ORIGINAL ARTICLE

Predictors to Mental Well-Being at Workplace: A Quantitative Case Study Among Administrative Staff of a Public University in Malaysia

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ABSTRACT

INTRODUCTION: The Malaysian Public Service Department reported many staff were at risk of mental health crisis or illness and an independent study revealed concerning rate of suicidal ideation. This study intends to: (a) describe the level of mental health literacy (MHL), mental health self-efficacy (MHSE), and mental well-being (MWB) among university administrative staffs, and (b) explore the dynamic influence between mental health literacy, mental health self-efficacy, and mental well-being. **MATERIALS AND METHODS:** A cross-sectional study using validated questionnaires was done on 91 administrative staff in one public university in Malaysia. The questionnaire consists of 37 items measuring MHL (subdimensions: knowledge, erroneous belief, first aid, and self-help), MHSE (subdimensions: optimism, factor coping, and advocacy), and MWB. Data was analysed using descriptive statistics, Pearson's correlation, and multiple linear regression. **RESULTS:** The mean scores for subdimensions of MHSE ranged from 14.2 to 28.6 (SD=2.73 to 4.45), subdimension of MHL from 6.1 to 25.5 (SD=2.17 to 3.35), and MWB was 18.5 (SD=3.36). Correlation analyses revealed all subdimensions of MHSE and MHL, as well as MWB showed significant weak to strong correlation (r=0.22 to 0.69). Only optimism subdimension of MHSE retained significance in predicting MWB (B=0.43) and among MHL subdimensions, only first aid retained significant prediction to optimism. **CONCLUSION:** The findings provide valuable insights to the dynamic role between subdimensions of MHL and MHSE, as well as their contribution towards MWB. Healthcare professionals should consider this dynamic into designing mental health promotion activity.

Keywords
mental well-being, mental health literacy, mental health self-efficacy, workplace

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INTRODUCTION

The importance of mental health or mental well-being has risen in both professional and public focus. According to the American Psychological Association, mental health is defined as *"a state of mind characterized by emotional well-being, good behavioral adjustment, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationships and cope with the ordinary demands and stresses of life."* [1] On the other hand, mental well-being was proposed as an alternative terminology to represent mental health from the positive psychology perspective.[2] The two terminologies have been used interchangeably despite minor difference in wording and perspective. Sudden changes by the recent COVID-19 pandemic have triggered the rise of mental health crisis and mental illness. Those from low-income communities, especially in urban areas, were more affected by mental illness as indicated by a higher prevalence for depression (24.2% vs 14.3%), anxiety (36.3% vs 8.0%), and stress (20.6% vs 0.9%) compared to national figures.[3] These would have an impact on the workplace that may be reciprocal in nature. Surveys have indicated that the prevalence of high stress had shown an increasing trend among Malaysian workers and potentially lead to depression, anxiety, and burnout.[4-6] The Malaysian Public Service Department have reported that more than 40,000 staff within the public service sector were at risk

of mental health crisis or illness and more than 11 % of healthcare workers reported suicidal ideation.[7] This report added concerns over the mental well-being of workers.

Not surprisingly, the efforts to advocate for mental health at the workplace were numerous. Most notably was the recognition of the issue in the recent Mental Health Day theme for year 2024 that was "*It is Time to Prioritize Mental Health in the Workplace*".[8] Advocacy programs have been initiated by government agencies or corporate sectors to promote mental health among workers. Both the role of leadership and meaningful work seemed to significantly predict better mental health among staff in small and medium enterprises.[9] The introduction of Employee Assistance Program (EAP) also showed significant contributions to improve mental well-being among staffs.[10] This indicates that the organization can initiate impactful programs to maintain and improve the state of mental well-being among their staff.

Studies among university staff estimated prevalence of depression, anxiety, and stress were 28.7%, 50.1%, and 14.8% respectively.[11] Staff that are women, age less than 40 years old, and hold non-academic roles were reported to be prone to depression. Another study among academician added high expectation and assuming multiple roles significantly contributed to high level of stress and burnout.[12] Studies involving non-academic staff were still lacking, especially in exploring factors related to mental health advocacy and its impact on mental well-being. Current available studies have focused on the prevalence of mental health crisis or illness, thus lacking the positive psychology perspective to the issue. This created a gap in operationalizing the concept of mental well-being in which understanding of the mental illness does not necessitate adequate to achieve good mental well-being. As far as the concept is concerned, a good mental well-being can also be achieved in the presence of mental illness.

Among the variables that are related to mental health advocacy are mental health literacy and mental health self-efficacy. Mental health literacy was defined as "*knowledge and beliefs about mental disorders which aid their recognition, management, and prevention*".[13] High level of mental health literacy has been shown to predict good attitude towards mental health and help-seeking behaviour.[14-16] Good mental health literacy can be achieved through advocacy and health education program that showed effectiveness among diverse populations such as adolescents and adults.[13,17,18] Mental health literacy was less studied on its influence towards mental well-being among Malaysian population.

Mental health self-efficacy was defined as *"perceived ability to perform an act"*.[19] The benefits of good mental health self-efficacy have been numerous and seem sustainable through encouraging social support, predicted less occupational stress, and building a conducive environment at work among Malaysian youths.[20,21] Similar to mental health literacy, mental health self-efficacy can be shaped through advocacy program as evident by the *Sanubari* Optimal Health Program (Sanubari OHP) among junior doctors in Malaysia.[22] This was only one study that linked mental health self-efficacy to mental well-being and currently, there is a lack of evidence among university administrative staff.

Therefore, this study aimed at addressing the above gaps. Specifically, the study intended to achieve the following objectives: (a) describe the level of mental health literacy, mental health self-efficacy, and mental well-being among university administrative staffs, and (b) analyse the role of mental health literacy and mental health self-efficacy onto mental well-being among university's administrative staff.

MATERIALS AND METHOD

This study utilized a cross-sectional design using a validated questionnaire among university administrative staffs at the International Islamic University Malaysia. The questionnaire was self-administered to 91 staff that were chosen using purposive sampling among participants in a series of mental health advocacy workshops. The staff were included for data collection if they were on permanent employment and worked at least one year at the university. There was no exclusion criteria set. Multiple reiterations were made to express their right not to participate in the study to overcome possible

perceptions of coercion before consent was obtained. Sample size calculation using a-priori sample size calculator for multiple regression by Soper with anticipated moderate effect size from previous study and treating the subdimensions as individual predictor revealed a minimum sample size of 56 respondents.[22,23] The questionnaire consists of four sections that measured: (1) sociodemographic characteristics, (2) mental health literacy, (3) mental health self-efficacy, and (4) mental well-being. Sociodemographic characteristics such as age, gender, highest education attainment, and household income.

The mental health literacy was measured using the Mental Health Literacy Questionnaire-Short Version for Adults (MHLq-SVa) consisting of 16 items measuring four dimensions: (a) knowledge of mental health problems, (b) erroneous belief/stereotypes, (c) help-seeking and first aid skills, and (d) self-help strategies. The instrument utilized a 5-point interval scale from "strongly disagree" to "strongly agree". It has good content and construct validity and achieved 0.84 reliability index on Cronbach's alpha.[24] Scores were obtained through summation of responses for each subdimension and for the whole construct. However, only scores for subdimensions were used for analysis in this study. Each subdimension has different number of items thus producing maximum score ranging from 15 to 30. All subdimensions reflected better outcomes with higher score except for erroneous belief subdimension.

Mental health self-efficacy was measured using the Mental Health Confidence Scale consists of 16 items measuring three dimensions that are: (a) optimism, (b) factor coping, and (c) advocacy.[25] The instrument utilized a 6-point interval scale with the extremes defined as "very not confident" and "very confident", respectively. It has good content and construct validities as well as 0.94 reliability index on Cronbach's alpha. Items can be scored by summation for each subdimension or the whole construct. Therefore, scores may range from 16 to 112 for the whole construct. Higher scores reflected higher mental health self-efficacy.

Mental well-being was measured using the WHO-5 mental well-being questionnaire consisting of five items measuring one dimension. The response options utilized a 6-point interval scale from "none at all" to "all the time". Total score may range from 0-30 points by summation of responses. It reported good content, factorial, concurrent, and convergent validity evidence and 0.91 reliability index on Cronbach's alpha.[26] There was no categorisation proposed for the total score but higher score reflected higher mental well-being.

Descriptive analysis employed frequency and percentage for categorical variables and mean and standard deviation for numerical variables. Pearson's correlation was used to analyse the relationship between scores of mental health literacy, mental health self-efficacy, and mental well-being. Correlation coefficient that are less than 0.2 was considered as very weak, 0.21 to 0.40 as weak, 0.41 to 0.60 as moderate, 0.61 to 0.80 as strong, and 0.81 to 1.0 as very strong.[27] Multiple linear regression was used to identify significant predictors to mental well-being. Ethical approval was obtained from the IIUM Research Ethics Committee [IREC 2024-292].

RESULTS

Most of the respondents were female (78%), with a mean age of 42.6 years old, married (74.7%), with household income between RM3,001 - RM6,000 (44%), and all respondents were of Malay ethnicity and subscribed to the religion of Islam. Over 60% of respondents attained at least an undergraduate education. Detailed descriptive statistics for demographic characteristics was presented in Table I below.

Table I: Respondents Sociodemographic Characteristics (n = 91)

Variable		n (%)
Age		42.6 (8.77)*
Gender		
	Male	20 (22)
	Female	71 (78)
Marital Status		
	Deceased spouse	3 (3.3)
	Married	68 (74.7)
	Single	20 (22)
Household Income		
	Less than RM 3,000	17 (18.7)
	RM 3,001 to RM 6,000	40 (44)
	RM 6,001 to RM 9,000	15 (16.5)
	RM 9,001 to RM 12,000	12 (13.2)
	More than RM 12,000	7 (7.7)
Highest education attained		
	Primary school	2 (2.2)
	Secondary school	34 (37.4)
	Undergraduate	29 (31.9)
	Postgraduate	26 (28.6)

* mean (SD)

Correlation between Subdimensions of Mental Health Self-Efficacy, Mental Health Literacy, and Mental Well-Being

Subdimensions under mental health self-efficacy showed several significant correlations. Optimism showed weak positive correlation with factor coping (r=0.27, p=0.011) and knowledge (r=0.29, p<0.01), moderate positive correlation with first aid (r=0.44, p=0.008) and self-help (r=0.40, p<0.001), and strong positive correlation with advocacy (r=0.69, p<0.001) and mental well-being (r=0.67, p<0.001). Factor coping showed weak positive correlation with advocacy (r=0.38, p<0.001) and mental well-being (r=0.30, p=0.006). Advocacy showed a weak positive correlation with knowledge (r=0.36, p<0.001), and moderate positive correlation with first aid (r=0.55, p<0.001), self-help (r=0.52, p<0.001), and mental well-being (r=0.50, p<0.001). Higher score of optimism may show higher scores of factor coping, knowledge, first aid, and self-help subdimensions. Higher score of factor coping may show higher scores of advocacy, and mental well-being. Higher score of advocacy may show higher scores of knowledge, first aid, self-help, and mental well-being.

Several subdimensions of mental health literacy showed several significant correlations. Knowledge showed weak negative correlation with erroneous belief (r=-0.31, p=004), weak positive correlation with mental well-being (r=0.26, p=0.018), and moderate positive correlation with first aid (r=0.46, p<0.001) and self-help (r=0.60, p<0.001). Erroneous belief showed a weak negative correlation with self-help (r=-0.31, p=0.004). First aid showed a weak positive correlation with mental well-being (r=0.22, p=0.044) and a moderate positive correlation with self-help (r=0.58, p<0.001). Finally, self-help showed a weak positive correlation with mental well-being (r=0.32, p=0.003). Higher score of knowledge may present with lower score of erroneous belief, and higher scores of mental well-being, first aid, and self-help. Higher score of erroneous belief may show lower score of self-help. Higher score of first aid may show higher scores of mental well-being and self-help. Finally, higher score of self-help may show higher score of mental well-being. These findings were summarized in Table II.

Table II: Descriptive Statistics and Pearson Correlations Analysis between Mental Health Self-Efficacy, Mental Health Literacy, and Mental Well-Being

Variable	Mean (SD)	Correlation coefficient						
		1a	1b	1c	2a	2b	2c	2d
Mental health self-efficacy								
Optimis (1a)	28.6 (4.45)							
Factor coping (1b)	23.5 (6.33)	0.27*						
Advocacy (1c)	14.2 (2.73)	0.69**	0.38**					
Mental health literacy								
Knowledge (2a)	25.5 (3.35)	0.29**	0.16	0.36**				
Erroneous belief (2b)	6.1 (3.02)	-0.10	0.09	-0.10	-0.31**			
First aid (2c)	12.9 (2.17)	0.44**	0.09	0.55**	0.46**	-0.16		
Self-help (2d)	18.2 (2.54)	0.40**	-0.07	0.52**	0.60**	-0.31**	0.58**	
Mental well-being	18.5 (3.36)	0.67**	0.30**	0.54**	0.26*	0.03	0.22*	0.32**

Note: Correlation is significant at the *0.05 or ** 0.001 level (2-tailed).

Predictors to Mental Well-being

Multiple linear regression revealed only optimism retained significant prediction of mental well-being scores ($F(6,78)=12.73$, $p<0.001$). For every unit of optimism score, mental well-being scores increase by 0.43 unit (B=0.43, 95% CI: 0.27–0.60, p<0.001). The prediction model was able to explain 45.6% (Adjusted R^2) variance in mental well-being scores. These findings were summarized in Table III below.

Table III: Multiple Regression Analysis for Predictors of Mental Well-being

Predictors	Univariate		Multivariate			
	B	p	B	95 % CI		p
				LL	UL	
Mental health self-efficacy						
Optimism	0.51	< .001	0.43	0.27	0.60	<.001
Factor coping	0.16	.016	0.05	-0.05	0.16	.378
Advocacy	0.66	< .001	0.18	-0.15	0.51	.335
Mental health literacy						
Knowledge	0.27	.008	0.05	-0.16	0.26	.601
Erroneous belief	0.04	.780	-	-	-	-
First aid	0.34	.059	-0.33	-0.67	0.00	.053
Self-help	0.42	< .001	0.16	-0.17	0.48	.292

Note: B – regression weight; CI – confidence intervals; LL – lower limit; UL – upper limit

Despite several predictors showing significance values less than 0.001 in the univariate analysis, only optimism retained its significance. This indicates that the influence of factor coping, advocacy, knowledge, and self-help onto mental well-being were a function of optimism. Subsequent analyses were done on subdimensions of mental health literacy as predictors to optimism. The multivariate analysis revealed only first aid (B=0.63, 95% CI: 0.14–1.12, p=0.010) retained its significance in predicting optimism. The prediction model was able to explain 19.4 % (Adjusted R^2) variance in optimism scores. These findings were summarized in Table IV below.

Table IV: Multiple Regression Analysis for Predictors of Optimism

Predictors	Univariate		Multivariate			
	B	p	B	95 % CI		p
				LL	UL	
Mental health literacy						
Knowledge	0.39	.002	0.04	-0.28	0.36	.762
Erroneous belief	-	-	-	-	-	-
First aid	0.89	< .001	0.63	0.14	1.12	.010
Self-help	0.70	< .001	0.35	-0.12	0.81	.157

Note: B – regression weight; CI – confidence intervals; LL – lower limit; UL – upper limit

Results of the predictors to optimism revealed that the influence of knowledge on mental health and self-help onto optimism was a function of first aid. Reflecting on the correlation between these predictors, it seemed probable that knowledge and self-help contributed to the development of first aid, which in turn predict optimism and subsequently mental well-being.

DISCUSSION

To recapitulate, most of mental health self-efficacy (MHSE) and mental health literacy (MHL) subdimensions were significantly correlated with each other, except for factor coping (MHSE) and erroneous belief (MHL). Advocacy subdimension of MHSE showed stronger magnitude of correlation with MHL subdimensions compared to optimism. These findings were in congruent with studies involving Chinese civil servants, Turkish nurses, and Australian sportsman.[28-30] Mental health literacy was associated with some elements of mental health self-efficacy as operationalised in this study. In particular, emotional regulation self-efficacy was shown to be influenced by mental health literacy among Chinese civil servants, whereas Australian sportsman showed significant association between mental health literacy with confidence to support and help-seeking (conceptually related to optimism and advocacy, respectively). These coherent findings suggest that mental health self-efficacy and mental health literacy have associations across different culture and population. The stronger magnitude of correlation between advocacy and subdimensions of MHL suggests an opportunity for a tailored intervention that improves specific elements of MHL. This finding was novel in this study, especially within the target population.

Mental health promotion should focus on increasing knowledge on mental health, ways to seek help (first aid) and good self-help skills in hope to improve advocacy subdimension of MHSE. Different modalities can be utilised in delivering the intervention. For example, a self-guided digital service has shown to improve both mental health literacy and mental health self-efficacy among Finnish patients with more relevance to younger population.[31] Classical approach using educational module among young adults in Chennai showed a single 90-minute MHL module can lead to significant improvements in stigma, knowledge, and behaviour related to mental health up to 6 months post intervention.[32] The refutation of erroneous belief may not be preferred to include in the mental health promotion. As indicated above, erroneous beliefs were not significantly correlated with advocacy or any other MHSE subdimensions. However, the negative correlation between knowledge and erroneous belief suggested that focusing mental health promotion on improving knowledge on mental health may provide additional benefit of reducing erroneous belief. Such approach of educating is much more desirable compared to antagonising approach to refute erroneous beliefs.

Bivariate analyses showed two subdimensions each of mental health literacy (MHL) and mental health self-efficacy (MHSE) showed significant prediction towards mental well-being. Knowledge and self-help of MHL and optimism and advocacy of MHSE predicted scores of mental well-being. This is consistent with studies that reported improvement in knowledge and self-help skills showed significant impact on mental wellbeing among various population.[15,16,29,33] Optimism and advocacy predicted scores of mental well-being with the latter presented with higher magnitude of influence. The influence of MHSE onto mental well-being or precursors to mental well-being has been shown in studies involving parents, adolescents, and opioid users of overseas populations.[22,34-36] This study extended the evidence of MHSE predicting mental well-being among working adults in university's administration.

This study found optimism, a subdimension of MHSE, as the sole significant predictor to mental well-being among administrative staff in a public university. This lends support to the full mediation role of optimism as seen among Spanish elderly population in previous study.[37] Optimistic individuals tend to have a positive outlook

on life, which may help them cope more effectively with work-related stressors, reduce negative emotions, and maintain better mental well-being. The influence of other mental health self-efficacy and literacy subdimensions on mental well-being may appear to be mediated by optimism as suggested by the change in regression weight and significance status from bivariate to multivariate regression analysis. This suggests that the benefits of mental health knowledge, first aid skills, and self-help strategies on mental well-being may operate through their effects on optimism. Individuals with greater mental health literacy and self-efficacy may be more likely to maintain an optimistic outlook, which in turn promotes their overall mental well-being.

The dissipating role of MHL onto mental well-being stimulated the quest to understand its role onto optimism. First aid was the only significant predictor to optimism among the subdimensions of MHL. Considering the strong positive correlation between the variables, the dynamic role of these subdimensions can be postulated. The formation of good MHL should be directed to improve first aid skills through collectively improving knowledge and self-care. First aid MHL may then resulted in better optimism among staff to manage their mental health, thus resulting in good MWB. This proposed mechanism of action was suggested after reviewing the results of correlation and regression analyses in tandem. Mental health literacy should be seen as precursors to developing good MHSE rather than being a direct contributor to mental well-being. Hence, this consideration should be reflected on how healthcare professionals assess the effectiveness of their intervention.

There are several limitations identified in this study. Firstly, this study was limited to administrative staff at a single public university, which may limit the generalizability. Future research should examine these relationships across broader samples of employees in different sectors and organizations. Secondly, a purposive sampling method during data collection may provide skewed picture among homogenous population. Therefore, future studies may consider using random sampling method to obtain a more representative data of the population. Thirdly, the dynamic between subdimensions of MHL and MHSE, and its role towards MWB were analysed using linear regression technique due to the limited sample size and resources available for complex analysis. Future studies may consider using structural equation modelling to re-explore the role of these subdimensions as reported and discussed above. Fourthly, this study has focused on variables that were considered potential outcomes for mental health advocacy program as organised by the university and lack consideration of confounding variables. Future studies with better representativeness should consider including potential confounding variables such as history of mental illness, caregiving status for mental illness patient, and others.

CONCLUSION

The level of mental health literacy, mental health self-efficacy, and mental well-being among university administration staff were moderate with wide variation especially in factor coping of MHSE. Subdimensions of MHL and MHSE showed dynamic inter-relations and revealed that only first aid subdimension of MHL predicted optimism, and only optimism predicted MWB. These findings provided suggestions on how to focus the mental health promotion efforts and what to measure for assessing the effectiveness of specific interventions.

CONFLICT OF INTEREST

All authors declared no competing interests

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