Socio-Demographics Influence on Hospitality Employee Job Insecurity, Work Engagement, Financial Concern, Quality of Life and Mental Health

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ABSTRACT

COVID-19 has had an immense impact on many countries. This study assessed how the socio-demographic characteristics of hospitality employees working during the COVID-19 period in Malaysia influenced job insecurity, work engagement, financial concern, quality of life, and mental health. Data were collected from over 200 hospitality employees via an online questionnaire. Based on the results and the hypotheses tested, gender and age groups significantly influenced hospitality employees' job insecurity and mental health. Additionally, changes in income level before and during COVID-19 significantly influenced hospitality employees' job insecurity, work engagement, financial concern, quality of life and mental health. Our findings offer several implications for hospitality researchers and practitioners. To the best of our knowledge, this is the first known study that evaluated the socio-demographic influence on hospitality employees' job insecurity, financial concerns, work engagements, quality of life, and mental health. Findings from this study contribute to the growing body of evidence on whether certain socio-demographic groups influence hospitality employees, particularly from an Asian country perspective like Malaysia. The researchers faced difficulties gathering data during the pandemic despite offering incentive opportunities. Therefore, future researchers should consider conducting a similar study in the post-pandemic period to gather data on the study variables for a comparison study.

1. INTRODUCTION

The coronavirus disease (COVID-19) started in December 2019 and affected many countries worldwide. As of 2nd October 2023, more than 696 million cases were reported, and the death toll surpassed 6,921,819 (worldometer, n.d.). The disastrous impact of COVID-19 on various industries and employees is notable. Malaysia is one of the developing countries negatively affected by the COVID-19 pandemic, with more than 37,170 deaths from 5,125,000 cases reported as of October 2nd, 2023 (approximately 15% of the total population). Starting in March 2020, the Government of Malaysia implemented a series of restriction orders (i.e., movement control orders) and prevention measures (e.g., social distancing, face coverings, and QR code scans for contact tracing) to prevent the virus escalating. However, the restriction orders and prevention measures negatively impacted many industries, including the hospitality industry. As of 5th October 2022, more than 84% of the total population in Malaysia was fully vaccinated (Covidnow, 2022); the country then moved into an endemic state in April 2022 (Kaos, 2022). At the time of this writing, information regarding COVID-19 active cases are still reported by the Ministry of Health Malaysia through their official website KKMNOW (https://data.moh.gov.my/covid).

Since the start of COVID-19, a corpus of literature from different countries (e.g., India, Malaysia, United States, United Kingdom) has been published about the impact of COVID-19 on diverse employment sectors, including the hospitality industry (Che Ahmat et al., 2021; Ghazali & Ishak, 2021; Islam & Alharthi, 2022; Koul & Nayar, 2022; Miawati et al., 2021). Malaskci et al. (2022) surveyed hotel employees in the United States and found that fear of COVID-19 significantly impacted employees' intention to leave their jobs. McAdams and Gallant (2022) found that restaurant managers in Canada reported increased mental health issues among employees and a lack of policies and procedures in handling mental health cases, mainly among independent restaurants. Many hospitality researchers have investigated COVID-19 impacts from various perspectives, such as human resources, strategic management, and work-related behaviours (Che Ahmat et al., 2022; Koul & Nayar, 2022). Consistencies among findings were reported; these included negative impacts on hospitality business operations and employees. Research has highlighted that hospitality operators face numerous challenges in terms of generating revenues, managing human resources, and ensuring the safety of customers and employees (Che Ahmat et al., 2021; Che Ahmat et al., 2022; Ghazali & Ishak, 2021; Hanafiah et al., 2021; Koul & Nayar, 2022). For example, hospitality industry operators in Malaysia reported a significant drop in sales, profit, and investment (Hanafiah et al., 2021). Other studies also mentioned revenue loss, which resulted in laying off employees or forcing unpaid leaves (Che Ahmat et al., 2022; Ghazali & Ishak, 2021).

Despite many published articles on COVID-19 in the hospitality industry, few studies investigated affected employees. Therefore, this study aimed to investigate how socio-demographic variables (i.e., gender, age, income) influence job insecurity, work engagement, financial concern, quality of life, and mental health of hospitality employees during the COVID-19 pandemic in Malaysia. Specifically, the research objectives were:

1. Determine if there is a difference in job insecurity, work engagement, financial concern, quality of life, and mental health between male and female hospitality employees.

2. Identify what influence gender has on hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health.

3. Determine if there is a difference in job insecurity, work engagement, financial concern, quality of life, and mental health across hospitality employees' age groups.

4. Identify what influence age has on hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health.

5. Determine if there is a difference in job insecurity, work engagement, financial concern, quality of life, and mental health across hospitality employees' current income groups.

6. Identify what influence changes in the income level of hospitality employees before and during COVID-19 have on hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health.

2. LITERATURE REVIEW

2.1 Job Insecurity

The COVID-19 pandemic caused massive job losses, leaving existing employees afraid of losing their jobs. Job insecurity is defined as "perceived powerlessness to maintain desired continuity in threatened job situation (Greenhalgh & Rosenblatt, 1984, p.438). Gaunt and Benjamin (2007) reported a significant influence of gender on job insecurity among employees working in the telecommunication and insurance sectors, where males experienced greater job insecurity than females. It seems reasonable to say that married men are generally the primary income provider; hence they were worried about being unable to provide for their families. Nonetheless, a study from Italy during COVID-19 reported a similar level of job insecurity between male and female dentists (Gasparro et al., 2020). Wilson et al. (2020) reported higher symptoms of depression caused by higher job insecurity resulting from the COVID-19 pandemic in the United States. While controlling for gender, age, and income, Basyouni and El Keshky (2021) found that job insecurity significantly influenced financial anxiety among private and government employees in Saudi Arabia. Subsequently, in the current study, the researchers posit that hospitality employees in Malaysia were concerned about the future of their jobs or their job situations due to a series of restriction movement control orders done by the government. Thus, the following hypotheses were tested:

H_1: Socio-demographics (i.e., gender, age, income) significantly influenced job insecurity.
  H_{1a}: Gender significantly influenced job insecurity.
  H_{1b}: Age groups significantly influenced job insecurity.
  H_{1c}: Current income groups significantly influenced job insecurity.

2.2 Work Engagement

Work engagement refers to positive physical, mental, and emotional forces devoted to the job, or the efforts employees are willing to exert in a workplace (Oksa, 2021). Researchers have found that work engagement has a positive relationship with job satisfaction, proactive behaviours, and higher organization commitment; consequently, there is a lower intention to leave the organization (Leiter & Bakker, 2010; Paek et al., 2015). Hu et al. (2020) reported that the COVID-19 pandemic caused anxiety among employees and made them less engaged with their work. In terms of gender, female employees were more likely to have lower work engagement during this pandemic than males; women were likely emotionally tired while working at home because their home and work life were intertwined (Bhumika, 2020). In other words, women could not escape family obligations at home, leading to emotional exhaustion. Regarding age, a study among nurses reported that older nurses had higher work engagement than younger nurses during the COVID-19 pandemic (Miawati et al., 2021). In terms of income, a study among Indian business executives found a significant difference in work engagement among income groups. However, no known study examines the difference in work engagement

between gender, age, and income groups among hospitality employees in Malaysia during COVID-19. Thus, the following hypotheses were tested:

H2: Socio-demographics (i.e., gender, age, income) significantly influenced work engagement.
  H2a: Gender significantly influenced work engagement.
  H2b: Age groups significantly influenced work engagement.
  H2c:Current income groups significantly influenced work engagement.

2.3 Income and Financial Concerns

The pandemic has had an enormous impact on the economy worldwide. Companies struggled to survive during COVID-19 and could not pay employees as much as before the pandemic. Although the Government of Malaysia provided various forms of aid to help Malaysians and industries (Md Shah et al., 2020) and extended some aid targeted to those affected groups (e.g., loan moratorium, cash aid), the impact of this pandemic crisis was phenomenal. The general population, including hospitality employees, is still concerned about their financial status, particularly in vulnerable communities. Young individuals, those 18 to 24 years old, had the highest income loss compared to other age groups (Gustafsson, 2020). During COVID-19, food expenditure influenced most of the spending patterns of the young generation (between 21 to 40 years old) in Malaysia, followed by transportation expenditure (Ismail et al., 2022). Females financially suffered the most during the COVID-19 pandemic compared to males, as females were more exposed to the economic impact. This might be due to the prolonged gender inequalities in jobs, incomes, and living standards that happened before COVID-19 (OECD, 2020). Based on previous studies findings, the following hypotheses were tested:

H3: Socio-demographics (i.e., gender, age, income) significantly influenced financial concerns.
  H3a: Gender significantly influenced financial concerns.
  H3b: Age groups significantly influenced financial concerns.
  H3c: Current income groups significantly influenced financial concerns.

Malaysian population represented by the low-income group earning below RM4,850/US$1,091 monthly), M40 (40% of the Malaysian population represented by the middle-income group earning between RM4,851/US$1,092 to RM10,970/US$2,468 monthly), and T20 (20% of the Malaysian population represented by the upper-income group earning RM10,971/US$2,469 or more). COVID-19 impacted household income groups, with more Malaysians that were previously in a higher income group moving to a lower income group. For example, 20% of households from the M40 income group before COVID-19 were shifted to the B40 income group, and nearly 13% of households in the T20 income group were moved to the M40 income group (Department of Statistics Malaysia, 2021). Researchers reported income reduction was associated with negative economic security (e.g., job insecurity, financial concern), mental health issues (e.g., anxiety, stress), and life dissatisfaction (Codagnone et al., 2020; De Pedraza et al., 2020, Maqsood et al., 2021, Witteveen & Velthorst, 2020). The number of job losses in Malaysia increased during the COVID-19 pandemic, and many employees had their salaries decreased, worked overtime hours, and received smaller allowances (Othman et al., 2022). Such losses further impacted their monthly income and savings, thus increasing financial concern. Nevertheless, the extent of these influences might be different between employee groups. Thus, the following hypotheses were tested in this study:

H4: Changes in income level before and during COVID-19 influenced job insecurity, work engagement, financial concern, quality of life, and mental health.
  H4a: Changes in income level before and during COVID-19 influenced job insecurity.
  H4b: Changes in income level before and during COVID-19 influenced work engagement.

H$_{4c}$: Changes in income level before and during COVID-19 influenced financial concerns.
H$_{4d}$: Changes in income level before and during COVID-19 influenced quality of life.
H$_{4e}$: Changes in income level before and during COVID-19 influenced mental health.

2.4 Quality of Life

According to the World Health Organization, quality of life is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. A person's self-perception regarding their locus in the environment of beliefs and value structure in which they live and in association with their vision, aspirations, standards, and apprehensions" (World Health Organization, 2012, p.11). Various factors may contribute to an individual's perceptions of their physical and psychological well-being; these include the level of freedom, social life, and connection with their environment (Vahedi, 2010). During COVID-19, many individuals were unemployed and experiencing financial insecurity: therein, both physical and mental health were affected, as well as the quality of life. Regarding gender, the quality of life for females was more affected during the COVID-19 pandemic than for males (Escalante & Maisonnave, 2021; Ping et al., 2020), whereas a study conducted in Saudi Arabia reported males were more likely to have a lower quality of life than females. This same study reported that households led by older individuals experienced lower quality of life than other households (Islam & Alharthi, 2022). Another study found that younger adults (18 to 29 years old) reported a more negative effect on their quality of life than other groups (Solomou & Constantinidou, 2020). Given that there are no conclusive findings on the difference in the quality of life during COVID-19 between gender and age groups, the following hypotheses were tested:

H$_5$: Socio-demographics (i.e., gender, age, income) significantly influenced quality of life.
H$_{5a}$: Gender significantly influenced quality of life.
H$_{5b}$: Age groups significantly influenced quality of life.
H$_{5c}$: Current income groups significantly influenced quality of life.

2.5 Mental Health

Even before COVID-19, the hospitality industry was competitive and stressful, often associated with long and irregular work hours (Davis, 2015). The unprecedented and uncertainty of the COVID-19 forced people to alter their daily lives, financial spending, and social interactions. As a result, the pandemic may also lead to psychological and emotional crises (McAdams & Gallant, 2022). In the hospitality industry, involuntary job loss due to COVID-19 contributed to employee mental health issues such as anxiety and depression and further impacted employee psychological well-being (Koul & Nayar, 2022). Quarantine hotel employees with fear of COVID-19 were also mentally affected (Haldorai et al., 2023). Effects of the pandemic on individuals' mental health differed between socio-demographic groups. Various studies have reported that females are at higher risk for anxiety and depression than males (Fenollar-Cortes et al., 2021). Research suggests that younger individuals between 18 to 24 years old are more likely than any other age group to experience mental illness and substance use disorders (Pearson et al., 2013). Given that gender and age might influence mental health status, this study aimed to investigate whether there was a significant difference in hospitality employees' mental health status during the COVID-19 pandemic based on age groups and gender; hence, the following hypotheses were tested:

H$_6$: Socio-demographics (i.e., gender, age, income) significantly influenced mental health.
H$_{6a}$: Gender significantly influenced mental health.

H_{6b}: Age groups significantly influenced mental health.
H_{6c}: Current income groups significantly influenced mental health.
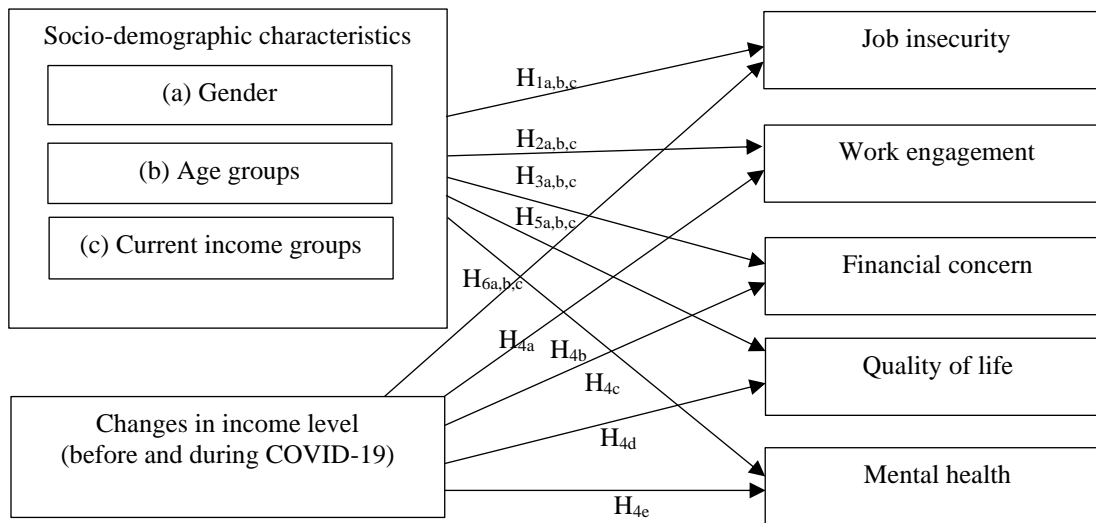

Figure 1. Conceptual model with proposed hypotheses.

3. METHODOLOGY

3.1 Research Design and Sampling

Given the descriptive nature of this study, a quantitative approach was adopted to gather information about the relationship between socio-demographic characteristics (i.e., gender, age, income) and job insecurity, work engagement, financial concern, quality of life, and mental health among hospitality employees during COVID-19 period in Malaysia. Hospitality employees in Malaysia working in the industry during the COVID-19 pandemic were sampled using non-probability sampling. Screening questions were included to ensure only eligible participants responded to the survey. The research ethics committee at the sponsoring university approved this study [REC/06/2021(MR/473)]. An online questionnaire was developed and contained six sections measuring all study variables. Three hospitality experts reviewed the questionnaire with relevant academic and professional experience for face validity. Later, the questionnaire was pilot tested with 30 hospitality employees to confirm validity and reliability. After that, the online survey link was distributed via social media platforms (e.g., Facebook, WhatsApp, Twitter) from July to December 2021. To encourage participation, the researchers gave ten gift cards valued at RM30 (US$7) each, randomly drawn.

3.2 Measures

The job insecurity scale with five-item was adapted from Vander Elst et al. (2014); the response options consist of a five-point Likert-type scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The work engagement scale was measured using an eleven-item and six-point scale from never (0) to always (6), focusing on vigour, dedication, and absorption from Schaufeli et al. (2006). The financial concern scale was adapted from Wilson et al. (2020), using six-item measured on a five-point Likert-type scale from 1 ("strongly disagree") to 5 ("strongly agree"). Quality of life with a ten-item scale was adapted from Sirgy et al. (2001). The used scale was measured on a seven-point Likert-type scale ranging from 1 ("very untrue") to 7

("very true"). Mental health symptoms were measured using questions adapted from Veit and Ware (1983). The used scale has five-item and is measured on a five-point Likert-type scale ranging from 0 ("none of the time") to 5 ("all of the time"). The researchers maintained the original scales developed by previous researchers for better comparison and interpretation. All scales are fit for further analysis based on the reliability and internal consistency scores reported in Table 2 (α between 0.648 and 0.930). Socio-demographic questions were asked, which included gender, age group, education, marital status, work location, and monthly income before and during COVID-19.

4. RESULTS AND ANALYSIS

4.1 Demographics of Respondents

A total of 229 participants responded to the survey. After the data-cleaning process, 226 valid responses were used in the analysis. The researchers used the Statistical Package for the Social Sciences version 29 software for data analysis. As shown in Table 1, more males (61.1%, $n = 138$) participated than females (38.9%, $n = 88$). Based on the labour force Malaysia report published in July 2023, male employees comprised of 83.0% out of 16.91 million labour force participation by gender (Department of Statistics Malaysia, 2023). Therefore, it is common to have more males working than females in Malaysia. The largest age group reported in this study was between 26 and 45 (63.7%, $n = 144$), and the highest number of respondents held a tertiary education (52.2%, $n = 118$). Most respondents were married (60.2%, $n = 136$). For monthly income level, slightly more respondents earned less than RM4,850 (US$1,091) a month during COVID-19 (96.5%, $n = 216$) than before COVID-19 (92.4%, $n = 207$). The demographics showed that more hospitality employees were in the low-income category during COVID-19 than before the pandemic. Realizing that many Malaysians were affected by the crisis, the government offered various forms of financial assistance during COVID-19 to ease the burden of affected citizens, such as loan moratoriums and cash aid.

Table 1: Respondent socio-demographic profile ($N = 226$).

Item	n	%
Gender		
Male	138	61.1
Female	88	38.9
Age group		
18 – 25	44	19.5
26 – 35	75	33.2
36 – 45	69	30.5
46 – 55	33	14.6
Over 55 years	5	2.2
Highest educational level		
Secondary	98	47.8
Tertiary	118	52.2
Marital status		
Single	86	38.1
Married	136	60.2
Others	4	1.7
Income before COVID-19 (monthly)		
B40 (less than RM4,850/US$1,070)	207	92.4
M40 (RM4,851-RM10,970 or US$1,070 – US$2,419)	15	6.7
T20 (RM10,971/ US$2,419 and above)	2	0.8
Income during COVID-19 (monthly)		
B40 (less than RM4,850/US$1,070)	216	96.5
M40 (RM4,851- RM10,970 or US$1,070 – US$2,419)	6	2.7
T20 (RM10,971/ US$2,419 and above)	2	0.8

4.2 Hypothesis Testing

This study investigated how socio-demographic characteristics such as gender, age group, and current income groups influence hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health during the COVID-19 pandemic period in Malaysia.

Hypothesis 1: Socio-demographics (i.e., gender, age, income) significantly influenced job insecurity.

An independent-samples *t*-test was conducted to compare males and females in terms of job insecurity, and the analysis showed a significant difference in mean score for males ($M = 3.94$, $SD = 0.81$) and females ($M = 3.64$, $SD = 0.79$) ($p = 0.007$) (see Table 2). A correlation analysis was conducted, and a significant negative association between gender and job insecurity was found ($r = -0.179$, $p = 0.007$). Based on the linear regression equation, job insecurity for males ($Y = 3.939$) was higher than for females ($Y = 3.641$) (see Table 3). Such result contradicted to Gasparro et al. (2020) when they found similar level of job insecurity between male and female dentists in Italy. The overall results show the gender of hospitality employees significantly influences their job insecurity, which supports hypothesis 1a. A one-way between-groups analysis of variance reported a statistically significant difference between age groups on job insecurity ($p < 0.05$), with the effect size of 0.07 calculated using eta-squared (η^2), indicating a moderate effect (see Table 4). Next, a post-hoc comparison using the Tukey HSD test was conducted to evaluate the significance of differences between pairs of group means. Based on the post-hoc analysis for job insecurity, the mean score for age group 1, between 18 to 25 years ($M = 3.48$, $SD = 0.68$), was significantly different from age group 2, between 26 to 35 years ($M = 4.00$, $SD = 0.65$) and the mean score for age group 1, between 18 to 25 years ($M = 3.48$, $SD = 0.68$) was significantly different from age group 5, over 55 years ($M = 4.52$, $SD = 0.66$) ($p < 0.05$). Although this study found significant differences between age groups and job insecurity, the correlation analysis between age groups and job insecurity was not significant ($r = 0.130$, $p = 0.051$); hence, hypothesis 1b was not supported.

Additional one-way between-groups analysis of variance was conducted to investigate differences between current income groups on job insecurity. According to the result, there were statistically significant differences ($p < 0.05$) in job insecurity for current income groups with an effect size of 0.09 calculated using eta-squared (η^2), indicating a moderate effect (see Table 6). Based on the post-hoc analysis, the mean score for income level group 1, B40 (less than RM4,850/US$1,070) ($M = 3.88$, $SD = 0.766$) was significantly different from income level group 2, M40 (RM4,851/US$1,070 to RM10,970/US$2,419) ($M = 2.47$, $SD = 0.67$). Nevertheless, income group 3, T20 (RM10,971/US$2,419 or more) ($M = 3.40$, $SD = 0.57$) did not differ significantly from either income groups 1 or 2. A correlation analysis reported a negative and statistically significant correlation between current income groups and job insecurity ($r = -0.228$, $p < 0.001$). Linear regression was performed using three dummy coded variables (B40, M40, T20) (Table 7). When using B40 as the base group, M40, compared to B40, will realize 1.398 fewer units on job insecurity and statistically significant. Meanwhile, when using B40 as the base group, T20 is 0.464 fewer units on job insecurity but not statistically significant. In other words, affected hospitality employees in the M40 income group significantly experienced less job insecurity than the B40 income group, which seems reasonable given that B40 represents the lowest income group in Malaysia. When using M40 as the base group, B40, compared to M40, will realize 1.376 higher units on job insecurity and statistically significant. On the other hand, when using M40 as the base group, T20 is 0.900

higher on job insecurity but not statistically significant. Given the data, affected hospitality employees in the B40 income group experienced significantly higher job insecurity than the M40 income group. The overall results support hypothesis 1c.

Hypothesis 2: Socio-demographics (i.e., gender, age, income) significantly influenced work engagement.

An independent-samples *t*-test was conducted to compare males and females regarding their work engagement. Table 2 shows no significant differences in scores for males ($M = 3.95$, $SD = 1.27$) and females ($M = 4.10$, $SD = 1.04$) for work engagement. The correlation analysis reported an insignificant relationship between gender and work engagement ($r = 0.063$, $p = 0.346$); hence, hypothesis 2a was not supported. A one-way between-groups analysis of variance found no significant differences between age groups and work engagement ($p > 0.05$) (see Table 4). Next, a correlation analysis was conducted, and no significant association was found between age groups and work engagement ($r = -0.043$, $p = 0.520$); thus, hypothesis 2b was not supported. A one-way between-groups analysis of variance found no significant difference between current income groups on work engagement ($p > 0.05$) (see Table 6). The correlation between current income groups and work engagement also was not significant ($r = 0.075$, $p = 0.262$); hence, hypothesis 2c was not supported.

Hypothesis 3: Socio-demographics (i.e., gender, age, income) significantly influenced financial concerns.

An independent-samples *t*-test was conducted to compare males and females regarding their financial concerns. There were no significant differences in scores for males ($M = 3.73$, $SD = 0.76$) and females ($M = 3.58$, $SD = 0.62$) for financial concerns (see Table 2). The correlation analysis reported an insignificant relationship between gender and financial concern ($r = -0.106$, $p = 0.111$); hence, hypothesis 3a was not supported. A one-way between-groups analysis of variance found no significant differences between age groups and financial concerns ($p > 0.05$) (see Table 4). The correlation analysis result also was not significant ($r = 0.127$, $p = 0.057$); hence hypothesis 3b was not supported. A one-way between-groups analysis of variance was conducted to investigate differences between current income groups on financial concern and found no significant differences ($p > 0.05$) (see Table 6). The correlation between current income groups on financial concerns also was not significant ($r = 0.005$, $p = 0.943$); thus, hypothesis 3c was not supported.

Hypothesis 4: Changes in income level before and during COVID-19 influenced job insecurity, work engagement, financial concern, quality of life, and mental health.

Using monthly income data before and during the COVID-19 pandemic, the researchers found that 49.3% ($n = 110$) of the respondents experienced a decrease in their monthly income level, while another 50.7% ($n = 113$) received the same level of monthly income during the period. An independent-samples *t*-test was conducted to investigate the differences between those who experienced a decrease in their monthly income level versus those who received the same monthly income level during COVID-19. Two income groups were created: Group 1 (decrease) and Group 2 (same). Table 8 shows a significant difference in the two groups mean scores for job insecurity, work engagement, financial concern, quality of life, and mental health. The magnitude of the differences indicated moderate to large effects (eta squared, η^2 from 0.083 to 0.280). Our results revealed that hospitality respondents experiencing income reduction during

COVID-19 differed in job insecurity, work engagement, financial concern, quality of life, and mental health, compared to those who received the same income.

Further analysis was conducted using correlational analysis to assess the correlation between the income groups and all five dependent variables (i.e., job insecurity, work engagement, financial concern, quality of life, and mental health). The correlations between the income groups and all five variables were significant at $p < 0.01$ (job insecurity, $r = -0.520$; work engagement, $r = 0.361$; financial concern, $r = -0.392$; quality of life, $r = 0.386$; mental health, $r = 0.281$). Next, regression analyses were conducted to investigate whether changes in the monthly income before and during COVID-19 influenced hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health (see Table 9). The final regression equation with a standardized coefficient (β) for each predictor is $Y = mX + b$, where Y = response (dependent) variable, m = estimated slope, X = predictor (independent) variable, b = estimated intercept.

On average, the respondents who experienced a decrease in their monthly income during COVID-19 had higher job insecurity and financial concern scores than respondents who received the same monthly income. The regression results supported descriptive data on financial concern when more than half of the respondents were worried about themselves and their family's financial situation. Nearly half of the respondents believed their financial situation would worsen in the next 12 months since COVID-19 is still ongoing. Moreover, on average, the respondents who received the same monthly income during COVID-19 had higher work engagement, quality of life, and mental health scores than respondents who experienced a decreased monthly income. It seems reasonable that respondents who still received the same monthly income during COVID-19 were unaffected in their engagement at work scores and overall quality of life and mental health scores. One plausible explanation might be that for those with the same monthly income, their financial status was adequate to survive during the pandemic. The additional financial assistance provided by the government helped them feel more financially stable, thus easing their burdens. According to Table 8, changes in income before and during COVID-19 of hospitality employees influenced their job insecurity, work engagement, financial concern, quality of life, and mental health, which supported hypothesis four (H_{4a-4e}).

Hypothesis 5: Socio-demographics (i.e., gender, age, income) significantly influenced quality of life.

An independent-samples *t*-test was conducted to compare males and females regarding their quality of life. As shown in Table 2, there were no significant differences in scores for males ($M = 3.73$, $SD = 1.17$) and females for quality of life ($M = 3.87$, $SD = 1.15$). The correlation analysis reported an insignificant relationship between gender and quality of life ($r = 0.058$, $p = 0.386$); hence, hypothesis 5a was not supported. A one-way between-groups analysis of variance was conducted, and no significant differences were reported between age groups on quality of life ($p > 0.05$) (see Table 4). The correlation result was insignificant ($r = 0.045$, $p = 0.498$); thus, hypothesis 5b was not supported. A one-way between-groups analysis of variance was conducted, and no significant differences were reported between current income groups and quality of life ($p > 0.05$) (see Table 6). The correlation between current income groups and quality of life was insignificant ($r = 0.115$, $p = 0.086$); hence, hypothesis 5c was not supported.

Hypothesis 6: Socio-demographics (i.e., gender, age, income) significantly influenced mental health.

An independent-samples *t*-test was conducted to compare males and females in terms of their mental health, and the analysis showed a significant difference in mean score for males (*M* = 2.33, *SD* = 0.90) and females (*M* = 2.61, *SD* = 0.76) for mental health (see Table 2). According to the linear regression equation, the symptoms of mental health for female respondents (*Y* = 2.631) were slightly higher than for male respondents (*Y* = 2.331). The correlation analysis reported a positive and statistically significant between gender and mental health (*r* = 0.161, *p* = 0.015); thus, hypothesis 6a was supported. Findings regarding females reporting higher mental health symptoms support previous studies by Fenollar-Cortes et al. (2021), where females are at higher risk of developing anxiety and depression than males.

A one-way between-groups analysis of variance was conducted to investigate differences between age groups on mental health. There were statistically significant differences in mental health scores at the $p < 0.05$ level for age groups. The effect size calculated using eta-squared (η^2) was 0.05 for mental health, indicating a moderate effect (see Table 4). After that, post-hoc comparisons using the Tukey HSD test were conducted to evaluate the significance of differences between pairs of group means. Based on the post-hoc analysis for mental health, the mean score for age group 2, between 26 to 35 years (*M* = 2.56, *SD* = 0.88), was significantly different from age group 4, between 46 to 55 years (*M* = 2.02, *SD* = 0.82) (*p* < 0.05). The correlation analysis reported a significantly negative association between age groups and mental health (*r* = -0.172, *p* = 0.009), indicating lower mental health symptoms are associated with older age groups. In comparison, higher mental health symptoms are linked with younger age groups. Such results support hypothesis 6b and Pearson et al. (2013) study, where younger individuals are more likely to experience mental illness than any other age group. A one-way between-groups analysis of variance was conducted, and no significant differences were found between current income groups on mental health (*p* > 0.05) (see Table 6). The correlation analysis was insignificant (*r* = 0.081, *p* = 0.229); hence, hypothesis 6c was not supported.

Table 2. Gender group differences between study variables.

Variable		*M*	*SD*	Sig.	Mean Diff.	*t*	CI	Cohen's d (η^2)
Job insecurity	Male	3.94	0.81	**0.007**	0.298	2.726	(0.08, 0.51)	0.032
	Female	3.64	0.79	**0.007**				
Work engagement	Male	3.95	1.27	0.346	-0.153	-0.985	(-0.46, 0.15)	0.004
	Female	4.10	1.04	0.326				
Financial concern	Male	3.73	0.76	0.111	0.154	1.672	(-0.03, 0.34)	0.012
	Female	3.58	0.62	0.096				
Quality of life	Male	3.73	1.17	0.386	-0.138	-0.869	(-0.45, 0.18)	0.003
	Female	3.87	1.15	0.384				
Mental health	Male	2.33	0.90	**0.015**	-0.283	-2.442	(-0.51, -0.06)	0.026
	Female	2.61	0.76	**0.012**				

Table 3. Linear regression results for response variables with gender as an independent variable.

Dependent variable, *Y*	*m*	*X*	*b*
Job insecurity			
3.641	-0.298	1 (females)	3.939
3.939	-0.298	0 (males)	3.939
Mental health			
2.631	0.282	1 (females)	2.331
2.331	0.282	0 (males	2.331

Note: *Y* = mX + b, where *Y* = response (dependent) variable, m = estimated slope, X = predictor (independent) variable, b = estimated intercept.

Table 4. One-way analysis of variance for the effects of age groups on job insecurity, work engagement, financial concern, quality of life, and mental health.

Variable	df	Sum of Squares	Mean Square	F	Sig. (p)	η²
Job insecurity						
Between	4	10.101	2.525	4.023	**0.004**	0.07
Within	221	138.739	0.628			
Total	225	148.84				
Work engagement						
Between	4	4.819	1.205	0.858	0.490	0.02
Within	220	308.945	1.404			
Total	224	313.764				
Financial concern						
Between	4	4.273	1.068	2.168	0.074	0.04
Within	221	108.873	0.493			
Total	225	113.146				
Quality of life						
Between	4	6.150	1.537	1.142	0.338	0.02
Within	221	297.632	1.347			
Total	225	303.782				
Mental health						
Between	4	8.069	2.017	2.834	**0.025**	0.05
Within	221	157.279	0.712			
Total	225	165.347				

Table 5. Means and standard deviations for three current income groups and five variables.

	Group 1 B40		Group 2 M40		Group 3 T20	
Variable	M	SD	M	SD	M	SD
Job insecurity	3.88	0.77	2.47	0.67	3.40	0.57
Work engagement	4.01	1.17	4.08	0.57	5.14	0.32
Financial concern	3.69	0.70	3.33	0.32	4.25	0.12
Quality of life	3.76	1.15	4.42	0.83	4.65	0.35
Mental health	2.44	0.84	2.53	1.00	3.25	0.35

Table 6. One-way analysis of variance for the effects of current income groups on job insecurity, work engagement, financial concern, quality of life, and mental health.

Variable	df	Sum of Squares	Mean Square	F	Sig. (p)	η²
Job insecurity						
Between	2	11.974	5.987	10.278	**< 0.001**	0.09
Within	221	128.728	0.582			
Total	223	140.701				
Work engagement						
Between	2	2.537	1.268	0.945	0.390	0.01
Within	220	295.452	1.343			
Total	222	297.989				
Financial concern						
Between	2	1.379	0.689	1.457	0.235	0.01
Within	221	104.581	0.473			
Total	223	105.960				
Quality of life						
Between	2	4.025	2.012	1.538	0.217	0.01
Within	221	289.256	1.309			
Total	223	293.280				
Mental health						
Between	2	1.356	0.678	0.956	0.386	0.01
Within	221	156.682	0.709			
Total	223	158.038				

Table 7. Linear regression results for job insecurity (response variable, *Y*) with three groups of independent variables (B40, M40, T20)

Dependent variable, Y	*m*	*X*	*b*
Job insecurity			
2.466	-1.398**	M40	3.864
3.400	-0.464	T20	3.864
(B40 as baseline)			
Job insecurity			
3.876	1.376**	B40	2.500
3.400	0.900	T20	2.500
(M40 as baseline)			

Note: $Y = mX + b$, where Y = response (dependent) variable, m = estimated slope, X = predictor (independent) variable, b = estimated intercept. **$p < 0.001$.

Table 8. Group differences for job insecurity, work engagement, financial concern, quality of life, and mental health between groups 1 (decrease) and 2 (same).

Variable		*M*	*SD*	Sig.	Mean Diff.	*t*	CI	η^2
Job insecurity	Decrease	4.26	0.68	<0.001	0.826	9.061	(0.65,1.01)	0.280
	Same	3.43	0.69	<0.001				
Work engagement	Decrease	3.60	1.20	<0.001	-0.835	-5.732	(-1.12, -0.55)	0.135
	Same	4.43	0.95	<0.001				
Financial concern	Decrease	3.96	0.72	<0.001	0.541	6.315	(0.37, 0.71)	0.153
	Same	3.42	0.54	<0.001				
Quality of life	Decrease	3.34	0.88	<0.001	-0.884	-6.241	(-1.16, -0.60)	0.156
	Same	4.23	1.21	<0.001				
Mental health	Decrease	2.21	0.74	<0.001	-0.473	-4.364	(-0.69, -0.26)	0.083
	Same	2.68	0.88	<0.001				

Table 9. Linear regression results for response variables with change in income level before and during the COVID-19 period as an independent variable.

Dependent variable, *Y*	*m*	X	b
Job insecurity			
3.429	-0.826**	1 (same)	4.255
4.255	-0.826**	0 (decrease)	4.255
Financial concern			
3.416	-0.54**	1 (same)	3.957
3.957	-0.54**	0 (decrease)	3.957
Work engagement			
4.430	0.835**	1 (same)	3.595
3.595	0.835**	0 (decrease)	3.595
Quality of life			
4.226	0.884**	1 (same)	3.342
3.342	0.884**	0 (decrease)	3.342
Mental health			
2.680	0.473**	1 (same)	2.207
2.207	0.473**	0 (decrease)	2.207

Note: $Y = mX + b$, where Y = response (dependent) variable, m = estimated slope, X = predictor (independent) variable, b = estimated intercept. **$p < 0.001$

5. CONCLUSION

This study examined the influence of socio-demographic characteristics, such as gender, age, and income, on job insecurity, work engagement, financial concern, quality of life, and mental health of hospitality employees working during the COVID-19 pandemic in Malaysia. Several analyses addressed the six research objectives, and the findings provide major takeaways. Significant differences were found between hospitality employees' gender and age groups regarding their job insecurity and mental health. Males reported higher job insecurity than females; however, females experienced more mental health symptoms. In short, gender influences hospitality employees' job insecurity and mental health. Meanwhile, no significant difference was reported between males and females in work engagement, financial concern, and quality of life. Additionally, the age groups of the respondents significantly influenced their job insecurity and mental health. The age group between 18 to 25 years significantly differed from those between 26 to 35 regarding job insecurity. In contrast, the age group between 26 to 35 years was significantly different from the age group between 46 to 55 years regarding their mental health. In this study, older age groups were associated with lower mental health symptoms, while younger groups were associated with higher mental health symptoms. Most respondents mentioned some of that time they exhibited symptoms of mental health (e.g., felt downhearted and blue, felt so down, and nervous), which should not be ignored as cases related to mental disorders are growing in Malaysia (Raaj et al., 2021).

Furthermore, this study found significant differences in job insecurity for the current income groups during COVID-19. Respondents in the B40 income group significantly differed from those in the M40 group for job insecurity. However, respondents in the T20 group did not significantly differ from either the B40 or M40 groups. Other interesting findings were gathered in this study. Slightly more respondents in this study shifted into the lowest income group (B40) during COVID-19 than before COVID-19. Most importantly, changes in the monthly income level before and during COVID-19 significantly influenced hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health. Respondents who experienced a decrease in their monthly income during COVID-19 had higher job insecurity and financial concern than those who received the same monthly income. Job insecurity is a stressful experience for affected employees; hence, these findings illuminate the government's critical role in helping the affected citizens.

Overall, this study contributes to the growing body of evidence on whether certain socio-demographic groups influence hospitality employee job insecurity, financial concerns, work engagements, quality of life, and mental health. Findings from this study will add a specific COVID-19 context in Malaysia in which hospitality employees were severely affected. To the best of our knowledge, this is the first known study that evaluated the socio-demographic influence on hospitality employees' job insecurity, financial concerns, work engagements, quality of life, and mental health. It is expected that the COVID-19 pandemic countries will be better prepared if a similar situation reoccurs. The study offers significant evidence for the Government of Malaysia to note the implications described in the next section.

5.1 Implications

Theoretically, based on the research findings, the effect of COVID-19 was different between the socio-demographic groups of hospitality employees. This study found gender significantly influenced hospitality employees' job insecurity and mental health. Additionally, changes in income before and during COVID-19 significantly influenced hospitality employees' job insecurity, work engagement, financial concern, quality of life, and mental health. In relation

to the job insecurity as a work stressor under the stress theory (Lazarus & Folkman, 1984), findings related to the influence of gender and changes in income level on job insecurity reflected that many affected employees had their salaries decreased during COVID-19 and males experienced greater job insecurity than females. Furthermore, the study findings can add to the existing COVID-19 literature on the hospitality industry, mainly on the socio-demographics influence on job insecurity, work engagement, financial concern, quality of life, and mental health.

The study findings offer several implications for future practice. Different approaches targeting different employee groups are needed to lessen the effect of COVID-19 on hospitality employees. Findings from this study offer important implications for the Government of Malaysia, hospitality operators and employees. Realizing the impact of COVID-19 on the hospitality industry, the government must develop additional interventions to assist the affected hospitality companies and employees. For example, various forms of financial assistance are indispensable and could be continued for the targeted groups to help citizens cope with the post-pandemic effects. Other forms of assistance are also necessary, such as job opportunities and training. Moreover, the industry could provide support and assistance programs for employees regarding mental health. The Ministry of Health Malaysia may tackle this issue by strengthening the community outreach programs to engage with those in need in addition to the existing interventions such as campaigns and mental health screening. Hospitality employees financially affected by COVID-19 might feel stressed or emotionally affected.

Hospitality operators knew that the decisions made during the pandemic severely impacted their employees physically and emotionally. Therefore, lessons learned from the COVID-19 pandemic should help hospitality managers justify improving their crisis management teams to prepare them for future major disruptions. Eliminating employees from the organization during the early stage of COVID-19 is a short-term strategy to reduce labour costs. A drastic decision is not benefitting the organization in the long term, notably when the government has reopened the international borders. Many companies, including hotels and restaurants, face difficulties recruiting talents to work for them (Croes et al., 2021; Liu-Lastres et al., 2022). One of the states in Malaysia name Sarawak, is experiencing a labour shortage in hospitality as not many people are interested in joining or rejoining the industry (The Star Online, 2022). A labour shortage is only one of the critical issues hospitality operators faces, in addition to high operating costs and slow demand for international tourists travelling to Malaysia (Poo, 2022).

5.2 Limitations and Future Research Recommendations

The current study is not without limitations. First, distributing questionnaires using social media platforms implies that the findings cannot be generalized to the entire population in Malaysia. Generalizing the findings to hospitality employees as a whole; without considering employee groups might be misleading. Second, the researchers faced difficulties gathering data during the pandemic despite offering incentive opportunities. Since hospitality employees likely had other stressors in their lives at this time, participation in this study was not a priority. Third, the data distribution reflects unequal samples of gender and age groups. Therefore, future researchers should use probability sampling to generalize the findings. Conducting a longitudinal study or collecting data during the post-pandemic or endemic phase would allow researchers to gather future data on the study variables. Furthermore, future researchers could consider using other methods, such as interviewing employees to get in-depth information regarding job insecurity, work engagement, financial concern, quality of life and mental health.

CONFLICT OF INTEREST

None declared.

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