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Analyzing Attrition Among the Married Employees

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Abstract

Employee attrition, a major challenge for organizations globally, is the phenomenon of employees leaving the company for a variety of reasons. This paper explores the scenario of employee attrition among married employees using descriptive statistical analysis. Using a dataset of 366 married employees from the Kaggle website, the study applies descriptive statistical analysis to evaluate the significance of variables such as age, gender, total working years, monthly income, distance from home, work-life balance, and job satisfaction. Descriptive statistics revealed that the average number of participants is 39.35 years with total working years ranging widely between 1 and 50 years. Monthly income also varies significantly, with an average of \$7,410.37, reflecting a diverse sample. Employees who live farther from work exhibit higher attrition rates, with an average commute distance of 50.36 km. Furthermore, gender analysis highlights a greater propensity for females to leave their roles compared to males. These findings highlight the necessity for organizations to implement targeted retention strategies, focusing on improving work-life balance and addressing gender disparities. This study contributes to the field of employee retention by offering actionable insights to guide organizational decision-making, thus enhancing workforce stability and performance.

Keywords: employee attrition, married employees, descriptive analysis, work-life balance, job satisfaction, gender disparities

Introduction

In today's business world, employee attrition causes substantial issues and long-term problems for organizations, reducing their competitiveness [1]. According to Khan [2], attrition describes the process of gradually decreasing the number of employees due to several reasons such as voluntary resignation, retirement, or termination. Meanwhile, [3] stated that employee attrition is the people who progressively leave the organization for a variety of reasons. Employee attrition is typically categorized into four types which are voluntary attrition, involuntary attrition, compulsory attrition, and natural attrition [4]. These categories help organizations identify the underlying causes of employee attrition and design effective solutions to reduce attrition and boost employee retention.

According to [5], voluntary attrition refers to employees' leaving an organization out of their own will, which is motivated by factors such as dissatisfaction with one's job, lack of opportunities, or better job options. For instance, [6] using data from United States, found that those employees who are very satisfied with their jobs and have a good work-life balance tend to have lower intentions of voluntary attrition. Similarly, a study by [7] pointed out that



employees who feel unappreciated or poorly compensated have a tendency to quit the job more willingly.

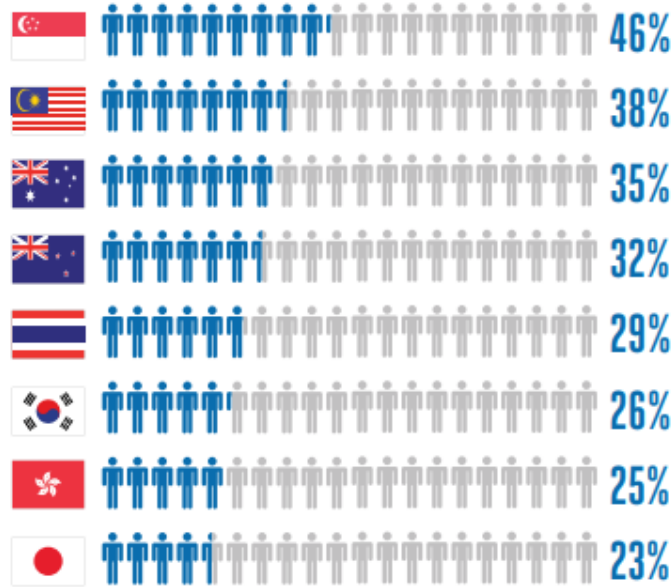


Figure 1: Employees Who Intend to Leave Their Current Job within 12 Months.

Figure 1 by [8] illustrates the percentage of employees who intend to leave their current position within the next 12 months in eight countries: Singapore, Malaysia, Australia, New Zealand, Thailand, South Korea, Hong Kong and Japan. Based on Figure 1, Malaysian workers are the second in the Asia-Pacific region. Pull factors include better pay, job opportunities, and a good work-life balance.

This paper explores the trend of the employee attrition among married employees using descriptive analysis. The variables considered are age, gender, total working years, monthly income, distance from home, work-life balance, and job satisfaction.

Methodology

The dataset “Employee Attrition and Factors” from the Kaggle website [9] was used. The variables selected for descriptive analysis include age, gender, total working years, monthly income, distance from home, work-life balance and job satisfaction. This study stands out from other existing research on employee attrition due to its exclusive focus on married employees. This study only analysed attrition among married employees, hence examining a randomly selected sample of 366 from the total 7511 cases of married employees.

Result and Discussion

This subtopic presents the findings of this investigation based on the data collected for this study. The analysis includes findings from descriptive statistics analysis. All statistical analyzes were performed with IBM SPSS version 26.



- **Age**

The age of employees is a significant variable to consider when analyzing employee attrition patterns. Table 1 presents a summary of descriptive statistics for the age variable of the study participants.

Table 1: Summary of Age Variable of Employee Attrition

Variable	Minimum	Maximum	Mean	Standard Deviation
Age	18	59	39.35	12.25

Based on Table 1, the mean age is 39.35 years, and the standard deviation is 12.25. The individuals' ages range from 18 to 59. This indicates that married employees in this study are typically in their late 30s, which corresponds to a mid-career stage for most individuals. This age range implies that the workforce consists of both relatively young employees (early in their careers) and elderly employees who are possibly approaching retirement.

- **Gender**

Gender plays an important role in evaluating employee turnover patterns since it can highlight potential inequalities in workplace experiences and retention. The following graph represents attrition rates by gender.

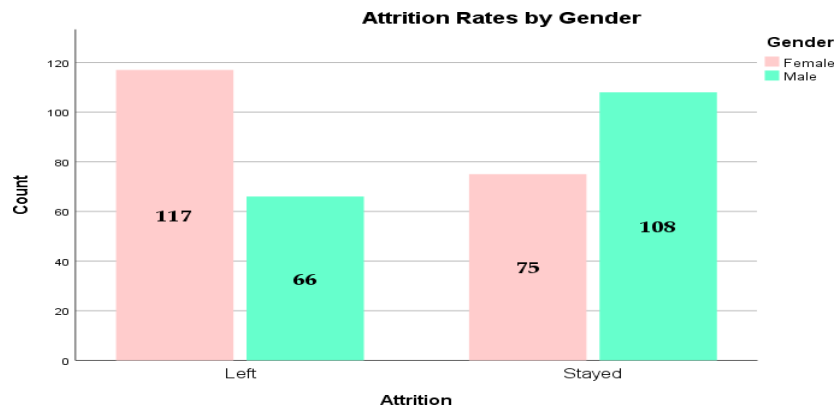


Figure 2: Attrition Rates by Gender

Based on Figure 2, the bar chart illustrates the attrition rates of married employees classified by gender (male and female). It reveals that among those who left their jobs, 117 were females and 66 were males. In contrast, among those who stayed, there were 75 females and 108 males. This indicates that a higher proportion of females among married employees left their positions compared to males, while males showed a greater tendency to stay in their roles. The data highlights a gender imbalance in employment retention among married individuals.



- **Total Working Years**

Table 2 summarizes the descriptive statistics for the total working years among the study participants. This variable provides insights into employee tenure and its potential impact on attrition trends.

Table 2: Summary of Total Working Years of Employee Attrition

Variable	Minimum	Maximum	Mean	Standard Deviation
Total Working Year	1	50	15.80	11.95

Table 2 shows the individuals' tenure at the organization range greatly, with an average of 15.80 years and a standard deviation of 11.95, ranging from 1 year to 50 years. This shows a range of recent hires and seasoned workers, indicating a significant degree of tenure variety in the workforce. A longer average tenure among married employees may indicate loyalty, but this group may also be more likely to leave if they reach retirement age or seek new possibilities after a long period of service.

- **Monthly Income**

Monthly income is an important factor in understanding employee attrition because it directly affects job satisfaction and retention. Table 3 summarizes the descriptive data for the monthly income variable among the study participants.

Table 3: Summary of Monthly Income of Employee Attrition

Variable	Minimum	Maximum	Mean	Standard Deviation
Monthly Income	1226	13840	7410.37	2235.43

Based on Table 3, monthly income has an average of \$7,410.37 and a standard deviation of \$2,235.43, ranging from \$1,226 to \$13,840. This large variation most likely reflects variations in job functions, levels, and responsibilities within the company.

- **Distance from Home**

Table 4 summarizes the descriptive statistics for the distance from home. This statistic captures employees' commuting distance, which is a crucial aspect in determining potential implications for employee attrition.

Table 4: Summary of Distance from Home of Employee Attrition

Variable	Minimum	Maximum	Mean	Standard Deviation
Monthly Income	1	99	50.36	29.27

According to Table 4, the distance from home for employee attrition ranges from 1 to 99 km. The average distance is 50.36 km, with a standard deviation of 29.27 km. This shows that employees live an average of 50 km away from their employment, with significant variation between people. The large range and high standard deviation suggest that some employees live quite close to the business, while others travel from



much further away. This disparity in commute distances could influence employee attrition.

- **Work-Life Balance**

Work-life balance is an important component in determining employee happiness and retention. The stacked bar graph depicts the distribution of attrition rates.



Figure 3: Attrition by Work-Life Balance

Figure 3 shows that the majority of employees who departed reported a 'fair' work-life balance (82), followed by 'good' (43), 'poor' (37), and only a small minority with 'excellent' (21). In contrast, among those who stayed, the majority reported having a 'good' work-life balance (74), followed by 'fair' (59), 'excellent' (36), and very few with 'Poor' (14). This implies that employees with a higher work-life balance (good or excellent) are more likely to stay, whereas those with a worse work-life balance (fair or poor) are more likely to depart. These findings emphasize the necessity of promoting a work-life balance in order to increase employee retention.

- **Job Satisfaction**

The following graph shows how job satisfaction levels (low, medium, high, and very high) categorize employee attrition. It illustrates the distribution of employees who stayed or left the organization based on various satisfaction categories.

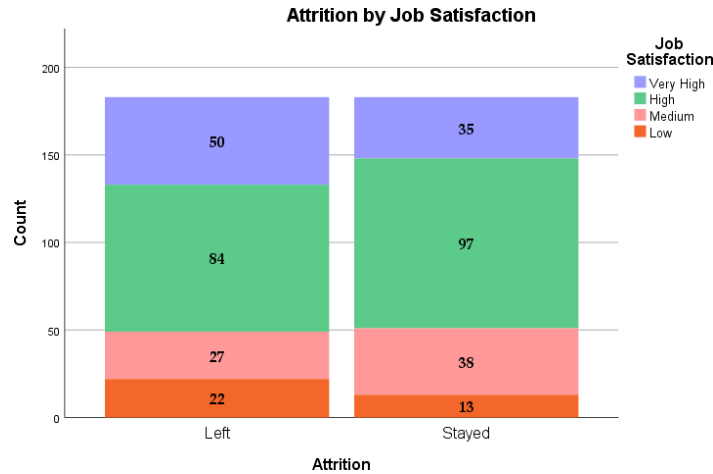


Figure 4: Attrition by Job Satisfaction

Figure 4 shows that among those that left, the majority reported medium work satisfaction (84), followed by high satisfaction (50). Similarly, the majority of employees who stayed indicated moderate satisfaction (97), followed by high satisfaction (35). Interestingly, a significant proportion of employees with extremely high satisfaction left (27), whereas fewer with poor satisfaction remained (13). This implies that, while medium contentment is the most common, attrition is not limited to lower satisfaction levels, underlining the possible impact of other factors.

Conclusion and Recommendations

Descriptive statistics analysis provides some important determinants of employee attrition in the case of married employees. The analysis shows that age, gender, total working years, monthly income, distance from home, work-life balance, and job satisfaction are significant towards attrition. Precisely, the probability of quitting is higher for younger employees, females, employees with poor work-life balance, and employees with medium job satisfaction. Another critical factor is the distance from home, where a longer commute shows higher attrition. These insights put into perspective that organizations need to address these factors to reduce employee turnover and improve retention.

To reduce attrition and promote a stable workforce, organizations should implement flexible work arrangements to enhance work-life balance, as employees with poor balance are more like to leave. Addressing gender disparities by introducing mentorship programs, gender-inclusive policies, and leadership opportunities for women can also help retain talent. Regular employee feedback surveys, career development programs, clear promotion pathways, and recognition efforts can improve job satisfaction. For employees with long commutes, offering transportation allowances, relocation assistance, or closer work options can help minimize attrition. Additionally, focusing on younger employees by providing growth opportunities, training, and



competitive compensation packages can help retain them. These strategies target key drivers of attrition and contribute to a more engaged workforce.

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