Exploring Factors Associated with Selection of Career Choice Between Men and Women: An Exploratory Study Among High School Students

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As universities and businesses are encouraged to diversify, the personal decision-making of individuals plays a role in who is available for various positions. Some fields of work are male dominated, and others are female-dominated. Additionally, the gender pay gap has been an actively researched topic for decades. However, recent gender pay gap studies have shown that once job title, hours worked, years of experience, and education are included, the gender pay gap diminishes significantly. That is, differences in pay between men and women can be attributed to career choice, which is driven by personal values and preferences. Therefore, is there a difference in how men and women choose their careers? What considerations are deemed more important for men versus women? What is it that men versus women value in their career path? Understanding these differences in the thought process of choosing a career can assist universities and businesses in attracting a diversified field of applicants. The current research surveyed high school students to ascertain what they consider the most influential and essential as they begin their career choice journey. The findings show that although men and women consider some factors equally, family-related considerations, such as weekday work only, flexibility, and daytime work only, are found to be key to the decision-making process of women. Additionally, women were found to gravitate towards more "helpful and caring" careers such as education and medical while men were more likely to "work with things" and choose engineering.

Keywords: Career Choice Gender Pay Gap Economics

Introduction:

Recent studies have indicated that the gender pay gap can largely be explained by career choice (Humphries, Johnston, & Nelson, 2023), (Nelson, Johnston, Humphries, & Sumlin, 2023), and (Blau & Kahn, 2017). If that is the case, then the decision-making process of career choice becomes of interest to explain differences in male versus female overall pay. Past studies have shown gender differences in career choice contributing factors. A study in 2010 (Gokulada, 2010) found that men are more likely to value job content and long-term career objectives, and women value work environments and interpersonal relationships more. Influence by family, friends, and teachers can also play a role. Additionally, (Murray, Meinholdt, & Bergmann, 1999) found that female role models increased women's interest in science-related fields, and (UNESCO, 2005) confirmed the influence of teachers on educational outcomes. Women show greater interest in humanities, social issues, and awareness and are more affected by social influences, particularly parents, than men (Achiam & Holmegaard, 2000). Additionally, past studies find that men and women typically gravitate towards male-dominated or female dominated careers, respectively. A 2015 study found that more men chose subjects such as Engineering, Mathematics, and Science, while women chose subjects such as Linguistics, Education, and Social Sciences (Ismail, 2015). These stereotypes of male and female-dominated subjects and roles are often displayed as such in teaching situations, thereby reinforcing the stereotypes (Mutekwe & Modiba, 2012).

A study of men and women in the Maldives (Shafina, 2020) found that males were driven by an interest in the study program and field-specific reasons for their career choice. Field-specific reasons included such things as perceived ability and benefits. On the other hand, availability and recommendations from family primarily drove women. In contrast to men, women considered interest and the field of work secondary in their decision-making. Both men and women considered affordability and perceived easiness with equal importance. Shafina also found that 52% of males and 64% of females indicated they were not influenced by social demands from work, family, spouse, community, or the need for a work-life balance. Although Shafina did find that women were more influenced by the demands of work-life balance than men. Additionally, Shafina found that work demands more influenced men. Regarding the fields of study chosen by men and women in the Shafina study, women were more likely to choose Language, Human Resource Management, and Education. Men were more likely to choose Information Technology and Law (Shafina, 2020).

From focus group observations, researchers (Kiernan, Walsh, & White, 2023) found that teachers, guidance counselors, parents, family, and friends play a role in career decision-making. US-based studies (Jacobs, 1989), (Marini & Brinton, 1984), and (Xiaoling & Marini, 1998) noted the influence of family and role models, particularly parents. A Swedish study found that parents' educational attainment and field of work affected career choice and often led the younger generation to follow in their footsteps regardless of whether it was a female or male dominated field (Dryler, 1998).

Methodology and Data

The literature review illustrates many factors that may influence a student's career choice. In the following section, we describe our research methods, the analysis of our findings, and study limitations.

The current study investigates differences in how men and women choose their careers. The study considers different factors that may play a role and how those factors may vary between men and women.

A population is an entire group of individuals with a shared characteristic. However, the ability to survey every member of a population is rare in research. Therefore, generalizing from a sample of the study population is accepted. A sample is any part of the defined population. (Banerjee & Chaudhury, 2010). Our sample comprises 115 high school students from a top-rated, public magnet high school in Florida. The high school focuses on STEM: computer science, interactive technology, math, science, and engineering. The enrollment at the high school is 1,589 students, and the student-teacher ratio is 19:1 (U.S. News, n.d.). As the survey respondents are high school-age persons, they are considered part of Generation Z. Generation Z consists of people born between 1995 and 2010. This generation is also called "Gen Zers" and "post-Millennials" (Magano, Silva, Vitoria, Nogueira, & Pimenta Dinis, 2020). Therefore, the results of this survey study could represent specific attributes and preferences associated with this particular generation. The racial makeup of the school is shown below in Table 1 and Figure 1.

Table 1

Racial diversity

Race	Percentage		
White	34.2		
Black	23		
Hispanic	22.7		
Asian	14.9		
Two or More Races	4.8		
Native Hawaiian or	0.2		
Pacific Islander			
	0.1		
American Indian or			
Alaska Native			

Racial diversity

Figure 1



The high school boasts a 99.6/100 scorecard from U.S. News and World Report (n.d.) and is ranked #6 among all Florida high schools. Figure 2 shows the results of the Florida Standards Assessment and Mathematics End of Course Exams.



Figure 2

Subject proficiency

The particulars of this high school will influence the results. The school is a high-performing school. Most students are likely to pursue a college degree and more inclined to choose STEM related fields since the school's focus is STEM.

This study used an online survey to obtain information from participants. The survey was constructed around individual, situational, and environmental factors that may influence students' career choices of students. The request for student participation was emailed to 11 instructors who recruited students by adding the survey to their Google Classroom. The survey was open for three weeks in December 2023. The survey requested the participants to provide their biographical data about their gender and school classification and rate the influential effects of approximately 35 factors on a Likert scale (Strongly Disagree 1; Disagree 2, Neutral 3, Agree 4, or Strongly Agree 5). 115 surveys were received from the approximately 210 students who were included. This is a 115/210 (55%) response rate, which is above the normal response rate. When grouped by gender, one student selected "prefer not to say," therefore that survey was dropped from the current study (Leahey, 2008). The male participants were n=57, and the female participants were n=57.

Results

The survey results indicate that males and females agreed on the top three factors when making career decisions. Financial stability, career stability, and interest/passion were found to be the most important factors. In addition to financial stability being a key factor for both men and women, financial stability was found to be statistically more important for women than men. These factors are closely followed by salary, personal fulfillment, work/life balance, and benefits

such as insurance and retirement. Salary, like financial stability, was also statistically more important for women than men. Other factors garnering nearly 70% or more of respondents were weekday work only, flexibility, daytime work only, family obligations, and upward mobility. Most of these factors had similar results when compared between males and females. However, women rated weekday work only, flexibility, daytime work only, and family obligations more than men. Weekday work only and family obligations were found to be statistically more important to women than men. On the other hand, upward mobility was noted as more important for men with 81% of men agreeing that it was important as compared to 68% of women. It was found that upward mobility was statistically more important to men as well. While financial stability, salary, weekday work only, family obligations, and upward mobility were found to yield results statistically different between men and women, the other factors (specifically, career stability, interest/passion, personal fulfillment, work/life balance, benefits, weekday work only, flexibility and daytime work only) were found not to vary statistically between men and women. These results are presented in Table 2.

Factor	Females: Percent Agreeing Factor is Important	Males: Percent Agreeing Factor is Important	F-Test	Statistical Significance
Financial Stability	100	98	7.83	0.01*
Career Stability	96	95	0.84	0.36
Interest/Passion	93	96	1.02	0.32
Salary	91	88	6.32	0.01*
Personal Fulfillment	91	91	0.01	0.91
Work/Life Balance	89	88	0.27	0.61
Benefits (Insurance/Retirement)	89	86	0.00	0.97
Weekday Work Only	88	77	5.89	0.02*
Flexibility	79	74	1.88	0.17
Daytime Work Only	79	70	2.13	0.15
Family Obligations	74	70	5.82	0.02*
Upward Mobility	68	81	4.81	0.03*

Table 2

*denotes statistical significance at the 5% level

There were several factors that neither men or women indicated as priorities. These included length of time for education/training, remote work, geographical preferences, overtime requirements, travel requirements, and prestige. None of these factors were found to statistically vary between men and women.

Some noted similarities in these results can be tied to attributes of Generation Z. Eighty-nine percent of women and eighty-six percent of men in the current survey held Benefits (such as

Insurance and Retirement) as being an important factor. This compares to 70% noted in previous literature (Generation Z in the Workforce, n.d.). Additionally, Generation Z literature has noted that 70% describe salary as a top motivator and our findings show 91% of women and 88% of men consider salary to be an important factor.

In terms of influence from others in their decision-making, men and women seemed to equally rely on parental influence. However, men relied more on teachers and friends in their decision making than women, with men's reliance on friends being statistically different than women.

The survey respondents were also asked to indicate their current career plans. Figure 3 summarizes these results. Women were more likely to indicate medical and education as their career choices. The higher percentage of women choosing education could contribute to the existence of a gender pay gap since education typically is considered as lower pay. The category of "medical" covers a lot of varied career paths from doctors, nurses, lab technicians, etc. making a generalization about expected salaries difficult. However, the medical field could be considered more of a "helping and caring" career and studies have shown women to be more prone to choose. Men were more likely to choose engineering, which is an established higher-paying area. Areas such as business, computer science, and law were more evenly distributed among men and women.

Though not an influencing factor on career choice, significantly more females (88%) than males (67%) report having made a definite career choice by the end of their 8th grade year and this difference was statistically significant at the 1% level.

The survey also revealed that women were more likely than men to consider careers dominated by the opposite sex. That is, women in the survey were more likely to consider male-dominated fields like engineering and computer science than men would consider female-dominated fields such as education and social work. Although much discussion occurs about encouraging women to be in male-dominated fields that pay more, perhaps equally important would be to encourage men in female-dominated fields such as education so that they serve as role models and mentors to young, male students.



Figure 3

Conclusion

Our results support that several factors such as financial stability, career stability, and interest/passion are important to men and women when choosing a career. The results also support that family-related considerations may be more important to women, such as weekday work only, flexibility, daytime work only, and family considerations, which ranked higher for women than men. Additionally, upward mobility, although ranked high by both men and women, was higher for men. Remote work, geography, overtime, travel, and prestige did not garner as much importance for men and women alike.

Career choices indicated by respondents could show some indication of predicted pay gap issues. Specifically, a higher percentage of men chose engineering, a known higher-pay career, and a higher percentage of women chose education, a known lower-pay career path. Additionally, a higher percentage of women selecting education supports the notion that women select fields that are women-dominated and are known to be more "helpful and caring" career choices.

Future research is needed around the career choice of high school students to explain the differences between influencing factors and which factors are most valuable to the student's decision-making. For example, consideration for other demographic information such as age, race, socioeconomic status, and parental education would be useful. Our research does not explain why students value one influencing factor more than another. Additionally, our research cannot be generalized to all high schools in the United States as it was conducted in a STEM focused magnet school. Surveying college students' choice of majors, career aspirations before college, career aspirations during college, and the influencing factors for those choices would also add to the literature.

References

Achiam, M., & Holmegaard, H. T. (2000). Criteria for gender inclusion. University of Copenhagen.

- Blau, F., & Kahn, L. (2017). The Gender Wage Gap: Extent, Trends, and Explanations. Journal of Economic Literature, 55(3), 789-865.
- Dryler, L. (1998). Parental Role Models, Gender and Educational Choice. The British Journal of Sociology, 49(3), 375-398.
- Generation Z in the Workforce. (n.d.). Retrieved February 20, 2024, from CSP Global: https://online.csp.edu/resources/infographic/generation-z-in-the-workforce/
- Gokulada, V. (2010). Factors that influence first-career choice of undergraduate engineers in software services companies: A south Indian experience. Career Development International, 15(w), 144165.
- Humphries, V., Johnston, T., & Nelson, P. (2023, Winter). Regression Analysis of the Gender Wage Gap in Academia. Administrative Issues Journal: Connecting Education, Practice, and Research, 13(1), 31-39.

- Ismail, L. (2015). Gender gap in higher education: perspective on factor influencing enrollment in Malaysian universities: A University of Malaya sample. The Online Journal of Quality in Higher Education, 2(4), 35-44.
- Jacobs, J. (1989). Revolving doors. Sex segregations and women's careers.
- Kiernan, L., Walsh, M., & White, E. (2023). Gender in technology, engineering and design: Factors which influence low STEM subject uptake among females at third level. International Journal of Technology and Design Education, 33, 497-520.
- Magano, J., Silva, C., Vitoria, A., Nogueira, T., & Pimenta Dinis, M. (2020). Generation Z: Fitting Project Management Soft Skills Competencies--A Mixed-Method Approach. Education Science, 10(187).
- Marini, M. M., & Brinton, M. C. (1984). Sex Typing in Occupational Socialization. In B. Reskin, Sex Segregation in the Workplace: Trends, Explanation, Remedies (pp. 192-232). Washington, DC: National Academy of Sciences.
- Murray, S. L., Meinholdt, C., & Bergmann, L. S. (1999). Addressing gender issues in the engineering classroom. Feminist Teacher, 12(3), 169-183.
- Mutekwe, E., & Modiba, M. (2012). Girls' career choice as a product of a gendered school curriculum: The Zimbabwean example. Souther African Journal of Education, 32(3), 279-292.
- Nelson, P., Johnston, T., Humphries, V., & Sumlin, C. (2023, Fall/Winter). A Regression Analysis of Gender Pay Gaps in Academe. Journal of Business and Economic Perspectives, 50(2), 115-121.
- Shafina, A. (2020). Exploring gender differences in selection of subjects at higher education levels in the Maldives. The International Education Journal: Comparative perspectives, 19(2).
- UNESCO. (2005). Guidelines for inclusion: Ensuring access to education for all. UNESCO.
- Xiaoling, S., & Marini, M. M. (1998). Gender-related Change in Occupational Aspirations. Sociology of Education, 71(1), 44-68.