Demographic Factors and Life Satisfaction: A Study among Industrial Female Operators

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ABSTRACT

Employee well-being is crucial thing to performance and organizational success which has been studied extensively in the field of industrial and organizational psychology. Those employees with higher levels of well-being are less probable to quit and are typically more productive at the workplace. Therefore, the objective of this research is to examine the effect of several demographic factors on well-being such as life satisfaction among industrial female operators. There were 313 employees of an electronic component manufacturing company who participated in this research. A Life Satisfaction Scale consisting of five questions regarding the global cognitive evaluation of one's life was administered. The collected demographic factors were age, tenure, department or division, and dependents. The results indicated that tenure and marital status were related to life satisfaction. Those who are married and work longer in the company have a higher level of satisfaction than their peers. Meanwhile, the age, department, and dependents were not significant determinants of life satisfaction. Our research indicates the importance of implementing various strategies to improve life satisfaction, especially among newly recruited employees.

Keywords: Demography, Employees, Industry, Life Satisfaction, Well-being
INTRODUCTION

Employee well-being is crucial to performance and organizational success which has been studied extensively in the field of industrial and organizational psychology. Those employees with higher levels of well-being are less probable to quit and are typically more productive at the workplace. Therefore, well-being research can provide useful guidance for people's real-life activities, such as in the workplace (Zheng et al., 2015). Some researchers have argued for the use of psychological well-being and subjective well-being or job satisfaction as indicators that represent overall employee well-being within organizations. In addition, a recent study has found three independent dimensions of subjective well-being in middle-income countries that differ from previous studies in developed countries because lower living standards make income a more significant factor of subjective well-being (Vladisavljević & Mentus, 2019). The first dimension is life satisfaction in general, which includes satisfaction with various life domains, especially material living conditions (financial status, shelter, and employment). The second dimension is affective well-being factors and the third dimension relates to the specific concept of local neighborhood satisfaction, which is rarely measured in subjective well-being. However, researchers commonly use the terms well-being, happiness, life satisfaction, utility, and welfare in an intermittent basis (Boo et al., 2016).

There has been a significant research that associates higher levels of employee life satisfaction with desirable organizational outcomes such as more efficient, fast, and creative problem-solving techniques, higher organizational commitment, especially job satisfaction (Sirgy & Lee, 2018; Unanue et al., 2017). While job satisfaction is associated with other outcome variables, such as job satisfaction, turnover, and resignation intention (Haar et al., 2014). Job satisfaction and good organizational climate will have a positive impact in increasing OCB (Organizational Climate Behavior), employee engagement and improving the company performance (Wardono et al., 2022). Therefore, employees who are more satisfied with their lives tend to be more productive at work, both In-role and Extra-role performance (Unanue et al., 2017). Both job satisfaction and life satisfaction are similar concepts involving affective states, emotions, and cognitive evaluations of work or life (Vladisavljević & Mentus, 2019).

However, the research on well-being is mostly limited to measure employee job satisfaction rather than life satisfaction (Unanue et al., 2017; Zheng et al., 2015). While in Malaysia, most previous studies have focused on academics, healthcare workers, white-collar workers and the general population (Boo et al., 2016). Less attention has been provided to lower-level employees. Considering that industrial operators or blue-collar workers are the support of the labor industry, it is also important to examine the extent of their life satisfaction in an effort to ensure their
well-being to achieve sustainable economic growth and society benefits (Boo et al., 2016; Dousin et al., 2020; Meguella et al., 2017; Miah, 2018).

In addition, satisfaction can be quantified in the same way across cultures because satisfaction is a universal term. Cross-cultural researchers have had no difficulty in interpreting life satisfaction measures into different languages. There does not seem to be a language barrier in the ability of people from different cultures to distinguish between the terms “happiness”, “life satisfaction”, “best life” and “worst life.” Therefore, empirical evidence suggests that life satisfaction is not a concept that belongs only to foreigners (Kumar & Tahmaseb-McConatha, 2023).

Existing research provides mixed results regarding the relationship between socio-demographic factors and life satisfaction. The factors such as age, gender, marriage, education, and having children are not consistent determinants of life satisfaction (Joshanloo & Jovanović, 2020; Kumar & Tahmaseb-McConatha, 2023; Sirgy & Lee, 2018). Conflicting findings are also seen for other factors including household income, employment status, and global region indicating the role of national context and socio-cultural conditions (Geerling & Diener, 2020; Joshanloo & Jovanović, 2020).

Therefore, this research aims to examine the relationship between several demographic factors, such as age, tenure, department, marital status, dependents, and life satisfaction among female operators in Malaysia. Furthermore, it is hypothesized that each factor has a significant effect on the respondents’ perceived life satisfaction. This research contributes to the literature by providing a better understanding of life satisfaction levels and its determinants among industrial operators.

LITERATURE REVIEW

Life Satisfaction

Life satisfaction can be described as a global assessment regarding an individual's feelings about their past experiences (e.g., achievements, failures, and others), current conditions individuals feel about their past experiences (e.g., achievements, failures, and more), current conditions (e.g., socioeconomic status, social relationships, challenges, opportunities, physical and mental well-being), and future aspirations (e.g., hopes, dreams, physical and mental well-being). However, because people often compare life circumstances in reaching conclusions about satisfaction with life, some evidence suggests that some life domains in the form of “satisfaction with health, situation, and finances” and “satisfaction with life” may be more important than others (Geerling & Diener, 2020). Life satisfaction and job satisfaction are closely related. It means that employee happiness and satisfaction are confirmed to be positively correlated with work engagement and affective organizational commitment, their better quality of life, work performance and
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productivity, organizational commitment, and negatively correlated with turnover (Novanto et al., 2018).

Demographic Factors Related to Life Satisfaction

There are several factors that affect individual life satisfaction, such as health, employment and income status, role concept realism, age, marriage and social relationships. These are general indicators which have been developed and refined by further researchers (Lahamuddin, 2013). In addition, life satisfaction is also affected by demographic factors, such as age; gender; job types and characteristics; supervision support; work and family balance; opportunities for career promotion; proper training; and personal development and careers (Hermawati et al., 2023; Qudsyi et al., 2015). On the other hand, employee life satisfaction is also negatively affected by burnout, stress felt during work, their perception that they earn less than others, work-family conflict and work pressure (Novanto et al., 2018).

RESEARCH METHODOLOGY

This research used a cross-sectional survey design with a total sampling strategy. All operators or blue-collar workers of an electronics manufacturing company in Kuantan, Pahang, Malaysia were involved. The final respondents were 313 female employees. Due to the number of male operators being less than 4% of the total number of operators, only female respondents were included in this research. All respondents provided informed consent before participating in the questionnaire.

Measures

Socio-demographic characteristics were compiled including age, length of service (tenure), department or division, marital status, and dependents. The Satisfaction with Life Scale (SWLS) developed by Diener in 1985, was used to evaluate life satisfaction. This scale consists of 5 items to measure the overall cognitive assessment of an individual's satisfaction with their life. These questions are listed as follows: (1) In many things, my life is close to my goals; (2) my living conditions are very good; (3) I am satisfied with my life; (4) I have gotten the important things I wanted in life so far; (5) If I could repeat my life, I would not change anything. Respondents indicated their level of agreement with each statement using a 7-point Likert scale (1: completely disagree to 7: completely agree). The SWLS score corresponds to the sum of the scores of the five items. The sum of the scores can be further categorized as very satisfied (31-35), satisfied (26-30), slightly satisfied (21-25), neutral (20), slightly dissatisfied (15-19), dissatisfied (10-14), and very dissatisfied (5-9).

Data Analysis
Descriptive statistics were used to summarize data on socio-demographic characteristics and perceived life satisfaction responses. Data were summarized as number (n) and percentage (%) for categorical variables, and mean and standard deviation (SD) for numerical variables. The Kolmogorov-Smirnov test indicated that all data did not meet the assumption of normality, thus Spearman's non-parametric correlation was conducted to test the correlation between life satisfaction and numerical variables (tenure and age). The differences in life satisfaction across marital status and number of dependents were assessed using the Kruskal-Wallis test. The Mann-Whitney test was conducted to examine differences in life satisfaction between production and non-production groups. All statistical analyses were conducted using SPSS statistics 23.0 with a significance level of $\alpha = 0.05$.

RESULT AND DISCUSSION

The Research Result

As shown in Table 1, the socio-demographic characteristics of the respondents were studied. The average age in the population was $31.96 \pm 12.43$ years and the average tenure was $9.68 \pm 11.63$ years. Almost two-thirds (65.2%) worked in production and were single or unmarried (64.2%). Moreover, more than half of the respondents (53.7%) had no dependents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>mean or N</th>
<th>SD or %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td>31.96</td>
<td>12.43</td>
</tr>
<tr>
<td>Length of service (years)</td>
<td></td>
<td>9.68</td>
<td>11.63</td>
</tr>
<tr>
<td>Department</td>
<td>production</td>
<td>204</td>
<td>65.2%</td>
</tr>
<tr>
<td></td>
<td>precision</td>
<td>35</td>
<td>11.2%</td>
</tr>
<tr>
<td></td>
<td>hawk</td>
<td>5</td>
<td>1.6%</td>
</tr>
<tr>
<td></td>
<td>molded</td>
<td>17</td>
<td>5.4%</td>
</tr>
<tr>
<td></td>
<td>asl</td>
<td>17</td>
<td>5.4%</td>
</tr>
<tr>
<td></td>
<td>gull</td>
<td>10</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Keysight</td>
<td>25</td>
<td>8.0%</td>
</tr>
<tr>
<td>Marital Status</td>
<td>single</td>
<td>201</td>
<td>64.2%</td>
</tr>
<tr>
<td></td>
<td>married</td>
<td>92</td>
<td>29.4%</td>
</tr>
<tr>
<td></td>
<td>widowed/divorced</td>
<td>20</td>
<td>6.4%</td>
</tr>
<tr>
<td>Number of Dependents</td>
<td>0</td>
<td>168</td>
<td>53.7%</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>49</td>
<td>15.7%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>53</td>
<td>16.9%</td>
</tr>
<tr>
<td></td>
<td>&gt; 2</td>
<td>43</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

Source: Processed Data

According to Table 2, respondents were slightly satisfied with each item except for the last question ("If I could repeat my life, I would change almost..."
nothing") which was rated as slightly dissatisfied. The average total SWLS or life satisfaction score was 24.96, which equates to slightly satisfied. On the other hand, as shown in Table 3, more than 40% of the respondents reported that they were satisfied and only seven respondents (2.2%) reported the opposite (dissatisfied).

Table 2. Summary Statistics for Each Item of SWLS

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>In most ways, my life is close to my ideal (sw1)</td>
<td>5.08</td>
<td>1.34</td>
</tr>
<tr>
<td>The conditions of my life are excellent (sw2)</td>
<td>5.71</td>
<td>1.14</td>
</tr>
<tr>
<td>I am satisfied with my life (sw3)</td>
<td>5.59</td>
<td>1.10</td>
</tr>
<tr>
<td>So far, I have gotten the important things I want in life (sw4)</td>
<td>5.32</td>
<td>1.26</td>
</tr>
<tr>
<td>If I could live my life over, I would change almost nothing (sw5)</td>
<td>3.28</td>
<td>1.88</td>
</tr>
<tr>
<td>Total SWLS scores</td>
<td>24.96</td>
<td>4.70</td>
</tr>
</tbody>
</table>

Source: Processed Data

Table 3. Distribution of SWLS Category

<table>
<thead>
<tr>
<th>Categories</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>extremely dissatisfied</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>dissatisfied</td>
<td>7</td>
<td>2.2</td>
</tr>
<tr>
<td>slightly dissatisfied</td>
<td>35</td>
<td>11.2</td>
</tr>
<tr>
<td>neutral</td>
<td>11</td>
<td>3.5</td>
</tr>
<tr>
<td>slightly satisfied</td>
<td>93</td>
<td>29.7</td>
</tr>
<tr>
<td>satisfied</td>
<td>137</td>
<td>43.8</td>
</tr>
<tr>
<td>extremely satisfied</td>
<td>29</td>
<td>9.3</td>
</tr>
</tbody>
</table>

Source: Processed Data

The Spearman correlation test indicated that there was a significant positive correlation between tenure and life satisfaction ($\rho = 0.19, p <0.01$). However, no significant difference between age and life satisfaction was found ($\rho = 0.07, p = 0.19$). For categorical demographic variables, the differences between socio-demographic groups on SWLS scores are illustrated in figures 1-3. The highest SWLS scores were reported by operators in the hawk department ($26.6 \pm 2.19$), being married ($26.07 \pm 4.62$), and having more than 2 dependents ($25.33 \pm 4.56$). As there was a high imbalance in departmental categories, non-production departments were combined into one non-production category. The Mann-Whitney test ($U =10307.50$ or $z = -1.07, p = 0.29$) indicated that there was no significant difference in life satisfaction between production and non-production departments. In addition, there was a significant difference in life satisfaction based on marital status (Kruskal-Wallis test ($H (313) =6.43, p =0.04$).
Figure 1. Life Satisfaction across Departmental Categories

Figure 2. Life Satisfaction across Marital Status Categories

Figure 3. Life Satisfaction across Dependency Categories
The Research Discussion

This research aims to examine whether several socio-demographic factors are determinants of life satisfaction among female employees, working as electronics manufacturing operators. In general, the majority of respondents felt satisfied with their lives with an average score of moderately satisfied which supports a previous large survey from 28 European countries (Wicker & Frick, 2017). This finding is interesting as women operators are categorized as blue-collar workers who are more vulnerable to less favorable working conditions and protections. A global survey by the Gallup World Pool found that women report slightly higher levels of life satisfaction than men across all income, education, and occupational groups (Joshi & Jovanović, 2020). This might be caused by women's resilience, due to their more developed social resources even though they might be subjectively more satisfied with their lives (Lakomy & Kafkova, 2017).

In addition, we also found that tenure and marital status are significant determinants of life satisfaction in the organization. It implies that the longer operators work in the company, the happier they are, which supports previous research (Hessels et al., 2018; Sirgy & Lee, 2018). On the other hand, a previous research did not find a significant relationship between tenure and life satisfaction (Ferreira et al., 2020). Regarding marriage, the significant effects of marital status are consistent with large surveys of life satisfaction around the world that find that married people appear to be healthier and live longer than those who are single, separated, divorced, or widowed (Joshi & Jovanović, 2020). It can be explained that married people tend to have better psychological health, suffer fewer health problems, and recover from illnesses faster (Grover & Helliwell, 2019).

Related to other demographic factors, age, department and number of dependents did not significantly affect the respondents' perceived life satisfaction. The lack of impact of age on life satisfaction has also been found in previous research although there is a tendency for older operators to have higher life satisfaction (Boo et al., 2016; Unanue et al., 2017). People who had more than two dependents in their family also reported being more satisfied with their lives, which indicates a family protection effect, no matter how small. Self-perceived life satisfaction among departments, however, was relatively similar, implying that there were no substantial differences in the level of job demands and/or the characteristics of the work assigned to the operators.

This research has several limitations. First, our measure of life satisfaction is self-report which increases the risk of common method bias. Although self-report instruments are acceptable when examining self-referential constructs, the field would benefit from the use of additional data sources. For example, asking “significant others” to triangulate information, using physiological data, and diary methods. Second, our sample was represented from a specific industry, for example,
an electronic component manufacturing company which might lead to
generalization issues. Even though we applied total sampling of all female operators
in the organization, future research should examine a more heterogeneous
population including job type, and industry or sector. Third, because of resource
constraints, we did not investigate other socio-demographic factors that have been
associated with life satisfaction such as health status, household income, and
ethnicity (Boo et al., 2016; Sirgy & Lee, 2018; Unanue et al., 2017).

Although the limitations of the current research, our results indicate that
organizational policymakers can employ various strategies to improve life
satisfaction, especially among newly recruited employees. This would be a key
mechanism for gaining greater employee retention, and improving productivity.
These strategies include promoting work-life balance, fostering a positive work
culture, and recognizing operators' hard work and achievements (Broeck et al.,
2016).

CONCLUSION

The results of this research indicated that tenure and marital status were
related to life satisfaction. Those who are married and work longer in the company
have a higher level of satisfaction than their peers. Meanwhile, the age, department,
and dependents were not significant determinants of life satisfaction. Our research
indicates the importance of implementing various strategies to improve life
satisfaction, especially among newly recruited employees. In addition, these
strategies can improve employee productivity and retention. If the employee
retention strategy is implemented well, the employee turnover rate will be reduced.

Although this research has several limitations, further researches is required
to generalize the result. In addition, it required to examine more heterogeneous
population including job type, and industry or sector; and also other socio-
demographic factors that have been associated with life satisfaction such as health
status, household income, and ethnicity.

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REFERENCES


Kumar, V. K., & Tahmaseb-McConatha, J. (2023). Life Satisfaction and Psychological and Physical Well-Being (V. K. Kumar & J. Tahmaseb-McConatha (eds.)).


Wardono, G., Sunaryo, W., & Moeins, A. (2022). The Influence of Organizational Climate on OCB and Employee Engagement with Job Satisfaction as an Intervening Variable. UTSAHA (Journal of Entrepreneurship), 1(3).
