



THE IMPACT OF GENDER STEREOTYPES TOWARDS UNDERGRADUATE PREFERENCES FOR LIBRARY AND INFORMATION SCIENCE (LIS) SPECIAL DEGREE: BASED ON THE DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, UNIVERSITY OF KELANIYA

Senarathna K.I.D.^{1*}, Amarasooriya Y.W.N.D.²

¹Department of Library and Information Science, University of Kelaniya

²Department of Library and Information Science, University of Kelaniya

ABSTRACT

Gender roles typically encompass expectations and norms regarding behaviors, appearances, occupations, and societal roles associated with masculinity and femininity. Gender stereotypes refer to preconceived notions and expectations about the characteristics, behaviors, and roles associated with individuals based on their gender. It is a social construct that varies across cultures and historical periods. In the case of LIS, if it is stereotypically viewed as a female-dominated field, it may discourage male students from considering it as a career path due to societal expectations or perceived lack of masculinity associated with the profession. The main objective of the paper is to examine to identify the impact of Gender Stereotypes towards undergraduate preferences for Library Science (LIS) special degree. This paper emphasized the impact of Gender Stereotypes towards undergraduate preferences for Library Science (LIS) special degree in the Department of Library and Information Science. Method of the study is Descriptive research. Around 80% of female students select the LIS subject as a special degree rather than male students. Apart from the female students, there were a low percentage of male students who selected LIS as a special degree. The basic reason for that is the traditional mindset of the students. Because female students most seek their profession around their hometowns. These criteria show the awareness of the students of LIS subject and the nature of the gender stereotype in the LIS field. Especially these have shown the differences between the male and female students' perceptions and attitudes when selecting the subject as a special degree. This study gains the major fact that most of the trainers requested male trainees for the library training programs. Then, introducing what are the opportunities available for male and female LIS students, considering that, conducting related workshops can be introduced as the timeliest concern matters.

KEY WORDS: Attitudes, Department of Library and Information Science, Gender, Gender Stereotype, Library and Information Science

Corresponding Author: Senarathna K.I.D.*, Email: chapas@kln.ac

Introduction

Gender is shaped not only by biological factors but also by a complex interplay of social, cultural, and psychological influences. It is a social construct that varies across cultures and historical periods.

"Gender is the social meaning of sex" (Haslanger, 2000, p.5). Gender is a complex social and cultural concept that refers to the roles, behaviors, activities, and expectations that a particular society considers appropriate for males and females. It goes beyond biological differences between sexes and encompasses various psychological, social, and cultural characteristics that individuals may identify with or express. The psychological approach of Gender defines as Identity. on the other hand, a set of attributes or ideals that function as norms for males and females (Haslanger, 2000).

"A gender stereotype is a generalized view or preconception about attributes, or characteristics that are or ought to be possessed by women and men or the roles that are or should be performed by men and women" (United Nations, 2014, p.1). It is important to recognize that gender stereotypes are generalizations that do not accurately reflect the diversity and complexity of human individuals. They overlook the unique characteristics, talents, and interests that can vary widely among individuals regardless of their gender. Challenging and breaking free from gender stereotypes can promote greater gender equality, inclusivity, and respect for individual identities and choices.

The history of gender stereotypes in Library and Information Science (LIS)¹ is rooted in societal perceptions of gender roles and expectations. Historically, librarianship was seen as a profession suitable for women due to prevailing stereotypes that associated women with nurturing and caretaking roles. In the late 19th and early 20th centuries, librarianship emerged as a profession predominantly staffed by women. This was partly influenced by the belief that women possessed the necessary skills, such as organization, attention to detail, and a disposition for quiet and orderly environments, which were considered essential for library work at the time. The idea of women as natural librarians was further reinforced by the influence of Melvil Dewey, a prominent figure in the development of modern library science. Dewey advocated for women's participation in librarianship and believed women were better suited for the profession due to their perceived attention to accuracy and detail (Shafack, 2016).

As a result, libraries became associated with femininity, and gender stereotypes began to shape the profession. The notion of the "spinster librarian," a single woman dedicated to her profession and often portrayed as socially awkward, gained traction in popular culture and reinforced the image of librarians as introverted and bookish. These gender stereotypes affected various aspects of the LIS profession. Women were often restricted to certain library roles, such as children's librarians or catalogers, while men were more

likely to occupy positions related to library administration or technical services (Ugwu,2012).

However, in the latter half of the 20th century, there was a gradual shift in gender dynamics within the LIS field. The feminist movement and the broader push for gender equality brought attention to the limitations imposed by gender stereotypes. Efforts were made to challenge traditional gender norms and expand opportunities for women in professional settings, including librarianship (Lascano,2021).

As gender stereotypes were increasingly questioned, more men entered the LIS profession. This diversification helped challenge the perception that librarianship was exclusively a female occupation. Men started occupying various roles, including library directors, systems librarians, and academic librarians, traditionally considered male-dominated areas. Furthermore, professional organizations and associations within LIS have actively worked to address gender disparities and promote inclusivity. Initiatives such as mentoring programs, scholarships, and conferences focused on gender equity have aimed to create a more balanced and diverse profession. Today, while women still make up a significant portion of the LIS workforce, efforts to challenge gender stereotypes and promote equality continue. Libraries strive to create inclusive environments that value the contributions of individuals regardless of their gender identity. Ongoing research, education, and advocacy efforts within LIS seek to address and dismantle gender biases, promoting a more equitable and inclusive profession for all (Muñoz,2022).

In many countries, including Sri Lanka, gender stereotypes have historically influenced the LIS profession. Traditionally, librarianship has been perceived as a female-dominated field, reflecting societal expectations and stereotypes about women's roles in nurturing and educational environments. In Sri Lanka, it's possible that similar gender stereotypes have shaped both the perception and composition of the LIS workforce. Women may have been more prevalent in library roles, particularly in public and school libraries, while men may have been more represented in managerial or technical positions. However, it is important to note that gender dynamics and the status of gender stereotypes can vary over time and across different regions and contexts. Efforts have been made globally to challenge and dismantle gender stereotypes in LIS, promoting gender equality and inclusivity within the profession.

In recent years, there has been an increasing emphasis on gender equity and diversity within the LIS field in many countries. Professional associations and organizations have undertaken initiatives to address gender disparities, encourage diversity, and create inclusive environments for all LIS professionals. To gain a clearer understanding of the current state of gender stereotypes in LIS within the Sri Lankan context, it would be helpful to consult local research studies, reports, or engage with professionals working in the field in Sri Lanka. These sources would provide insights into the specific challenges and progress made in terms of gender equity and the representation of diverse voices

within the LIS profession in Sri Lanka. According to the data of the DLIS²(2023), In 2014/2015 LIS Special batch there is a one Uganda student followed LIS special degree. If focus on the current scenario of the male and female students' perceptions comparing the history, students' traditional mind-set is changing very slowly. Generally, most of the university students when they are selecting subject as a special degree, focus on their interest of the subject, curiosity on the subject, easy to study, what are the job opportunities related to that are seeking by them (Muñoz,2022). LIS students when they are selecting LIS subject for a special degree, Lewis's criteria can be adapted. Because students who are addicted to reading books, they like to select this subject. According to Lascano (2021) Although students are aware of the LIS course students do not view it as a career path worth pursuing. But in Sri Lankan context most of the females are wondering to select library profession as their future career. Further related to sex, both sexes knowledgeable in the LIS courses (Lascano,2021).

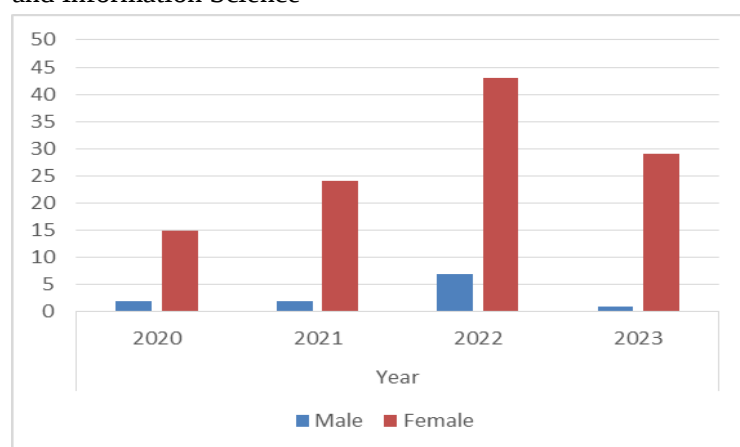
Accordingly, above introduction there is an outstanding relationship between the gender stereotype and LIS students when they select LIS subject for their special degree.

Justification of the Study

Problem Statement

The department of library and information science is building needed library profession for the library and services sector in the world. Last few decades there have been some consideration decrease of the percentage of male students, when selecting LIS subject as a special degree.

Figure No 01 - Gender Stereotype special degree students in the Department of Library and Information Science



Source: Department Statistics, 2023

² DLIS (Department of Library and Information Science)

According to the Figure No.01, in the year 2020-2023, the count of the LIS male students who selected special degree showed an outstanding decrease. By 2023 it shows a steady decrease in the count of the LIS male students.

Considering this, it should be paid some attention for the impact of gender stereotype and attitudes in selection of library and information science special degree in the DLIS. Gender stereotypes can influence perceptions of which fields or professions are considered more suitable for individuals of a particular gender. In the case of LIS, if it is stereotypically viewed as a female-dominated field, it may discourage male students from considering it as a career path due to societal expectations or perceived lack of masculinity associated with the profession. Gender stereotypes can shape students' career aspirations and interests. Stereotypes regarding women's roles as caregivers or having more nurturing qualities might lead some female students to gravitate towards LIS, which can involve aspects of organizing, preserving, and disseminating information. This research seeks to answer the problem 'What impact of Gender Stereotypes on undergraduate preferences for Library Science (LIS) special degree?'.

Research Objectives

This study aims to find out the following:

Main Objective

To identify the impact of Gender Stereotypes towards undergraduate preferences for Library Science (LIS) special degree.

Other Objectives

1. To compare the differences of the impact of Gender Stereotypes towards undergraduate preferences for Library Science (LIS) special degree.
2. To reveal the opportunities for male and female students in the LIS subject field.
3. To identify the suggestions and suggest promotional strategies.

Significance of the study

The main pros in this study is addressing students' and responsible resources persons' suggestions, promote awareness among students, parents, educators, and society as a whole about the diversity of career options available within LIS, breaking down gender stereotypes associated with the field, Encourage the participation of diverse professionals, including individuals from different genders, in LIS events, conferences, and academic programs. This can provide students with role models and mentors who can guide and inspire them regardless of their gender. Develop programs that expose students to various careers within LIS and provide hands-on experiences. Such initiatives can help students understand the breadth of opportunities available and overcome gender

stereotypes by making informed choices rather than the traditional mind-set of the students.

Literature Review

Anderson& Martinez (2016) examined the gendered perception of library and information science and its implications for career choices. It discusses how societal expectations, gender stereotypes, and the feminization of the profession influence individuals' decisions to pursue a library and information science bachelors' degree. The review emphasizes the importance of creating an inclusive environment to attract and retain individuals from diverse gender backgrounds.

Brown& Wilson (2014) reported that impact of the gender stereotypes on library and information science education. It discusses how gendered perceptions of the field affect individuals' decisions to pursue a library and information science bachelor's degree, focusing on the experiences of both men and women. The review explores the role of educational interventions and mentorship programs in challenging gender stereotypes and promoting gender equity in library and information science.

O'Connor (2017) examined the career aspirations of library and information science students, and this research investigates the gendered expectations that influence students' choices. The study explores how societal norms and stereotypes shape individuals' perceptions of gender roles within the field.

Fulton& Mackenzie (2020) examined the Stereotypes and experiences of Men in the Profession. The authors explore the experiences of men working in the library profession and the impact of gender stereotypes on their career decisions. The study sheds light on how societal perceptions of librarianship as a feminine profession can discourage men from pursuing Library and Information science as a major.

Smith& Brown(2018) reported that the gender disparities in Library and information science programs, focusing on the underrepresentation of men. It explores the influence of gender stereotypes on career choices, particularly how the perception of library and information science as a feminized profession affects men's decision to pursue a bachelor's degree. The review discusses strategies to encourage greater gender diversity in library and information science education.

Thompson & Wilson (2017) carried out research on the impact of gender stereotypes on career aspirations in library and information science. It explores how traditional gender norms and perceptions of femininity in the field affect both men and women's decisions to pursue a library and information science degree. The review highlights the need for interventions to challenge gender stereotypes and promote inclusivity in library and information science education.

Latham& Gross(2016) reported there were gender issues and stereotypes of male librarians. Study discovered that the experiences of male librarians, the influence of

gender stereotypes on their professional choices. It emphasizes the need to challenge traditional gender norms and create a more inclusive environment within the library and information science field.

Library and information science professions can also become entrepreneurs by investing in various information businesses. Babalola (2011) observed one who invests in an entrepreneurship venture is an entrepreneur. An entrepreneur has traditionally been described as an individual who takes risks and starts something new.

Malek (2020) compared the motivations of male and female students in choosing library and information science as a major. It explores how gender stereotypes shape their decision-making process and highlights the need for interventions to encourage gender diversity in the field.

McKnight (2019) discovered Barriers to Attracting Men to Library and Information Science and he examined existing literature on barriers that discourage men from pursuing library and information science careers. It discusses the impact of gender stereotypes, societal expectations, and workplace culture on men's decisions to enter or stay in the field.

White, Taylor & Johnson (2015) explored the underrepresentation of men in library and information science programs and its relationship with gender stereotypes. It analyzes existing literature on the topic, examining the barriers and challenges faced by men entering the field, and identify strategies to increase gender diversity. The review emphasizes the need for proactive measures to address gender stereotypes and promote inclusivity.

Research Methodology

Research Design.

The mixed method used for this study. And based on the descriptive method study has been done. This was described, analyzed, and interpreted the data concerning the impact of gender stereotype and attitudes in selection of library and information science special degree in the Department of Library and Information Science.

Population and Sample of the Study.

There are 764 students who have special degrees in the faculty of Social Sciences, University of Kelaniya (Students' Details – Academic Year 2019/2020, Faculty of Social Sciences). Among this population there are 70th students are Library Science students who are following LIS special degree. Based on the purposive sampling method this sample was carried out for the study.

Table No.01- Population and Sample of the Study

No. of Faculty of Social Sciences Special Degree students	LIS special Students by year		
764	I	II	III
	17	23	30
	70		
Total of the population	Total of the sample		
764	<u>70</u>		

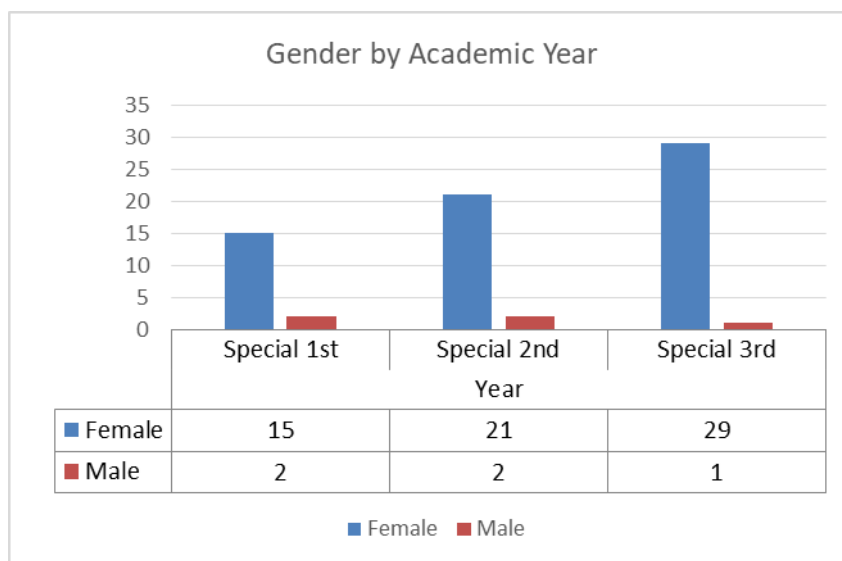
Source: Students' Details – Academic Year 2019/2020, Faculty of Social Sciences

Data Collecting tools and Techniques.

Primary data would be collected through the questionnaires. And used structured interview for collecting data from the resource's persons. Secondary data collected referring to the Website and Statistical Report of the Department and the Faculty. Data analyses had been derived from MS Excel.

Results and Discussion

Figure No.02- Gender by Academic Year



Majority of respondents are females 92.8% (65) and 7.2% (5) male respondents. Among them 21.4%(15) of the respondents were special first year female students and 2.9% (02) of male students. In special second year 30% (21) of female students and 2.8% (02) of male students. Considering special third year 41.4% (29) of female students and 1.5% (1) of male students. Comparing these statistics in each year females were high.

Figure No.03-Awareness of the subject before entering the university

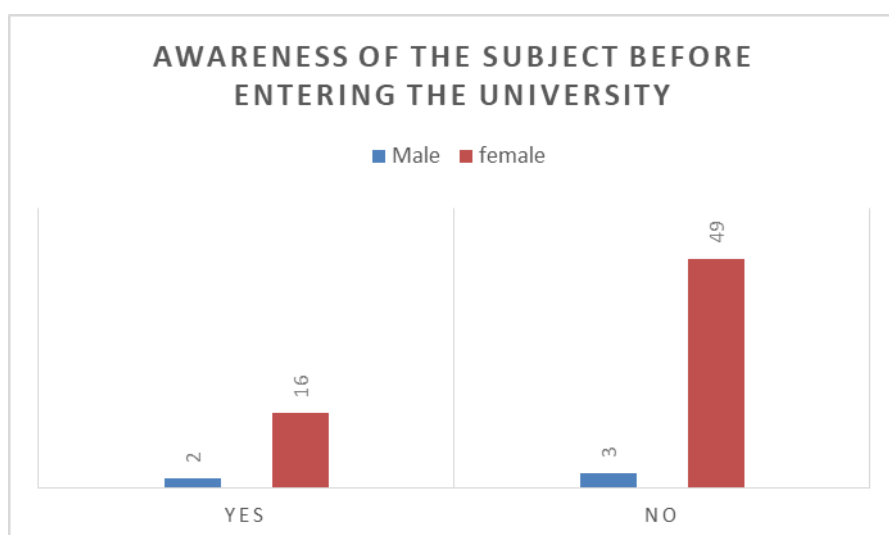
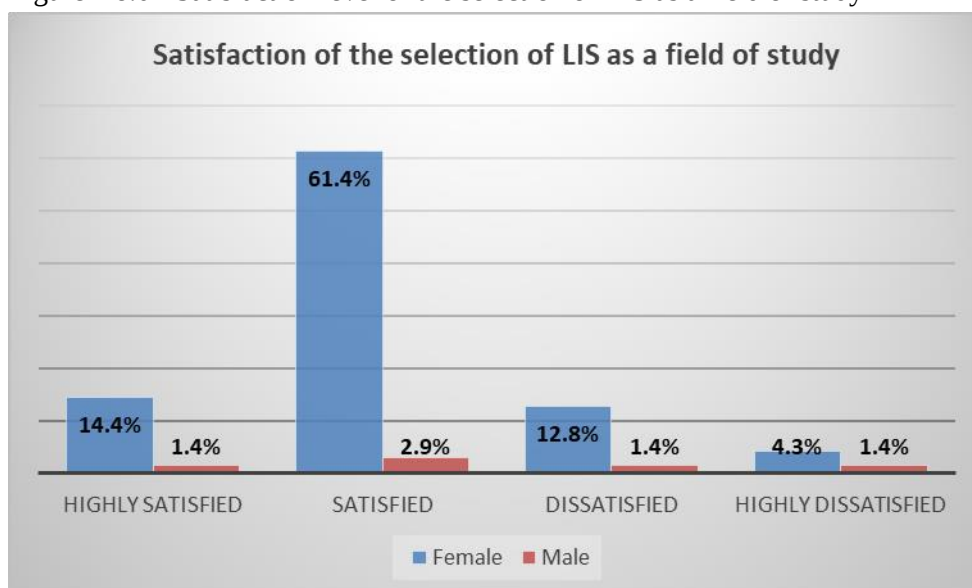


Figure no.03 presents the data related to the awareness of the LIS subject before entering university. It shows that 2 (2.8%) male respondents and 16 (22.9%) females mentioned they already aware about the LIS subject before entering to the university. 3 (4.3%) male and 49 (70%) female students said they didn't aware about the LIS subject before entering the university. If considering these factors, more than male students, 22.9% (16) of female students aware about the LIS subject before entering to the university.

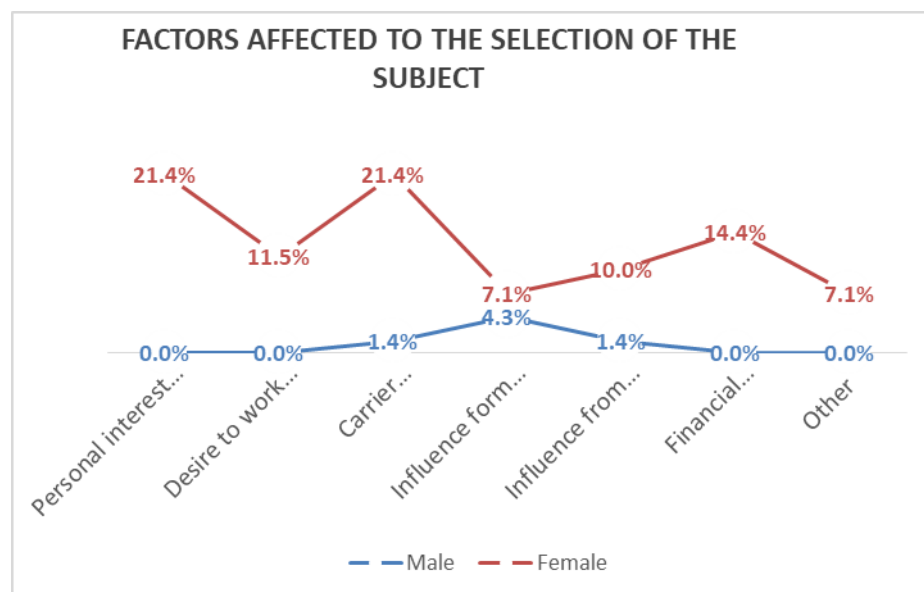
Figure No.04-Satisfaction level of the selection of LIS as a field of study



According to Figure no. 04 clearly displays that the female students 14.4% (10) and 1.4% (1) of male students were Highly Satisfied of the selection of LIS as a field of study. Very few students 4.3% (3) of female students and 1.4% (1) of male students were Highly

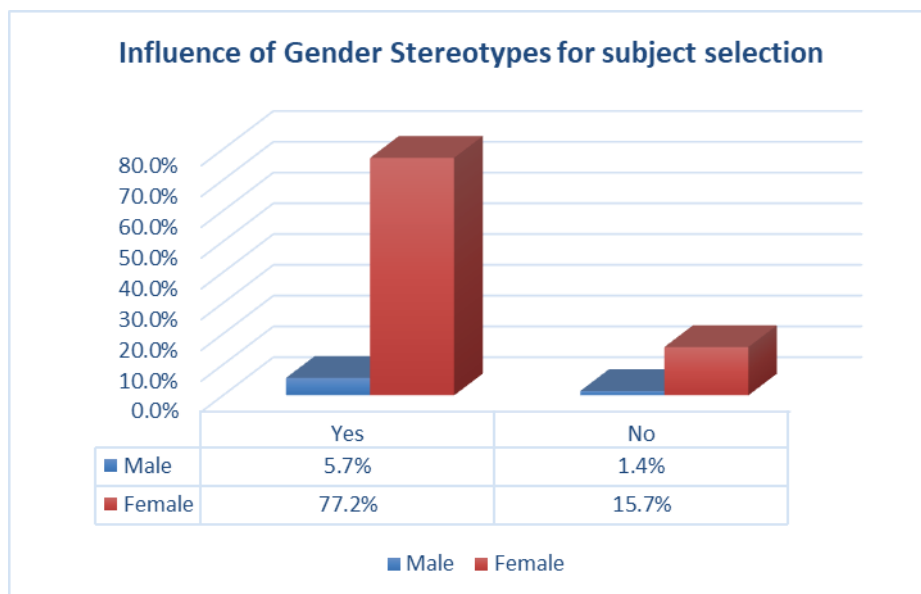
Dissatisfied. In this table clearly displays that 61.4% (43) of female students and 2.9% (2) of male students were satisfied when selection of LIS as a field of study.

Figure No.05-Factors affected to the selection of the subject



The second objective of this study was to compare the differences of the impact of Gender Stereotypes towards undergraduate preferences for Library Science (LIS) special degree. The finding show that majority of male respondents (4.30%) mentioned the most affected fact was influence from family or friends. There are two factors (Carrier opportunities and job prospects, Influence from educators or mentors) shows same percentage (1.4%) for selection of the subject of male students. A large number of female students responded (21.1%) as carrier opportunities and job prospects was the most affected factor to the selection of the LIS subject.

Figure No.06-Influence of Gender Stereotypes for subject selection



The second objective of this study was to compare the differences of the impact of Gender Stereotypes towards undergraduate preferences for Library Science (LIS) special degree. According Table no.07 carried out 5.7% of male respondents and 77.2% female respondents when select the LIS subject as a special degree affected gender stereotype. Only 17.4% of male and female students mentioned as it's not influence.

The third and fourth objectives were to reveal the opportunities for male and female students in the LIS subject field and to identify the suggestions and suggest promotional strategies. To achieve these objectives used structured interviews with two resource persons who attached in the department of Library and Information Science (DLIS), University of Kelaniya and the other resource person from the training institute which give the training opportunities for the LIS students.

There are structured questions and answers from the DLIS Resources Person and the training institute (TI) which give training opportunities for the LIS students.

- 1) What are the opportunities for the LIS male and female students in the LIS field?
- 2) As you think, to whom most opportunities are available in the LIS field?
- 3) What are the suggestions to develop student's carrier as male and female students?
- 4) When selecting students for the LIS special degree what gender prioritize you?
- 5) Considering female and male students, in past three years which gender had been got more job opportunities in the LIS field?

6) To overcome less participations of male students what are the strategies for use?
As a result of an interview with DLIS resource person discovered following things.

LIS students can specialize in information management, becoming experts in organizing, classifying, and retrieving information. They can work in diverse sectors such as healthcare, law firms, corporations, and government organizations. Information specialists assist in creating efficient systems for information organization and retrieval. There are same opportunities for male and female students who are competencies with IT skills and practical knowledge. Most of LIS students are working in the overseas countries as LIS professionals. Not Sri Lankan context without gender biasness they can work freely among them.

Career orientation/exploration is the best way possible among the choices to promote the LIS degree. Career orientationshould test frequently. The awareness program for LIS subject should start at School level then student can prepare for their future, and to begin deciding what career paths they want to pursue in university.

DLIS is giving same opportunities for female and male students to participate for special degree. But, considering past few years, male LIS students' participation shows low level. To address this problem DLIS are planning to initiate some promotional activities. According to factors that mentioned by DLIS, there are more job opportunities in Public and Private sector in LIS field. Then considering past few years students who graduated from the LIS degree engaged jobs in LIS field without gender diversity.

DLIS is planning to initiate direct and indirect strategies to increase male students as well as female students for the Department. To achieve that goal, expect to use Word of Mouth (WOM), Formal and informal communication, DLIS website, social media and LinkedIn. Some male students may benefit from hands-on activities, group projects, or practical demonstrations. Providing a range of instructional techniques can engage male students and enhance their participation. Expect to Create a positive classroom environment including Foster an inclusive and supportive classroom environment that encourages active participation from all students. Promote respectful discussions, acknowledge diverse perspectives, and discourage any form of discrimination or bias. Establishing a safe and welcoming space can help male students feel comfortable sharing their thoughts and ideas.

As a result of an interview with Training Institute (TI) resource person discovered following things.

TI is expecting to give the priority to male LIS graduates when recruiting. In the current scenario not only this institute many other Local and foreign LIS institutes are giving more priority to male LIS graduates when recruiting.

If there is a lack of visible male role models or successful individuals in LIS for male students to identify with, it may further reinforce gender stereotypes and discourage them

from pursuing the field. It is stereotypically viewed as a female-dominated field, it may discourage male students from considering it as a career path due to societal expectations or perceived lack of masculinity associated with the profession.

Further, most of the females are balancing their families rather than males. Then they mentioned that they can balance their personal and professional life well if they become Librarians in the future.

They are thinking the LISC subject is streamlined for only females and most of the female work in the librarianship, Because of that male dislike working under female top managers was a kind of a reason. As mentioned by the TI, it should be pay much attention for the strategies from the DLIS to attract male students for their Special degree.

Conclusions and Recommendations

The representation of women in the field of library and information science has been a significant impact on female students' decisions to pursue a degree in the field. Around 80% of female students select the LISC subject as a special degree rather than male students (Department of LISC statistics, 2023). The basic reason for that is the traditional mindset of the students. Because female students most seek their profession around their hometowns. Further, most of the females are balancing their families rather than males. Then they mentioned that they can balance their personal and professional life well if they become Librarians in the future. Apart from the female students, there were a low percentage of male students who selected LISC as a special degree. They are thinking the LISC subject is streamlined for only females and most of the female work in the librarianship, Because of that male dislike working under female top managers was a kind of a reason. These criteria show the awareness of the students of LISC subject and the nature of the gender stereotype in the LISC field. Especially these have shown the differences between the male and female students' perceptions and attitudes when selecting the subject as a special degree. This study gains the important fact that most of the trainers requested male trainees for the library training programs. Then, introducing what are the opportunities available for male and female LIS students, considering that, conducting related workshops can be introduced as the timeliest concern matters.

For most students, programs and activities that expose them to various careers can engage them in school and provide them with options. Librarians on the other hand must take chances to promote the degree to students entering the library either for research, assignment, or other related activities. Alumni may also have a share in promoting the course - library science may it be to their clients, colleagues, relatives, and family members. LIS curriculum does not include any gender education subject, it should add to the curriculum. The scarcity of diverse gender representation in certain fields can impact students' perceptions of their own potential success and hinder their interest in pursuing those areas. If there is a lack of visible male role models or successful individuals in LIS for male students to identify with, it may further reinforce gender stereotypes and

discourage them from pursuing the field. And the other recommendations can be derived below.

- Participate in career fairs and outreach programs targeted at male students.
- Encourage LIS professionals and alumni to actively promote the field to potential male students.
- Increase visibility of male role models through guest lectures and mentorship programs.
- Include gender education in the LIS curriculum to address stereotypes.
- Add career orientation modules to explore diverse LIS opportunities.
- Organize workshops highlighting benefits of an LIS career for both genders.
- Collaborate with libraries and educational institutions for hands-on experience.
- Engage families and communities to change traditional mindsets about LIS careers.
- Conduct ongoing research to monitor gender representation and intervention effectiveness.
- Implement surveys and feedback mechanisms to understand student experiences.
- Develop policies supporting gender diversity and inclusion in LIS programs.

References

Addai, P., Ofori, I. N., Bioh, R., & Avor, J. (2017). Attitude towards women in managerial positions: A study among undergraduate students of the University of Ghana. *International Journal of English Literature and Social Sciences*, 2(5), 239211. Retrieved from <https://dx.doi.org/10.24001/ijels.2.5.1/20/05/2022>

Amanatullah, E. T., and Morris, M. W. (2010). Negotiating gender roles: gender differences in assertive negotiating are mediated by women's fear of backlash and attenuated when negotiating on behalf of others. *J. Pers. Soc. Psychol.* 98, 256–267. Retrieved from <https://doi.org/10.1037/a0017094/23/04/2022>

Argyle, L. P., and Mendelberg, T. (2020). Improving women's advancement in political science: what we know about what works. *Polit. Sci. Polit.* 53, 718–722. Retrieved from <https://doi.org/10.1017/s1049096520000402/10/04/2022>

Babalola, O. O., Plessis, Y., & Babalola, S. S. (2021). Insight into the organizational culture and Challenges faced by women STEM leaders in Africa. *MDPI Social Sciences*. Retrieved from <https://doi.org/10.3390/socsci10030105/23/06/2022>

Bauer, N. M. (2015). Emotional, sensitive, and unfit for office: gender stereotype activation and support for female candidates. *Polit. Psychol.* 36, 691–708. Retrieved from <https://doi.org/10.1111/pops.12186/30/04/2022>

Begeny, C. T., Ryan, M. K., Moss-Racusin, C. A., and Ravetz, G. (2020). In some professions, women have become well represented, yet gender bias persists—Perpetuated by those who think it is not happening. *Sci. Adv.* 6:eaba7814. Retrieved from <https://doi.org/10.1126/sciadv.aba7814/15/05/2022>

Bernstein, R. H., Macy, M. W., Williams, W. M., Cameron, C. J., Williams-Ceci, S. C., and Ceci, S. J. (2022). Assessing gender bias in particle physics and social science recommendations for academic jobs. *Soc. Sci.* 11:74. Retrieved from <https://doi.org/10.3390/socsci11020074/20/04/2022>

Biernat, M., Carnes, M., Filut, A., and Kaatz, A. (2020). Gender, race, and grant reviews: translating and responding to research feedback. *Pers. Soc. Psychol. Bull.* 46, 140–154. Retrieved from <https://doi.org/10.1177/0146167219845921/20/04/2022>

Casad, B. J., Franks, J. E., Garasky, C. E., Kittleman, M. M., Roesler, A. C., Hall, D. Y., et al. (2021). Gender inequality in academia: problems and solutions for women faculty in STEM. *J. Neurosci. Res.* 99, 13–23. Retrieved from <https://doi.org/10.1002/jnr.24631/20/04/2022>

Choudhury, S. (2018). Why criminalisation of marital rape is still a distant dream in India. *BusinessStandard*. Retrieved from <https://www.researchgate.net/deref/https%3A%2F%2Fwww.business-standard.com%2Farticle%2Fcurrent/22/03/2022>

Department Library and Information Science. (2023). Department of LISC statistics. University of Kelaniya.

Eagly, A. H. (2020). Do the social roles that women and men occupy in science allow equal access to publication? *Proc. Natl. Acad. Sci. U.S.A.* 117, 5553–5555. Retrieved from <https://doi.org/10.1073/pnas.2001684117/10/02/2022>

Eschenbach, E. A., Virnoche, M., Cashman, E. M., Lord, S. M., & Camacho, M. M. (2014, October). Proven practices that can reduce stereotype threat in engineering education: A literature review. In 2014 IEEE Frontiers in Education Conference (FIE) Proceedings (pp. 1-9). IEEE. <https://doi.org/10.1109/FIE.2014.7044011/26/03/2022>

Faculty of Social Sciences. (2020). Students' Details academic year 2019/2020 FSS. University of Kelaniya.

Fox Tree, J. E., and Vaid, J. (2022). Why so few, still? Challenges to attracting, advancing, and keeping women faculty of color in academia. *Front. Sociobiol.* 6:792198. Retrieved from <https://doi.org/10.3389/fsoc.2021.792198/27/03/2022>

Haslanger, S. (2000). Gender and race: (What) are they? (What) do we want them to be? 31(4), 31–55. *philpapers*. <https://philpapers.org/rec/HASGAR>

Hussain Shah, S. (2023). Emergence, evolution, challenges and future prospect in LIS education and its impact on job opportunity of LIS education in Pakistan. *Research Gate*. https://www.researchgate.net/publication/370024532_Emergence_evolution_challenges

[and future prospect in LIS education and its impact on job opportunity of LIS education in Pakistan](#)

Lascano, E. (2021). Students' Knowledge on Library and Information Science (LIS): An Option for Choosing a Career. Library Philosophy and Practice. Research Gate.

https://www.researchgate.net/publication/353480364_Students'_Knowledge_on_Library_and_Information_Science_LIS_An_Option_for_Choosing_a_Career

Malik, A. (2021). Research practices of LIS professionals in Pakistan: A study of attitudes, involvement and competencies. Journal of Information Science, 1–13. Research Gate.

https://www.researchgate.net/publication/346078068_Research_practices_of_LIS_professionals_in_Pakistan_A_study_of_attitudes_involvement_and_competencies

Munoz-Munoz, Ana M. (2022). Challenges and difficulties in Librarianship and Documentation research with gender perspectives. En Adelina Sánchez-Espinosa & Dresda E. Méndez de la Brena (Eds.). Feminist Research Alliances: Affective Convergences (pp. 243-254). Peter Lang.

Nations, U. (2014). Gender stereotypes and stereotyping and women's rights. In UN Human Rights (pp. 01–02). United Nations.

https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/OnePagers/Gender_stereotyping.pdf

O'Meara, K. A., Beise, E., Culpepper, D., Misra, J., and Jaeger, A. (2020). Faculty work activity dashboards: a strategy to increase transparency. Change 52, 34–42. Retrieved from <https://doi.org/10.1080/0091383.2020.1745579/11/02/2022>

Pun, R. (2016). Becoming the entrepreneur librarian: Building skills, networks and experiences abroad. IFLA, WLIC 2015. From 12 -14 August 2015, Cape Town, South Africa.

Sekhar, A., & Parameswari, J. (2020). Development and validation of gender stereotype scale. Journal of the Indian academy of applied psychology, 46(1), 48-56.

Shafack, M. R. (2016). The library and information science (LIS) profession and the Cameroon development vision 2035: A perception study. Journal of Sustainable Development, 9(4), 225-233.

Ugwu, F. & Ezeani, E.N. (2012). Evaluation of entrepreneurship awareness and skills among LIS students in universities in Southeast Nigeria. Library Philosophy and Practice.

Retrieved from <http://digitalcommons.unl.edu/ibphilprac/83b> 23/12/2021