or perceived prestige among peers. Previous research emphasizes that peer influence often reinforces negative stereotypes and perceptions of certain fields, which is evident in this study as well, showing how students' decisions are swayed by peer opinion. Further, a study by Singh & Bhatt (2018) points out that peer influence often reinforces existing stereotypes. When a peer group holds the belief that home science is an "inferior" option or primarily for women, these attitudes get magnified, leading to widespread rejection of the field. The present study's findings show that peer influence can outweigh individual preferences, as students may avoid home science out of fear of social alienation or judgment. Baker & Jones in his study (2017) also affirm that peer opinion plays a critical role in

career decision-making, especially in environments where academic choices are closely tied to social status and prestige. The confusion about career pathways as another major factor influences students' perceptions. Previous studies conducted by Joshi in 2020, suggest that students who lack clear information about the career prospects in home science are more hesitant to pursue it. The confusion arises from inadequate career guidance and limited exposure to potential opportunities within the field. This research confirms that students who are unsure of future career paths in home science are more likely to view it unfavourably. Singh et al., (2018) support this by indicating that students who lack guidance or mentorship are less likely to explore non-traditional career paths like home science. Without exposure to the field's potential, students are more prone to confusion and, consequently, hesitation. This confusion is exacerbated by the narrow representation of home science in popular media and education systems, which often fail to showcase the breadth of its applications. The present study's results confirm that this confusion is a significant deterrent, mirroring the conclusions of earlier research that career uncertainty can diminish students' interest in pursuing home science.

CONCLUSION

The present study highlights the relationship between students' perceptions of home science as a career option and the factors contributing to their hesitancy in pursuing it. Despite a generally positive view of the field, although many students recognize the value and potential of home science, a considerable number express reluctance, largely due to societal stereotypes and limited public awareness about its contributions and opportunities. The research highlights the necessity for targeted awareness campaign and educational initiatives aimed at dismantling stereotypes and fostering a supportive peer environment. Moreover, enhancing career counselling and guidance can clarify the pathways within Home Science. By aligning educational strategies with contemporary societal needs and reinforcing its value, more informed, and supportive landscape can be cultivated. Ultimately, this research seeks not only to inform educators but also to inspire students to recognize the rich potential and relevance of Home Science in enhancing quality of life.

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