

## ORIGINAL ARTICLE

# Exploring Perceived Workplace Psychosocial Factors and Its Relation on Mental Health Among Baristas

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## ABSTRACT

**Introduction:** Baristas highlighted unsustainable working conditions such as wage cuts, excessive work demands, insufficient employee benefits, and lengthy workdays in the food and beverage industry. This overwhelming situation was found to have adversely affected the workers' mental health. Objective: This research investigated mental health status and its relation to perceived workplace psychosocial factors among baristas. **Methods:** This cross-sectional study employed 398 baristas (response rate: 64.82%) working in the Greater Klang Valley using the Malay version of the self-administered survey. The Depression Anxiety Stress Scale (M-DASS 21) was used to assess the participant's mental health status while the Job Content Questionnaire (M-JCQ) evaluated the workplace psychosocial factors perceived by the participants. The socio-demographic and occupational information of the participants were also documented. The data were managed using SPSS and analyzed for descriptive and inferential analyses. **Results:** The results reported 195 baristas (75.60%) encountered poor mental health with the most common symptoms reported for stress (66.70%), anxiety (65.10%) and depression (49.60%). Approximately, half of the baristas experienced high job demands, low job control, and poor job support. Significant associations were recognized between depression and poor psychosocial factors (high job demands and poor job support). **Conclusion:** The findings indicated high prevalence of poor mental health status among baristas. Significant associations were documented between depression and workplace perceived psychosocial domains of high job demands and poor job support. This preliminary study can be used as a reference for future research in ensuring the wellness of workers in the Food and Beverage industry.

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## INTRODUCTION

The variety in the Malaysian cuisine is a vibrant fusion of depicted numerous civilizations. Closer to home every year, the business of the food and beverage (F&B) industry expands and creates new trends. In 2017, the industry reported a gross output value of RM82.8 billion with an annual growth value of 11.7% (1). The consumer demand, however, continues to be high despite shifting trends. The industry offers a variety of services including full-service restaurants, fast-food chains, cafe, kiosks on the street, and self-service outlets.

Restaurants and cafe are reopening in large numbers during a challenging epidemic era. The coffee culture in Malaysia is thriving. There are many coffee shops selling a variety of coffee, and their numbers are expanding quickly due to the culture of coffee consumption. Numerous causes, such as urbanization and busy lifestyles, linked to the rise in coffee consumption behavior in Malaysia. This situation has created job opportunities among youth including working as baristas. Baristas are responsible for taking customers' orders, preparing high-quality drinks, operating the cash register, and maintaining the store's cleanliness and inventory. Baristas are expected to deliver these jobs fast and effectively while also fostering positive relationships with their patrons, therefore affecting the workers' psychological well-being and physical health (2).

The World Health Organization defines mental health as a state of well-being in which an individual realizes his or her abilities to cope with the normal stresses of life, work productively, and contribute to his or her community. In 2015, National Health and Morbidity Survey (NHMS 2015) documented that every one of three Malaysia encountered symptoms of poor mental health (3). The findings portrayed an increase in the magnitude of the reported number of 10.6% from the previous decades (3). Among the workers, research conducted by an international insurance company documented those one out of three workers suffered from mental health problems (4). The statistics were alarming because mental health has pervasive impacts on individuals, organizations, and social systems either directly or indirectly (4,5). For instance, the Malaysian government spent over RM14.5 billion on mental health-related concerns at work, which included the costs of personnel turnover, presentism issues, and absenteeism due to illness (5).

In the context of the working environment, economic proliferation, knowledge growth, technological advance, societal demands, and policy changes have led to a rapid transformation, making it challenging for workers to keep pace. Numerous theoretical models studied the relationship between workers' mental health and perceived workplace psychosocial job variables. This includes high job demands (6), poor social support (6), low job control (6), job insecurity (7), and work bullying (8). The renowned Karasek's Job demand-control (JDC) model (6) is used to explain the psychosocial workplace environment by predicting the type of job strains perceived by people in their workplaces. Job demands are described as the pressure perceived in delivering tasks within a timely manner. The job control at the workplace is measured by the autonomy that an individual has on the decision over his working environment. In the late 1980s, the concept of social support was introduced to reconcile the effects between job demands and job control in the existing Karasek's model. Social support is described as the support of peers and supervisors to facilitate workers' well-being and to create a healthy environment at the workplace. This later came to be known as the Job Demand-Control-Support (JDCS) model (9).

To the best of the authors' knowledge, this study was one of the first that explores the association between mental health status and occupational-related psychosocial factors among workers in coffee supply stores, particularly baristas. Thus, this research aims to investigate mental health status and its relation to perceived workplace psychosocial factors in baristas.

## MATERIALS AND METHODS

### Study design and recruitment process

This cross-sectional study was conducted among baristas working in the coffee shops located in the Greater Klang Valley, Malaysia. The selection of baristas was based on convenient sampling and support from the respective coffee shop. The sample size was estimated based on prevalence rate of mental health ( $p=29.2\%$ )(3,4), using a single proportion with a confidence interval (CI) set at 95%,  $\alpha$  (5%), and 80% power of the study to ensure sufficient sample size. Hence, minimum number to be recruited was 398 baristas. Barista diagnosed with mental illness was excluded from the study. This study received ethics approval from the Universiti Kuala Lumpur Research Ethics Committee (UREC/2020/005). Participants maintained their anonymity and were assigned unique identifying codes that were only known to the research team. Before the study started, the store manager's approval was acquired, and participants' informed consent was distributed. The research team disseminated survey questions to the staff with assistance of the store manager.

### Study material

Data were collected using the Malay-translated self-administrated survey comprising of three (3) sections. In the first section, participants were asked to provide information on sociodemographic (E.g.: age (years), marital status, level of education), and occupational (E.g.: years of employment, working days per week, and weekly working hours). In the second section, the mental health status (depression, stress, and anxiety) of participants was assessed using validated Malay version of the Depression, Anxiety, and Stress Scale (DASS21) (10,11) respectively over the past week. Each domain comprises of seven (7) statements and to be scored based on the four (4) Likert responses scored from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time). Scores from each set of domains were summed up to yield a single subscale score and interpreted from 'normal,' to 'extremely severe' according to the predetermined criteria. Higher scores indicate greater severity of depression, anxiety, or stress symptoms sustained by an individual. Additionally, the DASS Manual advised utilizing the DASS cut-off of 78 percentile scores as the referral point (10) rather than the median value for non-clinical samples when calculating and classifying the scores into "normal" versus "emotional distress." participants who displayed at least mild signs of sadness, anxiety, or stress are considered in emotional distress. The last section of the questionnaire evaluated the perceived workplace psychosocial factors using Malay-validated Job

Content Questionnaire (M-JCQ) (11,12). A total of 34 items were selected consisting of three (3) subscales: (1) job control (9 items), (2) job support (8 items), and (3) job demands (5 items) and were scored using a four Likert scale ranging from '1' (strongly disagree) to '4' (strongly agree) further computed to a total score. The total scores of each scale were, job control (24–96), psychological job demand (12–48), and job support (8–32) with higher scores of job control and job support indicating better working conditions on contrary to job demands (13). The median cut values of each scale were used to categorize the scale into two categories of high and low respectively (13).

### Statistical analysis

The data were managed and analyzed using IBM SPSS for descriptive and inferential statistics. The percentage, mean, standard deviation, and frequency distribution were calculated for descriptive statistics. The Chi-Square test was used to determine the association between mental health and psychosocial factors was used for with p value set at 0.05.

## RESULTS

### Demographic and occupational profiles

A total of 258 barista returned the questionnaire and eligible for the study (response rate: 64.82%). Table I summarized the socio demographic and occupational profile of the participants. Most of the barista were Malays (85.70%), unmarried with an average age of 24.168 (SD=4.96) years. Most of them completed tertiary education with an average monthly income of MYR1960.31.25 (SD=2481.56). More than half of the studied barista been working for more than two years, with average employment years of 3.72 (SD=4.14) years. Three of four baristas worked on a shift basis with majority working less than 8 hours on daily basis. Continuous variables including age, number of service years, years of working experience, and working hours per day then dichotomized based to the median cut-off value respectively.

### Mental health status

Table II presents the descriptive statistics of the DASS21 subscales. The mean (SD) scores of the subscales are as follows: depression [10.87 (SD: 9.70)], anxiety [12.29 (SD: 8.94)], and stress [15.12 (SD: 8.96)]. The Cronbach's alpha coefficient of the DASS subscales revealed satisfactory values of more than 0.70. The present research indicates that approximately three out of four participating baristas (75.60%) sustained at least one symptom of poor mental health. Of these, stress was reported as the most common symptom of poor mental health (66.70%), followed by anxiety (65.10%) and

depression (49.60%) among the baristas. Interestingly, one of four baristas in this study agreed that they experienced extremely severe symptoms of anxiety, as compared to the other two subdomains of DASS21.

### Mental health status and workplace perceived psychosocial factors

Table III tabulates the descriptive statistics for the subscales of Karasek's psychosocial components. The job supports showed excellent internal consistency values  $> 0.70$  ( $\alpha=0.90$ ), whereas both job control and job demand acceptable Cronbach's alpha values (0.36-0.63). The mean (SD) for each psychosocial domain was 37.24  $\pm$  5.91 (job demands), 70.00  $\pm$  10.42 (job control), and 26.29  $\pm$  4.38 (job support). To estimate the workplace's psychosocial exposures, score was categorized into two groups, low and high based on the median values of each subscale. Thus, a barista scoring below the median value for social support ( $<26$ ) is considered to receive poor support from peers and supervisors. Those who obtained median score more than 36 is categorized as experienced high job demands while low autonomy at work was characterized by participants scoring a median value of less than 70. Depression symptoms were significantly observed in baristas that experienced poor job support from either supervisor or co-workers. Similarly, depression was significantly associated with high job demands.

## DISCUSSION

Emotional distress was known to be significant health outcomes measured in various work environments (14, 15). The issue concerning poor mental health status among workers has become a worldwide phenomenon. Workers in the food service industry are exposed to challenging and unsustainable working environments to meet customers' needs and orders. Baristas are expected to prepare and serve good quality drinks within a short time, do housekeeping work, and administrative tasks apart from dealing with difficult customers. This profession also obliged the workers to uphold good manners when attending to customers although under greater pressure also to adhere to instructions from the supervisor. This situation has possibly deteriorated an individual's mental status further adversely affecting one's quality of life. Even though research on mental health in relation to psychosocial factors at work has been quite active for a long time, less attention was given to coffee shop workers which resulted limited source of literatures. Hence, this study aimed to determine mental health status and workplace perceived psychosocial factors in baristas and the relationship between both variables.

**Table I : Socio-demographic profile among baristas (N=258)**

Variable	%(n)	Mean (SD)
Age (Years)		
≤23	55.40(143)	24.16(4.96)
> 23	44.60(115)	
Gender		
Male	50.80(131)	
Female	49.20(127)	
Races		
Non Malay	14.30(37)	
Malay	85.70(221)	
Level of education		
Non-tertiary	31.00(80)	
Tertiary	69.00(178)	
Marital Status		
Unmarried/divorced	84.10(217)	
Married	15.90(41)	
Working Experience (Years)		
<2	53.10(137)	3.72(4.14)
≥2	46.90 (121)	
Year of employment in current company (Years)		
		1.48(1.75)
Working Hours/day (Hours)		
<8	70.20(181)	9.00(1.70)
≥8	29.80(77)	
Working in Shift		
No	24.00(62)	
Yes	76.00(196)	
Household incomes (MYR)		
		1960.31(2481.56)

**Table II : Descriptive statistic of mental health status among barista (N=258)**

Subscales	Cronbach's $\alpha$	Mean (SD)	Status of mental health (%)				
			Normal	Mild	Moderate	Severe	Extremely severe
Depression	0.89	10.87 (9.70)	50.40	10.90	20.90	10.10	7.80
Anxiety	0.82	12.29 (8.94)	34.90	5.40	22.90	11.60	25.20
Stress	0.81	15.12 (8.96)	33.30	33.70	21.30	9.70	1.90

**Table III : Association Between Mental Health Status and perceived workplace psychosocial factors (N=258)**

Subdomain	Median	Mean (SD)	Cronbach's $\alpha$	Depression % (n)			Anxiety % (n)			Stress % (n)		
				Normal	Depressive	$\chi^2$ (df)	Normal	Anxious	$\chi^2$ (df)	Normal	Stress	$\chi^2$ (df)
<i>Job Demand</i>												
Low (n=130)	36	37.24(5.91)	0.36	43.10(56)	57.80(74)	5.60 (1)*	42.20(38)	54.80(92)	3.69 (1)	47.70(41)	51.70(89)	0.38 (1)
High (n=128)				56.90(74)	42.20(54)		57.80(52)	45.20(76)		52.30(45)	48.30(83)	
<i>Job Control</i>												
Low (n=120)		70.00(10.42)	0.63	45.40(59)	47.70(61)	0.13 (1)	44.40(40)	47.60(80)	0.24 (1)	46.50(40)	46.50(80)	0.00 (1)
High (n=138)	70			54.60(71)	52.30(67)		55.60(50)	52.40(88)		53.50(46)	53.50(92)	
<i>Job Support</i>												
Low (n=123)	26	26.29(4.38)	0.90	38.50(50)	57.00(73)	8.92 (1)*	46.70(42)	48.20(81)	0.06 (1)	43.00 (37)	50.00(86)	1.12 (1)
High(n=135)				61.50(80)	43.00(55)		53.30(48)	51.80(87)		57.00 (49)	50.00(86)	

\*p value <0.05

Although various established instruments are available to evaluate the level of an individual's general mental health, this study preferred the DASS21 because it served as a general severity measurement scale of related depression, anxiety, and stress symptoms (10). The selection of DASS21 in determining the level of emotional distress is in accordance with previous studies among workers (16, 17). The internal consistency reported high reliability across subdomains of DASS21 (19), similar to those found in local study conducted among healthcare workers (11).

The present findings reported approximately four out of five baristas agreed that their encountered at least one symptom related to poor mental health status in comparison to the general population in Malaysia of 29.20% (1) and earlier study among workers in Malaysia (4). Of these, more than half of the studied population suffered from stress (66.70%), and anxiety (65.10%) as compared to less than half the study population reporting depressive symptoms. Likewise, a study among casual dining employees evidently reported almost similar outcomes that the participants sustained moderate to high-stress levels (18). Coherently, a cross-sectional study on waiters in Ghana using a similar screening instrument also discovered a high prevalence of poor mental health with the most prevalent symptom was for anxiety (52.30%) followed by depression (38.30%) and stress (34.40%) (15).

The Cronbach's alpha for all items of Malay-validated Job Content Questionnaire (M-JCQ) suggesting that the respective items have good internal consistency (19). The Cronbach's alpha coefficients showed acceptable values for social support and job

control (Cronbach's  $\alpha=0.90$  and  $0.63$ , respectively). The Cronbach's alpha value of job demand was similar to those borderline values reported in other studies (12,20). McVicar and his team (2003) (21), based on findings in research involving nursing staff concluded that the workers' own perception of their job could also be an important contributing factor to their health problems. Numerous researchers suggested evidence that the presence of an imbalanced perceived psychosocial at work such as high job demands, low decision autonomy, and insufficient social support, may become a great treat to the workers' mental health (14,8,16). The analysis computed that almost half of the baristas (49.60%) experienced high job demands, poor job supports (47.70%), and low job control (46.50%). The outcomes are expected to result from the interaction between baristas with customers including those with difficult behavior (22). The Job Demand–Control (JDC) (6) and Job Demand–Control–Support (JDCS) models (9) are renowned theoretical approaches that commonly refer to understand the relationship among task characteristics, physical health, and psychological well-being. Workers with less autonomy at work, performing same task, and greater job demands could later lead to stress (15). Many studies have examined the association between perceived workplace psychosocial factors and mental health in different occupational settings. For instance, a study performed among work force of hotel and catering industry in Hong Kong documented that high psychological demanding environment and low decision autonomy at work intensified stress levels (23). The results of this research offered significant evidence of the association between depression and high job demands and poor social support. Evidently, systematic studies also described

similar findings that illustrated significant relationship between both domains of Karasek's Model (job support and job demands) symptoms of depression (24).

The study, nonetheless, recommended future work to address several possible limitations. Firstly, adopting the cross-sectional study design, unable to firmly establish the causal effect relationship between mental health status and perceived workplace psychosocial factors. Hence, the outcomes from this study need to be interpreted with concerns. Secondly, the study used self-administered survey for data collection to achieve the research objectives within a short period of time. Although the data collection method encourages the baristas' participation in the study with peace of mind, there is the possibility that the barista' responses may show biasness, due to the over reporting or under reporting to provide socially preferable answers over their real experiences. It is suggested in future work to consider the qualitative research (Eg: focus group discussion) because it will allow depth discussion on the responses received from the participants. This will offer better insight which may also complement the quantitative findings.

## CONCLUSION

The findings offer interesting data that the majority of the studied barista reported on symptoms of poor mental health status. In addition, the baristas also unsustainable working environment in the context of psychosocial factors workplace psychosocial where almost half of them experienced high job demands, low job autonomy and poor job support. Significant associations were documented between depression and high job demands and poor job support, respectively. Thus, provide significant preliminary data towards an evidence-based approach in addressing the poor mental health issues among the working population and the general population. This is also in support for efforts to strive towards the Third Sustainable Development Goal (SDG 3) of promoting mental health and well-being. This preliminary study can be used as a reference for future research in ensuring the wellness of workers in the Food and Beverage industry.

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