

Examining Gender-Related Quantitative Disparities in Intern Performance: A Comparative Analysis

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Internships serve as pivotal experiences in shaping individuals' professional trajectories, bridging academic knowledge with real-world application. Amidst growing emphasis on diversity and inclusion, understanding gender dynamics in internship programs becomes imperative. This study investigates gender-based quantitative disparities in intern performance evaluation, focusing on the summers of 2022 and 2023. Drawing on demographic data and performance ratings across personal attitudes, work-related skills, and human relations, a comprehensive analysis reveals nuanced gender differences. While males dominate program participation, females exhibit higher representation in top performance categories for personal attitudes and work-related skills. Conversely, males excel in human relations skills. Recommendations include enhancing gender inclusivity in recruitment and program design, tailoring support initiatives, and fostering gender-equitable environments. Findings offer insights for optimizing internship programs, promoting diversity, and advancing gender equality in professional spheres.

Keywords: Gender distribution, demographic profile, personal attitudes, work-related skills, human relations abilities

Internships play a crucial role in shaping individuals' professional growth by bridging academic knowledge with practical application in real-world settings. With an increasing emphasis on fostering diversity and inclusion within organizations, it is essential to examine various aspects of internship experiences, particularly the evaluation and assessment of interns' performance. An important area of inquiry pertains to potential quantitative differences based on gender in how interns are evaluated. Gender influences various career-related attitudes, behaviors, and outcomes, encompassing factors like career choice, experiences, and work attitudes (Verma, 2017). Recognizing and addressing such disparities is not only vital for ensuring equitable opportunities for interns but also aligns with broader societal objectives of advancing gender equality in professional environments.

The rationale for this study stems from the need to thoroughly investigate whether gender-based quantitative variations exist in how interns' performances are evaluated. The comparative analysis between the summers of 2022 and 2023 is particularly relevant, considering the dynamic nature of workplace environments and the evolving perspectives on gender in professional settings. This research seeks to contribute empirical evidence and insights into the potential influences of gender on the assessment of interns' performance, shedding light on areas that may require attention to foster a more inclusive and unbiased internship experience.

Additionally, as universities aim to create environments that appreciate diversity and inclusivity, it's important to understand any differences in how interns are evaluated based on gender. This study's results are expected to help academic discussions and partnerships, leading to strategies to reduce biases and improve fairness in intern assessments. By tackling these issues, the study hopes to create a fairer and more

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supportive environment for interns, ultimately helping promote diversity and gender equality in the professional world.

Despite the increasing emphasis on diversity and inclusion in professional environments, there is a lack of systematic research examining gender-based quantitative disparities in the assessment of intern performance. Specifically, it will answer the following questions. What is the gender breakdown among participants in the Internship Program during the summers of 2022 and 2023 based on the demographic characteristics of enrolled interns? What is the correlation between interns' gender and their proficiency levels in personal attitudes, work-related skills, and human relations abilities over two consecutive years? What notable discrepancies are evident between interns' gender and their performance across personal attitudes, work-related skills, and human relations abilities over two consecutive years?

EXPECTED OUTPUT

The study on gender distribution within the Internship Program course for the summers of 2022 and 2023 is expected to produce a comprehensive demographic profile of enrolled interns. This output would include specific statistics on the proportion of male and female interns in each year. By comparing the gender distribution over two years, the study would be able to identify any shifts or trends in gender representation within the program. Furthermore, the output may reveal any disparities or imbalances in the gender composition of interns over the two years, which could inform strategies for promoting diversity and inclusivity within the program. The study's analysis of the relationship between interns' gender and their performance in personal attitudes, work-related skills, and human relations abilities over two years would provide useful insights into gender-related differences in intern performance. The expected output would most likely be statistical findings demonstrating how gender influences various aspects of intern performance, such as attitude, skill level, and interpersonal abilities. This output could help identify areas with the most pronounced gender disparities and inform efforts to address potential biases or barriers to equitable intern evaluation. Overall, the study's findings would help to improve our understanding of gender dynamics in internship programs and aid in the development of strategies to promote fairness and equality in intern assessment processes.

SIGNIFICANCE OF THE STUDY

The significance of this study stems from its ability to shed light on the dynamics of gender representation and performance evaluation within internship programs, particularly over two consecutive years. The study's goal is to gain valuable insights into the demographic composition of enrolled interns by examining gender distribution within the Internship Program course for the summers of 2022 and 2023. Understanding gender distribution can help identify long-term disparities or trends, highlighting areas where targeted interventions may be required to promote diversity and inclusivity within the program. Furthermore, such insights could guide recruitment strategies to ensure a more balanced representation of male and female interns, fostering a supportive and equitable learning environment.

Furthermore, investigating the relationship between interns' gender and their performance in personal attitudes, work-related skills, and human relations abilities over two consecutive years has important implications for addressing potential biases in performance evaluation. The study's goal is to identify any gender disparities and understand the underlying causes by analyzing performance metrics in these key areas. This knowledge can help to shape interventions aimed at reducing biases and promoting fairness in intern evaluations. Finally, by identifying significant differences between interns' genders and their performance over time, the study can contribute to the larger goal of creating a more inclusive and equitable professional landscape in which individuals are evaluated on their merit rather than gender stereotypes.



Conceptual/Theoretical Framework

Figure 1 outlines the flow of the study, from the input variables through the analysis process to the ultimate output, providing insights and conclusions related to gender distribution and the relationship between age and performance among interns.

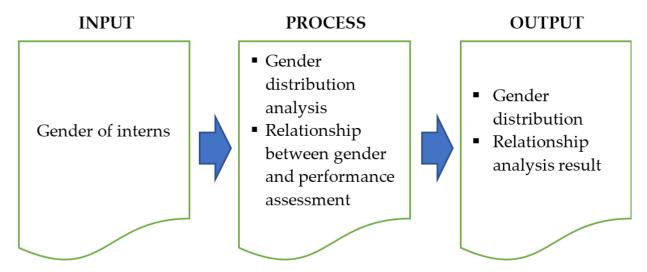


Figure 1. Input Process Output (IPO) Conceptual Framework

The data collection phase of the study involves acquiring information, specifically on the distribution of gender within the Internship Program course. In the subsequent analysis phase, the study will scrutinize this gender distribution, offering insights into the demographic profile and illuminating the representation of different genders within the program. Concurrently, the study will evaluate the association between interns' gender and their performance with a focus on personal attitudes, work-related skills, and human relations abilities. Additionally, it will extend this analysis to the summer of 2022 and 2023, exploring potential correlations in specified dimensions.

The outcomes of this study will provide valuable insights, presenting results on the gender distribution within the Internship Program. Furthermore, it will unveil findings on how gender correlates with performance in personal attitudes, work-related skills, and human relations abilities during both the summers of 2022 and 2023. The study will culminate by presenting significant variances, delivering conclusive insights into the intricate relationship between gender and performance. These findings will contribute to guiding future considerations for the development and support of interns within the program.

METHODOLOGY

Research Design

A quantitative methodology was utilized for this research inquiry because it requires gathering and analyzing numerical data to identify trends and patterns in gender distribution. This approach entails quantifying data in order to identify and interpret the underlying dynamics of the Internship Program's demographic makeup. This study of Xu et al., (2023) employed a quantitative research design with the aim of exploring gender differences in major choice.

Research Site

The research was conducted at the Catanduanes State University's (CatSU) College of Engineering and





Architecture, involving 4th-year undergraduate students pursuing Bachelor of Science in Computer Engineering (BSCpE) who completed internship programs. These students were deployed to various Host Training Establishments (HTEs), encompassing both government and private agencies or companies situated in Naga City and in Metro Manila, Philippines during the summers of 2022 and 2023.

Units of Analysis/Source of Data/Sampling

The study focused on fourth-year undergraduate students enrolled in the Bachelor of Science in Computer Engineering (BSCpE) program who completed internships, as well as the Host Training Establishments (HTEs) where these interns were deployed, which included both public and private agencies or companies. Data collection primarily consisted of administering questionnaires to both participating students and their supervisors or mentors at the HTEs, supplemented by information from secondary sources such as university records and documentation about the internship program's demographics. Using a complete enumeration approach, the study included all 153 student interns, with the goal of achieving a comprehensive understanding and precise estimation of population parameters.

Data Collection/Instrumentation

The research utilized a combination of primary and secondary data sources, predominantly involving the distribution of questionnaires to fourth-year undergraduate students enrolled in the BSCpE program who had finished their internships, as well as their supervisors at Host Training Establishments (HTEs). These surveys aimed to evaluate various facets of internship performance, encompassing personal attitudes, work-related skills, and human relations abilities. Survey instrument adopted the student internship program rating form from the study of Santelices (2024). Furthermore, secondary data obtained from university archives improved understanding and population parameter estimation for the group of 153 student interns. A 5-point Likert scale was included in the questionnaire design to help with the analysis and interpretation of the input received from the appraisal reports.

RESULTS

Table 1 illustrates the gender distribution among participants in the Internship Program during the summers of 2022 and 2023.

Table 1. Gender Distribution among Participants in the Internship Program during Summers of 2022 and 2023

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	55	35.9	35.9	35.9
Male	98	64.1	64.1	100.0
Total	153	100.0	100.0	

The study includes 153 participants, 55 of whom identify as female and 98 as male, accounting for 35.9% and 64.1% of the total sample, respectively. Notably, the table shows a higher proportion of males than females, emphasizing the importance of this data in understanding the demographic composition of internship program participants and its potential implications for program assessment, recruitment strategies, and promoting gender inclusivity and equity within the program.

The table below shows data on the relationship between gender and the average rating of personal attitudes in a sample, as well as the total number of individuals in each category. The rows represent gender



categories (male and female), and the columns show the average ratings for personal attitudes, which range from 2.75 to 5.00, as well as the total count.

Table 2. Correlation Between Interns' Gender and Performance Level in Personal Attitudes

Gender Personal Attitudes Average												Total				
Gender	2.75	3.25	3.50	3.63	3.75	3.88	4.00	4.13	4.25	4.38	4.50	4.63	4.75	4.88	5.00	1 Otal
Male	0	1	4	1	2	5	0	1	5	1	3	3	12	7	10	55
Female	1	3	2	1	1	5	3	5	6	7	15	7	14	16	12	98
Total	1	4	6	2	3	10	3	6	11	8	18	10	26	23	22	153

Table 2 shows that males have the most frequent ratings for personal attitudes of 4.75 and 4.88, with 12 individuals receiving each rating. In addition, 10 males have a rating of 4.50. Overall, male ratings ranged from 2.75 to 5.00. Females' most common ratings for personal attitudes are 4.50 and 4.88, with 15 receiving each. Additionally, 16 females have a rating of 4.75. Females' ratings range from 3.25 to 5.00. There are 153 people of both genders, 55 men and 98 women.

Based on the data presented, it is clear that both males and females receive high ratings for personal attitudes, with a sizable proportion of individuals receiving 4.50 or higher. Females appear to have a higher representation in the higher rating categories, particularly at 4.50, 4.75, and 4.88, where they outnumber males. This suggests a possible gender difference in perceived personal attitudes, with females being more frequently rated as having higher attitude levels.

Table 3 below shows data on the relationship between gender and average rating of work-related skills in a sample, as well as the total number of people in each category. The rows represent gender categories (male and female), and the columns show the average ratings for work-related skills (ranging from 2.71 to 5.00) and total counts.

Table 3. Correlation Between Interns' Gender and Performance Level in Work-Related Skills

Gender	Work-Related Skills Average												Total						
	2.71	3.29	3.43	3.50	3.57	3.71	3.86	4.00	4.14	4.17	4.29	4.33	4.43	4.57	4.67	4.71	4.86	5.00	
Male	0	0	0	1	1	5	1	5	1	0	7	0	2	8	1	7	3	13	55
Female	1	1	1	0	2	3	5	8	7	1	17	1	6	6	1	14	10	14	98
Total	1	1	1	1	3	8	6	13	8	1	24	1	8	14	2	21	13	27	153

Among males, the most prevalent ratings for work-related skills are 5.00 and 4.57, with 13 and 8 individuals respectively. Additionally, 7 males received ratings of 4.29 and 4.71 each. Male ratings span from 3.57 to 5.00. Regarding females, the most common ratings for work-related skills are 4.29 and 4.71, with 17 individuals receiving each. Furthermore, 14 females received a rating of 4.57. The ratings for females range from 2.71 to 5.00. In total, there are 153 individuals of both genders, comprising 55 men and 98 women.

Based on above data, it is clear that both males and females receive high ratings for work-related skills, with a sizable proportion of individuals receiving 4.29 or higher. Females appear to have a higher representation in the higher rating categories, particularly at 4.29 and 4.71, where they outnumber males. This suggests that there may be a gender difference in perceived work-related skills, with females being rated higher than males.



Table 4. Correlation Between Interns' Gender and Performance Level in Human Relations

Gender	Hum	Total						
Gender	3.00	3.67	4.00	4.33	4.67	5.00	Total	
Male	0	0	3	3	9	40	55	
Female	1	2	13	14	18	50	98	
Total	1	2	16	17	27	90	153	

Table 4 shows the correlation between gender and the average rating of human relations skills in a sample, as well as the total number of people in each category. The rows correspond to gender categories (Male and Female), while the columns show the average ratings for human relations skills (ranging from 3.00 to 5.00) and total counts.

Among males, the most prevalent rating for human relations skills is 5.00, with 40 out of 55 individuals receiving this score. Male ratings in this category span from 3.00 to 5.00. For females, the most common ratings are 4.67 and 5.00, with 18 and 50 individuals respectively. In total, 98 females received ratings ranging from 3.00 to 5.00. The combined population consists of 153 individuals, comprising 90 men and 63 women.

According to this data, both men and women receive high ratings for human relations skills, with a sizable proportion receiving ratings of 4.67 or higher. Males appear to have a higher representation in the higher rating categories, particularly at the 5.00 level. This suggests that there may be a gender difference in perceived human relations skills, with males being rated higher. Top of Form

DISCUSSION

The analysis of Tables 1, 2, 3, and 4 provides comprehensive insights into the gender distribution and performance levels of interns in an internship program across various dimensions. Table 1 demonstrates a noticeable gender imbalance, with males comprising a higher proportion (64.1%) than females (35.9%) among the participants during the summers of 2022 and 2023. This disparity underscores the importance of considering gender diversity and inclusivity in internship program recruitment strategies. Moving to Tables 2, 3, and 4, which explore the correlations between gender and interns' performance levels in personal attitudes, work-related skills, and human relations, respectively, interesting patterns emerge. While both males and females generally receive high ratings across these dimensions, there are nuanced differences. Females tend to have a higher representation in the higher rating categories for personal attitudes and work-related skills, particularly at ratings of 4.50 and above. However, males dominate in the highest rating category for human relations skills, with a substantial majority receiving a rating of 5.00.

These findings suggest potential areas of focus for program enhancement and further investigation. The observed gender differences in perceived performance levels highlight the importance of fostering an inclusive environment where individuals of all genders feel equally supported and valued. Strategies aimed at promoting gender diversity, such as targeted recruitment efforts and gender-sensitive program design, could help address the gender imbalance seen in the internship program. Additionally, further research could explore the underlying factors contributing to the observed gender differences in performance ratings, including societal expectations, cultural norms, and individual experiences. By gaining a deeper understanding of these dynamics, internship programs can tailor their interventions to better support the diverse needs and talents of all participants, ultimately enhancing the overall effectiveness and impact of the program.

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CONCLUSIONS

The analysis of the gender distribution and performance levels among participants in the Internship Program during the summers of 2022 and 2023 reveals several noteworthy patterns. While males constitute a higher proportion (64.1%) of participants compared to females (35.9%), both genders receive high ratings across personal attitudes, work-related skills, and human relations. Notably, females exhibit a trend of higher representation in the higher rating categories for personal attitudes and work-related skills, indicating potential differences in perceived competencies. Conversely, males dominate the highest rating category for human relations skills, suggesting a possible gender disparity in this aspect. These findings underscore the importance of considering gender diversity in internship program recruitment and design to ensure equitable opportunities and support for all participants. Further research into the underlying factors contributing to these gender differences could inform targeted interventions aimed at promoting gender inclusivity and enhancing program effectiveness.

RECOMMENDATIONS

Based on the findings presented in Tables 1, 2, 3, and 4, several recommendations can be made to optimize the internship program. Firstly, given the gender disparity in participation, efforts should be made to enhance gender inclusivity through targeted recruitment strategies and outreach initiatives to attract a more balanced representation of male and female participants. Secondly, the observed differences in performance ratings across genders, particularly in personal attitudes and work-related skills, suggest the need for tailored support and development opportunities. Programs aimed at enhancing personal attitudes and work-related skills should be designed with a gender-sensitive approach to address any perceived discrepancies. Additionally, to foster equitable development and recognition of human relations skills, mentorship programs and networking opportunities should be provided, ensuring both male and female participants have equal access to resources and support systems. Ultimately, promoting a culture of gender equity and inclusivity within the internship program will not only enhance the overall experience for participants but also contribute to the program's success and impact.

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REFERENCES

- 1. Ferreras-Garcia, R., Sales-Zaguirre, J., & Serradell-López, E. (2022). Competency assessment and learning results in tourism internships: is gender a relevant factor? Higher Education, Skills and Work-Based Learning, 12(1), 162–177. https://doi.org/10.1108/HESWBL-05-2021-0096
- 2. Huang, T. (1999). Gender differences in company training: the case of Taiwanese high-tech firms. Employee Relations, 21(5), 500–508. https://doi.org/10.1108/01425459910292115
- 3. Kapoor, A., & Gardner-McCune, C. (2020). Exploring the participation of cs undergraduate students in industry internships. SIGCSE 2020 Proceedings of the 51st ACM Technical Symposium on Computer Science Education, 1103–1109. https://doi.org/10.1145/3328778.3366844
- 4. Miller, H., Miller, B. R., & Spoelstra, J. (2020). A sustainability internship program: strategies for creating student stewards for sustainability. International Journal of Sustainability in Higher Education, 22(5), 1022–1037. https://doi.org/10.1108/IJSHE-08-2020-0314
- 5. Santelices, R. (2024). Performance In On-the-Job Training (Ojt) of Computer Engineering Students from Host Training Establishments (HTEs), Summer 2022. International Journal of Advanced Research, 12(01), 515–521. https://doi.org/10.21474/ijar01/18148



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- 6. Verma, E. (2017). Career preferences and academic performance: A gender based study. 2(3), 200–203.
- 7. Xu, C., Xiang, F., Duan, R., Miralles-Cardona, C., Huo, X., & Xu, J. (2023). An Analysis of Factors Influencing Chinese University Students' Major Choice from the Perspective of Gender Differences. Sustainability (Switzerland), 15(18). https://doi.org/10.3390/su151814037