

ANALYSIS OF THE RELATIONSHIP BETWEEN DEMOGRAPHICS AND EMPLOYEE SATISFACTION LEVELS: THE ROLE OF GENDER AND AGE IN IMPROVING THE QUALITY OF THE WORK ENVIRONMENT

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Abstract: This study explores the influence of age and education level on employee satisfaction on performance appraisal at the Surabaya Ministry of Health Polytechnic. With a quantitative approach, data was collected through a questionnaire from 90 employees and analyzed using descriptive and inferential statistics. The results showed that there was a significant difference in satisfaction levels based on age and education level. Younger, more educated employees tend to report higher satisfaction with performance appraisals, suggesting that these demographic factors influence their perceptions of fairness and transparency. This study emphasizes the importance of human resource management to consider age and education when designing an effective performance appraisal system. This study provides new insights in the human resource management literature by highlighting the importance of demographic factors in employee satisfaction with performance appraisals. The results of this study also provide guidance for improving the performance appraisal system and employee satisfaction in the institution.

Keywords: Job Satisfaction; Performance Appraisal; Age; Education Level

1. Introduction

In an era of increasingly fierce global competition, employee performance appraisal is one of the crucial aspects in human resource management (Memon, 2021). Fair and transparent assessments not only function to evaluate employee performance, but also have a direct effect on job satisfaction, motivation, and employee productivity (Kakkar, 2020). At the Surabaya Ministry of Health Polytechnic, the results of the study showed that there was a variation in employee satisfaction with performance assessments based on age and level of education (Alsuwaidi, 2021). This raises questions about the effectiveness of the existing assessment system and its impact on employee motivation and productivity.

Data shows that employees with younger ages and higher levels of education tend to feel more satisfied with the performance appraisals they receive (Dreaver, 2020). In contrast, older, less-educated employees reported lower levels of satisfaction (Aburumman, 2020). This problem can pose a significant risk to employee motivation, which in turn can affect work productivity. Dissatisfaction with performance appraisals can lead to a decrease in work morale, increased attendance, and even employee turnover (Alsuwaidi, 2021).

The risks posed by this problem are considerable. According to research by Judge and Mukaihata, 2020, low job satisfaction can contribute to a decrease in productivity by up to 20% (Mukaihata, 2020). In addition, dissatisfied employees tend to take sick leave more often and have a tendency to look for work elsewhere, which can increase recruitment and training costs for organizations (Alsafadi, 2021). This problem arises along with the implementation of a

performance appraisal system that does not consider employee demographic factors (Karaca-Atik, 2023) Since the system was implemented, feedback from employees has shown an increase in dissatisfaction, especially among older and less educated employees. This creates perceived injustice in the assessment process, which leads to a decrease in motivation and productivity (Gwernan-Jones, 2020).

The data from this study provides valuable insights into the level of employee satisfaction with performance appraisals at the Surabaya Ministry of Health Polytechnic. With an in-depth analysis of the variables of age and education level, the study revealed significant dissatisfaction among certain employees, which can negatively impact their motivation and work productivity.

This information is very important for management in making policies that are more inclusive and responsive to employee needs. By understanding the differences in job satisfaction perceptions based on demographics, management can formulate fairer and more transparent policies in the performance appraisal system (Costin, 2023) For example, policies that consider training for appraisers to understand the context and background of employees can be implemented, so that the assessments carried out are more objective and fair. In addition, this data can also be used as a basis for designing career development programs that suit the needs of employees (Na-Nan, 2020) By providing opportunities for employees to improve their skills and knowledge, management not only increases job satisfaction, but also contributes to an increase in overall productivity (Kaltiainen, 2020).

Thus, the results of this study not only serve as an evaluation tool, but also as a strategic guide in decision-making. The policies resulting from this data analysis are expected to create a more positive work environment, increase employee motivation, and ultimately, encourage higher productivity at the Surabaya Ministry of Health Polytechnic.

This research not only has a clear goal, but also provides significant benefits and has high urgency in the context of human resource management at the Surabaya Ministry of Health Polytechnic.

Research Objectives

1. This study aims to measure and analyze the level of employee satisfaction with the performance assessment system at the Surabaya Ministry of Health Polytechnic, taking into account demographic variables such as age and education level.
2. This research is to identify the problems faced by employees related to performance appraisal, including the factors that cause dissatisfaction.
3. This research is to provide data-based recommendations to management in formulating better and more responsive policies to employee needs.

Research Benefits

1. **Increased Job Satisfaction:** The results of this study can be used to formulate strategies that can increase employee job satisfaction, which in turn can increase motivation and productivity.
2. **Basis for Decision Making.**
The data obtained from this study can be a strong basis for management in making decisions related to performance appraisal policies and human resource development.
3. **Improving the Quality of Performance Appraisals.**
By understanding employee perceptions, management can improve the quality of the performance appraisal system, making it fairer and more transparent.
4. **Training Program Development.**
This research can help in designing appropriate training programs for assessors and employees, in order to improve their competence and understanding of the assessment process.

Research Urgency

In the context of increasingly fierce competition and demands to improve organizational performance, it is important to ensure that employees feel satisfied and motivated in their work. Employee dissatisfaction can have a negative impact on the overall performance of the organization. Therefore, this research is very important to identify and address existing problems (Rana, 2022) This research also has urgency for various stakeholders, including management, employees, and other related parties, to create a better and productive work environment. With changes in policies and work systems, this research is important to ensure that the policies taken are relevant and in accordance with the needs of current employees.

2. Literature Review

There are at least two demographic factors that affect employee satisfaction in performance assessments, namely the age factor and the level of education.

Age factors affect employee satisfaction

The age factor affects employee satisfaction in significant ways, as outlined in the study. Employees of different age groups have different preferences and expectations regarding performance appraisal and job satisfaction ("The Impact of Employee Commitment and Satisfaction on Training Effectiveness," 2021) Younger employees tend to be more motivated by quick rewards or promotions, while older employees may focus more on job stability, work-life balance, or recognition for their long-term contributions (Oh et al., 2023) Employee satisfaction levels can also be related to their career stages. Younger employees may focus more on career development and opportunities for learning, while older employees may seek security and satisfaction in their day-to-day jobs (Tugade & Arcinas, 2023)

External factors such as career advancement, workload, or job suitability for personal goals can also differ between age groups, influencing their perception of job satisfaction (S. Bulilan, 2023) Management needs to consider career development programs that are more focused on the needs of each age group. Age-based training or promotion programs can help improve job satisfaction (Rahman et al., 2020) By understanding these differences, organizations can design more effective policies and programs to improve the work well-being of employees based on their age (Gazi et al., 2022).

Education level factors on employee satisfaction

The education level factor also has a significant influence on employee satisfaction with performance assessments. Employees with higher levels of education tend to have a better perception of fairness and transparency in performance appraisal systems. They may be better able to understand the assessment criteria and feel that the assessment is more objective and fair (Tugade & Arcinas, 2023) More educated employees often have higher expectations related to their performance appraisals ("The Impact of Employee Commitment and Satisfaction on Training Effectiveness," 2021) They may expect more constructive feedback and opportunities for better career development, which can affect their satisfaction levels (Thapa, 2023)

Employees with higher education may be better able to adapt to changes in performance appraisal policies and be more open to feedback (Dahleez, 2023) This can increase their satisfaction with the assessment process (Jäger & Fifka, 2024) More educated employees may be more involved in the performance appraisal process, including providing input and feedback (Tugade & Arcinas, 2023) This involvement can increase a sense of ownership and satisfaction with the results of the assessment (Olmedo-Cifuentes & Martínez-León, 2014)

Higher levels of education are often associated with greater motivation to achieve higher goals and productivity ("The Impact of Employee Commitment and Satisfaction on Training Effectiveness," 2021) Employees who are satisfied with their performance appraisals tend to be more motivated to perform well (Na, 2021) Thus, organizations need to consider the level of education of employees in designing an effective performance appraisal system, in order to meet the expectations and needs of employees from various educational backgrounds (Hong et al., 2023)

3. Method

This research was carried out during the period of July to August 2024. This allotted time provides ample opportunity to collect data, analyze results, and compile research reports. The method used in this study is a survey using a questionnaire. The survey method was chosen because it allows researchers to collect data from a large number of respondents in a relatively short period of time (van Gennep, 2021) The questionnaire is designed to measure the level of employee satisfaction with the performance appraisal system, as well as to identify the factors that affect this satisfaction.

The population in this study is all employees at the Surabaya Ministry of Health Polytechnic. By involving all employees, this study aims to get a comprehensive picture of the level of job satisfaction in the institution. The research instrument in the form of a questionnaire was prepared by the researcher himself. This questionnaire is designed by considering aspects relevant to job satisfaction and performance assessment. The questions in the questionnaire cover a variety of satisfaction scales, ranging from "very satisfied" to "dissatisfied", as well as open-ended questions to get deeper input from employees. The data obtained from the questionnaire will be analyzed using frequency distribution analysis with table pivots.

This method allows researchers to present data in a more structured and easy-to-understand form, as well as to identify patterns and trends in employee satisfaction levels based on demographic variables such as age and education level. This analysis will provide a clear picture of employees' perception of the existing performance appraisal system (Álvarez-Pérez, 2020).

4. Result and Discussion

Based on the cross-tabulation of the level of satisfaction with the level of education presented, the following is the analysis and reading of the data:

Satisfaction Level Distribution:

Of the total 90 respondents, the majority of employees were satisfied with the highest level of satisfaction in the "Satisfied" category (50 respondents), followed by "Quite Satisfied" (23 respondents) and "Very Satisfied" (15 respondents). Only 2 respondents stated "Dissatisfied".

Education and Satisfaction Levels

The relationship between education levels and satisfaction levels can be illustrated as shown in the figure 1:

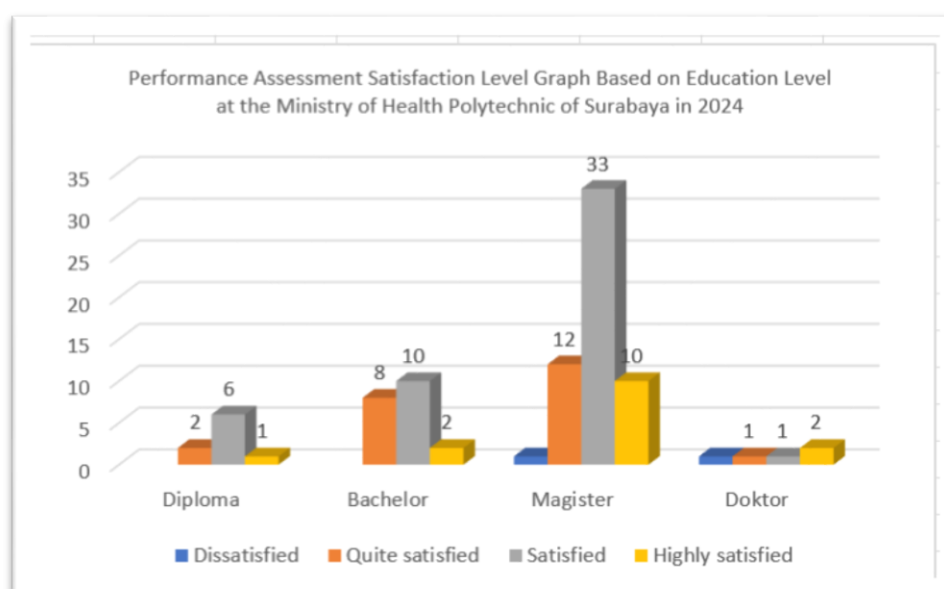


Figure 1: The Relationship between Education Levels and Satisfaction Levels

From the image above it can be interpreted as follows:

1. Diploma III: Of the 9 respondents, 6 were satisfied, 2 were quite satisfied, and 1 was very satisfied. This shows that employees with Diploma III education tend to be satisfied, even though the number is relatively small.
2. Bachelor (S1): Of the 20 respondents, 10 were satisfied, 8 were quite satisfied, and 2 were very satisfied. This shows that employees with a bachelor's degree also have a good level of satisfaction, but not as high as employees with a Master's education.
3. Master (S2): With 56 respondents, this group showed the highest level of satisfaction, with 33 respondents feeling satisfied and 12 quite satisfied. This suggests that higher education is associated with better levels of satisfaction.
4. Doctoral (S3): Of the 5 respondents, only 1 was satisfied, 2 were quite satisfied, and 2 were very satisfied. Although the numbers are small, these results show that employees with doctoral degrees have varying levels of satisfaction, with some feeling very satisfied.

Overall, there is a tendency that higher levels of education are associated with better levels of satisfaction. Employees with a Master's degree (S2) showed the highest level of satisfaction, while employees with a Doctoral education (S3) showed greater variation in satisfaction levels. This can indicate that other factors, such as expectations, responsibilities, and work experience, also play a role in determining employee satisfaction levels.

To test whether there is a relationship between the level of satisfaction and the level of education, a chi-square test is used, which is a correlation test that corresponds to this categorical data. Because the p-value is below 0.05 (0.04), there is a significant relationship between education level and satisfaction level. The results of the Chi-Square test indicate that there is a significant relationship between the level of education and the level of employee job satisfaction, with a p-value of 0.04. This value is below the commonly used significance threshold of 0.05, so we can conclude that the difference in education level has a real effect on job satisfaction levels.

In other words, there is a significant correlation between an employee's educational background—whether it's a Diploma, Bachelor's, Master's, or Doctorate—and how satisfied they are with workplace performance appraisals. Employees with different educational

backgrounds show significant variation in their satisfaction levels, so education level can be considered an important factor influencing their perception of job satisfaction.

Education level often affects employees' expectations regarding their work, both in terms of responsibility, recognition, and compensation (Ahmed, 2022). Employees with higher levels of education tend to have greater expectations regarding job satisfaction, as they are usually prepared for managerial positions or more strategic jobs (Trieu & Pavelková, 2022). Higher education provides more in-depth knowledge and skills, which is often also followed by expectations of better career opportunities, a more adequate work environment, and more significant recognition within organizations (Umoke et al., 2020; Zhou et al., 2022). Therefore, the level of job satisfaction will be higher if their expectations are met (Wang et al., 2021; Xu et al., 2022).

There is a tendency that the higher a person's level of education, the more likely they are to occupy a position with greater responsibility. Employees with a Master's or Doctoral degree, for example, typically land positions with more challenges, allowing them to make full use of their skills and knowledge (Trieu & Pavelková, 2022). This can increase job satisfaction because they feel more recognized and valued. On the other hand, if an employee with higher education is placed in a position that does not match their qualifications or skills, this can lead to job dissatisfaction because they feel that their job does not reflect the level of ability they have (Fu et al., 2020).

Employees with higher education tend to have greater access to career development opportunities such as advanced training, promotions, and opportunities to be involved in strategic projects (Ankholiya et al., 2023). With these opportunities, they are more likely to feel involved and valued in the organization, which contributes to increased job satisfaction (Pungnirund, 2020; Sepahvand, 2020). Conversely, employees with lower levels of education may not have the same access to these opportunities, which can affect their perception of job satisfaction (Choukir et al., 2022).

Higher education is typically associated with increased intrinsic motivation, where individuals are more driven by personal achievement, professional recognition, and social responsibility (Wang et al., 2021; Xu et al., 2022). Employees with higher education may be looking for more than just a salary; They may want work that has social impact and relevance (Thapa, 2023). If organizations are able to provide recognition for their contributions and offer opportunities for them to participate in strategic decisions, their job satisfaction levels will increase (Zhou et al., 2022). In contrast, employees with lower education may focus more on extrinsic motivational aspects such as salary, job stability, and good working conditions (Jäger & Fifka, 2024).

From a management perspective, the results of this analysis provide important insights for human resource management. Organizations need to pay attention to the needs of employees based on their level of education to ensure that their expectations are met, whether in terms of career development, recognition, or compensation (Dyrbye et al., 2020; Rahman et al., 2020). Effective management must be able to provide balanced opportunities for all employees, as well as ensure that all employees, regardless of education level, feel valued and have opportunities to develop (Brand & Walker, 2022).

If job satisfaction levels can be significantly affected by education levels, it will also affect the overall performance of the organization. More satisfied employees tend to be more productive, more committed, and have less desire to leave the company (Matagi et al., 2022; Yuan et al., 2022). Therefore, organizations that are able to understand the relationship between education and job satisfaction can design more effective employee management strategies, which will ultimately have a positive impact on organizational productivity and sustainability (Akbar, 2020).

Overall, the findings that there is a significant relationship between education level and job satisfaction level suggest that organizations should take into account the educational background of employees when designing human resource policies (Oh et al., 2023). By creating a work environment that can accommodate the needs and expectations of employees based on their level of education, organizations can increase job satisfaction and create a more productive and committed workforce (S. Bulilan, 2023).

Age and Satisfaction

The relationship between age and satisfaction levels can be illustrated as the graph below:

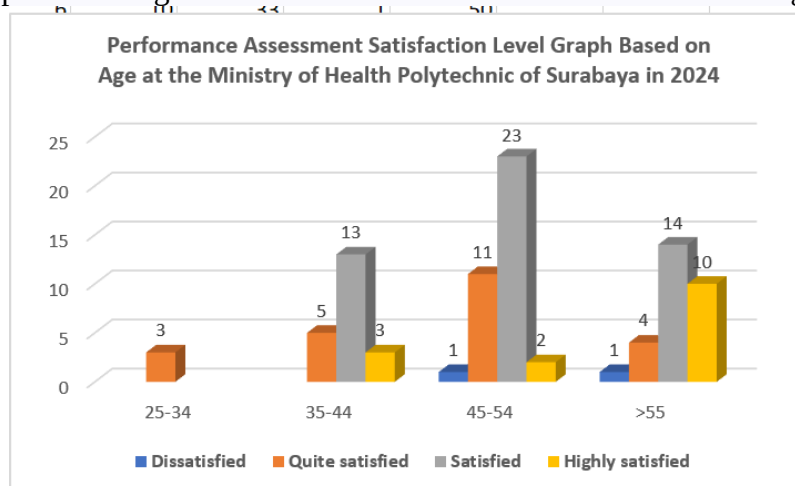


Figure 2: The Relationship between Age and Satisfaction Levels

The graph above shows that the 45-54 year age group has the highest level of satisfaction with 23 people feeling satisfied and 11 people quite satisfied. The >55 age group had the highest number for the very satisfied category (10 people), while dissatisfaction was generally low across all age groups. At the age of 25-34, the majority were satisfied (5 people) and no one felt very satisfied or dissatisfied.

To test whether there is a relationship between the Satisfaction Level and the Age Level of Employees, the chi-square test is used, which is a correlation test that is in accordance with this categorical data. Chi-Square Test Output: because the p-value is below 0.05 (0.002), there is a significant relationship between age and satisfaction level.

The results of the Chi-Square test for employee age also showed a very significant relationship with job satisfaction levels, with a p-value of 0.002. This shows that the age of employees affects their perception of job satisfaction. Employees from different age groups may have different expectations and needs related to the job, such as career development, stability, or recognition. Younger age groups tend to have different preferences than more senior employees, who may value a balance between personal and work life or long-term stability more.

The main findings of the study show that there is a very significant relationship between age and employee satisfaction level. The relationship between these two variables is not a coincidence, but rather there is a clear correlation between the age of employees and how they feel about their job (Guenther, 2024; Rana, 2022). Employees of different ages may have different preferences and expectations regarding performance and job satisfaction. Younger employees may be more motivated by quick rewards or promotions, while older employees may be more focused on job stability, work-life balance, or recognition for their long-term contributions (Ankhofiya et al., 2023; Thapa, 2023).

Differences in satisfaction levels between age groups can also be related to career stages (Choukir et al., 2022). Younger employees may be more focused on career development, while older employees may seek security and satisfaction in their day-to-day jobs. External factors such as career progression, workload, or job suitability for personal goals can also differ between age groups, influencing their perception of satisfaction (Alsultanny, 2020).

Practical implications, that management may need to consider career development programs that are more focused on the needs of each age group. More age-based training or promotion programs can help improve job satisfaction (Fu et al., 2020). It's a good idea to segment employees based on age in planning policies or programs to improve work welfare, because the needs of younger employees are different from those of more senior employees. Further investigation may be needed to unearth the expectations and preferences of each age group. This can help in designing human resource policies that are more in line with the specific needs of each age (Thapa, 2023).

Education level and age are factors that have a significant relationship with the level of employee job satisfaction (Lafaver et al., 2018) Differences in perception based on gender and age indicate the existence of different special needs of each of these groups. Management needs to take proactive steps in adjusting organizational policies to be more inclusive and relevant to various groups of employees. This includes considering gender differences in work policies, as well as creating more targeted strategies for employees of different age groups (Bakar et al., 2015) Follow-up research or surveys can help provide deeper insights into the causes of these differences in satisfaction, so that interventions are more targeted and have a positive impact on all employees (Busis et al., 2017) If needed, other strategies can be implemented to maintain and improve balance and job satisfaction among all groups within the organization (Nae & Choi, 2022)

These findings underscore the need for organizations to consider a more inclusive and segmented approach to designing human resources policies. Policies that take into account the differences in needs between men and women, as well as differences in preferences based on age, will be able to improve overall job satisfaction.

5. Conclusions

The significant relationship between education level and age and job satisfaction levels indicates the need for a more inclusive management strategy that focuses on the specific needs of each group of employees to improve overall satisfaction.

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