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Languishing: Do university students with better mental health literacy fare better?

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Abstract

The term "languishing" gained widespread recognition and appeal during the COVID-19 pandemic as it succinctly captured the pervasive sense of stagnation, disconnection, and emotional depletion experienced by many individuals amidst prolonged uncertainty and isolation. While existing research on the topic of languishing during COVID-19 has largely focused on people's mental health states in different populations and across different time periods, this paper elucidates if mental health literacy protects against languishing in higher education students—where languishing is reportedly most prevalent. In this study, we employed a correlational design and recruited participants from a university in Australia (N = 149). Our results indicated that mental health literacy did not predict languishing. With the COVID-19 pandemic underscoring the significance of mental health, our work contributes to the increasing emphasis on safeguarding and potentially enhancing mental well-being within both public and policy discourse.

Introduction

During the peak of the COVID-19 pandemic, stress, emptiness, aimlessness, feelings of insignificance, and inertia were widespread (Crabtree et al., 2023; Javed et al., 2020). Not only were people concerned about contracting COVID-19 and uncertainty about the future (Usher et al., 2020), but they also had to endure social isolation from lockdowns and quarantines (Blakely et al., 2021; Lu et al., 2020; Takashima et al., 2020). Schooling and working individuals also had to cope with "Zoom fatigue" from excessive virtual sessions (Lindstrom et al., 2021). Not surprisingly, many individuals throughout the pandemic reported their experience as being able to live life but without a reason or purpose, essentially feeling "blah" (Flaskerud, 2022). These feelings have become known as languishing - an idea introduced into public discourse by mainstream media, resulting in a wave of follow-up conservations (Grant, 2021). The idea of languishing gained significant popularity and appeal because it succinctly narrativised and captured the profound impact of the COVID-19 pandemic on people's lives and emotional states (Willen, 2022).

The concept of languishing was introduced to distinguish mental health from mental illness (Keyes, 2002). Keyes (2002) defines mental health as a collection of indicators encompassing emotional hedonic components, psychological well-being, and social well-being. Individuals who frequently experience positive emotions and have good psychological and social functioning are identified to be flourishing. In contrast, individuals who experience affective stagnation and perceive living their lives as empty but are not diagnosed with mental illness are said to be languishing (i.e., the absence of mental health). Flourishing and languishing exist on a mental health continuum. Languishing is associated with well-being, such that the more a person languishes, the lower their well-being (Wissing et al., 2021). Existing evidence also demonstrates that languishing is a predictor of mental illness and behaviours associated with mental illness; people in states of languish have a higher rate of being diagnosed with mood disorders such as anxiety and major depressive disorder (Keyes et al., 2010), are more likely to display suicidal behaviour (Keyes et al., 2012), and are slower to recover from mental illness (lasiello et al., 2019). A rise in languishing was observed as the pandemic unfolded. Nine months into the pandemic, non-languishing individuals decreased by 40%, while those categorised as languishing increased by 43% (Nes et al., 2022).

Languishing is reportedly most prevalent in higher education (HE) students. Consequent experiences of stress and insecurity following a crisis are particularly acute among university students (Browning et al., 2021). Unlike the schooling population and non-schooling young adult population, not only do university students have to adapt to abrupt changes in their learning environments and make behavioural changes consistent with regulations (e.g., social distancing and isolation), university students are also concerned about post-education employability (Tan et al., 2023). Given the multiple stressors faced by higher education (HE) students, it's unsurprising that HE students both university and college students - reported high levels of stress and academic burnout and had major concerns

regarding their mental health during the pandemic (Kwan, 2022; Mshigeni et al., 2021; Hawley et al., 2021). In fact, university students experienced poorer personal well-being than young adults of similar age in the general population (Tinsley, 2020). Anecdotal and empirical evidence demonstrate that languishing is also apparent among HE students and is experienced by most university students during the COVID-19 pandemic (Wixom, 2021; Visser & Law-van Wyk, 2021; Allen et al., 2023). HE students were in a state of languish for a longer period of time compared to the general adult population (ONS, 2021). Given that university students are more vulnerable to mental health difficulties given the developmental age phase they are in (Wen et al., 2021), these findings suggest that HE students - with their states of languish - are at a greater risk of developing mental illnesses at a later point in their lives.

The COVID-19 pandemic, while fostering an atmosphere of languishing, also catalysed increased momentum for mental health awareness (Nealon, 2021). Mental health literacy is the knowledge and ability to recognise mental disorders and seek help (Furnham & Swami, 2018). Specifically, mental health literacy includes the components of (1) the knowledge of how to seek information for mental health, (2) the knowledge and beliefs about causes and risk factors associated with mental health, (3) the recognition of specific illnesses/psychological distress, (4) attitudes which allow for recognition and help-seeking behaviour, (5) the knowledge regarding professional help and the availability and finally (6) the knowledge of self-help interventions (Jorm, 2012). Mental health literacy is paramount when it comes to the early intervention and prevention of the detrimental impact of mental health disorders (Bjørnsen et al., 2019; Kim et al., 2015; Kutcher et al., 2016; Spiker & Hammer, 2019; Zaidlin et al., 2022). Mental health literacy has been associated with the early identification of mental health disorders (Kelly et al., 2007) and higher levels of willingness to seek professional help for one's conditions (Gulliver et al., 2012). Teachers with higher levels of mental health literacy were more able to identify potential indicators of suicide, selfinjury, and suicidal ideation among students (Campbell et al., 2019). Additionally, greater mental health literacy was associated with less severe levels of depression among university students with reported psychological symptoms (Kim et al., 2015). This suggests that mental health literacy can be a protective factor against mental illnesses and the worsening of mental states.

Accordingly, this paper examines whether mental health literacy protects against languishing. Existing studies have shown that several protective factors help buffer HE students from the adverse effects of the pandemic. For instance, mindfulness allows one to be better able to shift their attention to more positive things over negative ones while going through the pandemic (Racine et al., 2021). HE students who received greater social support, academic support, and access to study-related household resources (i.e., conducive study place, stable internet connection, access to study materials) reported better psychological health than students without such support and access (Haliwa et al., 2021; Burt & Eubank, 2021; Moeller et al., 2022). Students with emotionally stable personality traits also reported less psychological distress (Moeller et al., 2022).

However, less is known as to whether mental health literacy protects individuals against languishing. Additionally, most of the existing literature had only examined people's levels of languishing during and after the COVID-19 pandemic (e.g., Concerto et al., 2022; Graham & Eloff, 2022; Crabtree et al., 2023; Vinko et al., 2022; Paz et al., 2022). As such, this paper seeks to address this literature gap by examining whether mental health literacy is a protective factor against languishing. Since mental health literacy relates to an individual's knowledge and understanding surrounding mental health, those with higher levels of mental health literacy are less likely to experience the state of languish.

Methods

Participants

An a priori power analysis was conducted based on work examining the relationship between mental health literacy and mental health (Nobre et al., 2022). Assuming a relatively conservative effect size ($f^2 = 0.15$), we used G*Power's (version 3.1.9.7) F-tests linear multiple regression, fixed model, R^2 deviation from zero with the following parameters to determine that we needed a minimum of n = 127 with 0.80 power and an α of 0.05.

A total of 149 participants were recruited through a university's subject pool system consisting of psychology students enrolled in the university (133 females, 14 males, and two others). Participants ranged from 17 to 50 years old (*M age* = 22.18, *Median age* = 20.00, *SD age* = 6.25). One hundred thirty participants have at least graduated from Year 12 high school, 17 have obtained a graduate degree, and 2 have a postgraduate degree. Within the university, there may be students who have decided to further their studies in psychology or to study psychology after obtaining their degree (or postgraduate degree) in a different field of study. This could clarify why some participants report having graduate or postgraduate degrees as their highest level of education.

A detailed analysis of the annual household income distribution among the participants reveals the following: 32 participants reported earning \$15,000 or less; 13 participants fell within the \$15,001 to \$25,000 range; 14 participants reported incomes between \$25,001 and \$35,000; 16 participants had annual incomes ranging from \$35,001 to \$50,000; 18 participants earned between \$50,001 and \$75,000; 20 participants reported incomes in the \$75,001 to \$100,000 bracket; 19 participants reported earnings between \$100,001 and \$150,000; and finally, 17 participants reported annual household incomes of \$150,000 or more (see Figure 1). Participants were awarded course credits for their psychology courses as compensation for their participation.

Procedure

Participants were directed to a Qualtrics online survey where they were provided with the study information, including the background, aim, participation involvement,

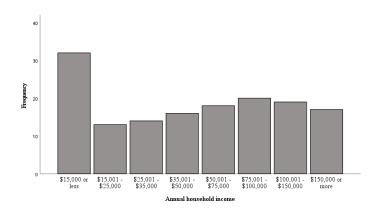


Figure 1. Annual household income distribution among participants (N = 149).

withdrawal process, data management and storage, privacy, possible risks and reimbursement of the study, and consent request. Participants indicated their consent by voluntarily proceeding with the online survey. Upon consent, participants completed a series of questionnaires assessing mental health state and health literacy. Participants also provided demographic information such as age, highest education level, and household annual income. This study was conducted in mid-2023 when the university has largely resumed in-campus activities and classes. This study has received the university's ethics approval.

Materials

Mental Health Literacy Scale

Mental health literacy was assessed using the Mental Health Literacy Scale (O'Connor & Casey, 2015), which contained 35 items designed to assess the knowledge and attitudes toward help-seeking behaviors and mental health. The items in this scale comprehensively assess all the attributes of mental health literacy previously defined by Jorm (2012) and have demonstrated good psychometric properties, including internal reliability, test-retest reliability, and content and structural validity (see O'Connor & Casey, 2015; Fulcher & Pote, 2021; Wei et al., 2018). Participants responded to the first 15 items of this scale, such as "To what extent do you think it is likely that Personality Disorder is a category of mental illness?" on a 4-point Likert scale (1 = Very unlikely, 4 = Very likely). They then responded to the next 20 items, such as "I am confident that I know where to seek information about mental illness" and "A mental illness is a sign of personal weakness" on a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). Items on this scale were summed to form a single index for mental health literacy, with higher scores indicating greater mental health literacy (M = 132.39, SD = 15.51, $\alpha = .92$). This scale produces a minimum score of 35 and a maximum score of 160 (O'Connor & Casey, 2015).

Languish

The mental state of languishing was measured using the Mental Health Continuum Scale – Short Form (Keyes, 2008). This scale is based on the concept of positive mental health, which comprises three dimensions: emotional well-being (positive emotions and life satisfaction), social well-being (social integration and social contribution), and psychological well-being (autonomy, purpose in life, and personal growth) (Keyes, 2002). The Mental Health Continuum Scale -Short Form (Keyes, 2008) consists of 14 items that assess emotional, social, and psychological well-being. This scale serves as an indicator of the positive functioning of an individual, with the lower end of the continuum indicating low levels of positive mental health (languishing) and the upper end of the continuum indicating high levels of positive mental health (flourishing). It also demonstrated good psychometric properties in measuring mental health (Lamers et al., 2011). In this scale, participants reported the frequency to which they felt "happy," "interested in life," and "satisfied with life" for emotional well-being (M = 12.11, SD= 3.23, α = .91) on a scale of 1 (Never) to 6 (Every day). Participants responded to 5 items, such as "How often do you feel that you had something important to contribute to society," for social well-being (M = 15.81, SD = 5.27, α = .81) on a 6-point Likert scale (1 = Never, 6 = Every day). Finally, participants responded to 6 items, such as, "How often do you feel that you had experiences that challenged you to grow and become a better person?" for psychological wellbeing (M = 23.23, SD = 6.02, $\alpha = .86$) on the same 6-point Likert scale (1 = Never, 6 = Every day). The 14 items were also summed to provide a single index for languish, with higher scores indicating lower levels of languish (M = 51.15, SD = 13.06; $\alpha = .92$).

Control variables

We also measured several variables that have been linked with mental health, including age (Weich et al., 2011; Burns et al., 2022), education (Bishop et al., 2021; Miles et al., 2020), and income (Fagrell Trygg et al., 2019). Participants reported their age (open-ended question) and indicated their highest educational level on a 4-point scale (1 = Year 10 high school, 2 = Year 12 high school, 3 = Graduate degree, 4 = Postgraduate degree). Participants' objective income was determined by their responses to a questionnaire item where they indicated their current annual household income on an 8-point scale ranging from \$15,000 or less to \$150,000 or more. (1 = \$15,000 or less, 2 = \$15,001 - \$25,000, 3 = \$25,001 - \$35,000, 4 = \$35,001 - \$50,000, 5 = \$50,001 - \$75,000, 6 = \$75,001 - \$100,000, 7 = \$100,000 - \$150,000, 8 = \$150,000 or more).

Results

The assumption of normality was tested for all key variables – mental health literacy, languish, emotional well-being, social well-being, and psychological well-being. Values for skewness and kurtosis for all variables were between –2 and +2, indicating a normal distribution (George & Mallery, 2010). Correlation analysis indicated that mental health literacy

was not correlated to languish (p = .42), emotional wellbeing (p = .10), social well-being (p = .77), and psychological well-being (p = .25). Table 1 displays the means, standard deviations, skewness, kurtosis, and intercorrelations of all the variables involved in this study.

Table 1. Descriptive statistics and intercorrelations of variables (N = 149).

Variables	1	2.	3.	4	5.		
Mental health literacy	-						
2. Emotional well-being	.13	_					
3. Social well-being	02	.67**	-				
4. Psychological well-being	.10	.74**	.71**	-			
5. Languish	.07	.86	.89**	.93**	-		
Mean	132.39	12.11	15.81	23.23	51.15		
SD	15.51	3.23	5.27	6.02	13.06		
Skew	-0.78	-0.28	0.23	-0.07	-0.001		
Kurtosis	-0.10	-0.49	-0.67	-0.45	-0.51		

** Correlation significant at p < .01

To determine if mental health literacy influenced languish and the different facets of well-being (namely, emotional, social, and psychological well-being), we conducted a series of multiple regression analyses. In Step 1 of the hierarchical multiple regression analyses, control variables, age, educational attainment (dummy-coded), and annual household income (dummy-coded) were included. Given their effects on mental health, these variables will be controlled during analyses to partial out the unique effect of mental health literacy on mental health. Mental health literacy was included in the second step of the analyses. Statistical assumptions relevant to multiple regression analysis were examined prior to the multiple regression analyses. No violations in normality, linearity and homoscedasticity of residuals, and multicollinearity between predictors were noted. Mahalanobis distance exceeded the critical $\chi 2$ for df = 12 (at α = .001) of 32.91 for three cases in the data file for the dependent variable of languish, indicating the presence of multivariate outliers. Multiple regression analyses were consequently conducted with and without the outlier.

The results revealed that the control variables accounted for a non-significant 12.3% of the variance in languish, R^2 = 0.12, F(11, 137) = 1.75, p = 0.68. Mental health literacy accounted for an additional 0.02% of the variance in languish, $\Delta R^2 = 0.0002$, $\Delta F(1, 136) = 0.03$, p = 0.86. The overall model explained 12.4% of the variance in languish, $R^2 = 0.12$, adjusted $R^2 = 0.05$, F(12, 136) = 1.60, p = 0.10. The analysis also revealed that mental health literacy did not predict languish, B = -0.01, t(136) = -0.18, p = 0.86, 95% CI (-0.16, 0.13). These findings remained after excluding the multivariate outliers (see Table 2). Similar analyses were conducted - separately - for emotional, social, and psychological well-being. Mental health literacy did not predict emotional well-being, B = 0.01, t(136) = 0.47, p = 0.010.64, 95% CI (-0.03, 0.04), social, B = -0.03, t(136) = -1.09, p= 0.28, 95% CI (-0.09, 0.03), and psychological well-being, B = 0.01, t(136) = 0.32, p = 0.75, 95% CI (-0.06, 0.08). These patterns of findings remained when multivariate outliers were excluded from the regression analyses. Given the asymmetrical male-female ratio of our sample, we also reran all the analyses with gender as an added control variable; results showed that mental health literacy did not predict languishing, emotional well-being, social well-being, and psychological well-being.

Table 2. Unstandardised (B) regression coefficients for multiple regression model predicting languish, emotional well-being, social well-being, and psychological well-being (N = 149).

	Languish			Emotional Well-being				Social Well-being				Psychological Well-being				
Variables	В	se	LLCI	ULCI	B se LLC		LLCI	I ULCI	B se LLCI		LLCI	ULCI			LLCI	ULCI
	Step 1 (R2				Step 1 (R2=				Step 1 (R2				Step 1 (R2:			
Constant	36.76	5.03	26.83	46.70	7.96	1.23	5.52	10.39	11.62	2.06	7.56	15.69	17.19	2.35	12.53	21.84
Age	0.52*	0.23	0.08	0.97	0.15*	0.06	0.04	0.26	0.15	0.09	-0.03	0.33	0.22*	0.11	0.01	0.43
Education Dummy																
1 (Year 10 High	-2.08	4.97	-11.91	7.75	-0.51	1.22	-2.92	1.90	-0.60	2.03	-4.62	3.42	-0.97	2.33	-5.58	3.63
School)																
Education Dummy																
2 (Graduate	-3.07	3.71	-10.41	4.27	-0.21	0.91	-2.01	1.59	-1.53	1.52	-4.53	1.47	-1.33	1.74	-4.77	2.11
Degree)																
Education Dummy																
3 (Postgraduate	11.68	10.75	-9.57	32.94	1.85	2.64	-3.37	7.07	6.61	4.40	-2.08	15.30	3.22	5.03	-6.73	13.18
Degree)																
Income Dummy 1	-1.93	4.27	-10.38	6.52	-0.37	1.05	-2.44	1.71	-0.93	1.75	-4.38	2.53	-0.64	2.00	-4.60	3.32
(\$15,001 - \$25,000)	-1	4.27	-10.50	0.52	-0.51	1.03	-2.44	1.71	-0.55		-4.50	2	-0.04	2.00	-4.00	5.52
Income Dummy 2	3.88	4.12	-4.26	12.03	0.68	1.01	-1.32	2.67	1.29	1.68	-2.04	4.62	1.92	1.93	-1.89	5.73
(\$25,001 - \$35,000)																
Income Dummy 3	5.30	3.90	-2.42	13.01	1.07	0.96	-0.82	2.96	1.64	1.60	-1.52	4.79	2.59	1.83	-1.02	6.20
(\$35,001 - \$50,000)																
Income Dummy 4	3.22	3.75	-4.19	10.63	1.26	0.92	-0.56	3.08	0.90	1.53	-2.13	3.93	1.07	1.75	-2.40	4.54
(\$50,001 - \$75,000)	5.00	5115		10.00	1.00	0.52	0.00	5.00	0.50		21.25	0.00	1.0		2.10	
Income Dummy 5																
(\$75,001 -	2.61	3.69	-4.68	9.91	1.05	0.91	-0.74	2.84	0.70	1.51	-2.28	3.68	0.87	1.73	-2.55	4.28
\$100,000)																
Income Dummy 6																
(\$100,001 -	6.36	3.72	-0.99	13.71	1.57	0.91	-0.24	3.37	1.73	1.52	-1.27	4.74	3.06	1.74	-0.38	6.50
\$150,000)																
Income Dummy 7	7.30	3.83	-0.27	14.87	1.83	0.94	-0.03	3.68	2.78	1.57	-0.32	5.88	2.69	1.79	-0.85	6.24
(\$150,000 or more)																
	Step 2 (R2				Step 2 (R2 =				Step 2 (R2				Step 2 (R2			
Constant	38.22	9.59	19.25	57.19	7.02	2.35	2.36	11.67	15.23	3.91	7.50	22.95	15.98	4.49	7.10	24.86
Age	0.53*	0.23	0.07	0.98	0.15**	0.06	0.03	0.26	0.17	0.09	-0.02	0.35	0.21*	0.11	0.00	0.43
Education Dummy																
1 (Year 10 High	-2.13	4.99	-12.00	7.75	-0.48	1.22	-2.90	1.94	-0.71	2.03	-4.73	3.31	-0.94	2.34	-5.56	3.69
School)																
Education Dummy																
2 (Graduate	-3.01	3.74	-10.40	4.38	-0.24	0.92	-2.05	1.57	-1.40	1.52	-4.41	1.61	-1.38	1.75	-4.84	2.08
Degree)																
Education Dummy																
3 (Postgraduate	11.56	10.81	-9.81	32.94	1.93	2.65	-3.31	7.17	6.32	4.40	-2.39	15.02	3.32	5.06	-6.69	13.33
Degree)																
Income Dummy 1	-1.86		-10.38	6.66	-0.41	1.06	2.50	1.68	-0.75	1.75	4.22	2.72	-0.70	2.02	-4.68	2.20
(\$15,001 - \$25,000)	-1.80	4.31	-10.58	0.00	-0.41	1.00	-2.50	1.08	-0.73	1.75	-4.22	2.72	-0.70	2.02	-4.08	3.29
Income Dummy 2	201						4.07	2.00	4.40			4.00	4.00		4.00	
(\$25,001 - \$35,000)	3.94	4.14	-4.25	12.13	0.64	1.02	-1.37	2.65	1.42	1.69	-1.92	4.75	1.88	1.94	-1.96	5.71
Income Dummy 3																
(\$35,001 - \$50,000)	5.37	3.93	-2.41	13.15	1.03	0.96	-0.88	2.93	1.81	1.60	-1.36	4.97	2.54	1.84	-1.11	6.18
Income Dummy 4																
(\$50,001 - \$75,000)	3.28	3.78	-4.19	10.75	1.22	0.93	-0.61	3.05	1.05	1.54	-2.00	4.09	1.02	1.77	-2.48	4.51
Income Dummy 5																
(\$75.001 -	2.74	3.77	-4.72	10.20	0.96	0.92	-0.86	2.79	1.02	1.54	-2.02	4.06	0.76	1.77	-2.74	4.25
\$100,000)																
Income Dummy 6																
(\$100,001 -	6.49	3.80	-1.03	14.00	1.48	0.93	-0.36	3.33	2.05	1.55	-1.01	5.11	2.95	1.78	-0.56	6.47
\$150,000)									_100				_100			
Income Dummy 7																
	7.42	3.90	-0.29	15.13	1.75	0.96	-0.14	3.64	3.08	1.59	-0.06	6.22	2.60	1.83	-1.02	6.21
(\$150 000 or more)																
(\$150,000 or more) Mental Health																
(\$150,000 or more) Mental Health Literacy	-0.01	0.07	-0.15	0.13	0.01	0.02	-0.03	0.04	-0.03	0.03	-0.09	0.03	0.01	0.03	-0.06	0.08

Discussion

The present study examined the relationship between mental health literacy and languishing. Specifically, we hypothesised that individuals with higher mental health literacy would exhibit lower levels of languishing. The results in the current study, however, did not support the hypothesis that individuals with higher levels of mental health literacy experience less languishing. Mental health literacy had no effect on the mental state of languish. Mental health literacy also did not affect the other facets of mental health – namely, emotional, social, and psychological well-being. This finding runs contrary to existing literature examining the relationship between mental health literacy and mental health state (see Nobre et al., 2022). Nobre et al. (2022) found that mental health literacy was positively associated with positive mental health – albeit weakly.

The discrepancy between our findings and theirs may be an artifact of the operationalisations used in each of our papers. Nobre et al. (2022) operationalised mental health using the Positive Mental Health Questionnaire (Lluch, 1999) that assessed satisfaction, pro-sociality, self-control, autonomy, problem-solving and self-actualisation, and interpersonal relationship skills. In contrast, in our study, mental health was assessed by the Mental Health Continuum Scale - Short Form (Lamers et al., 2011), which measured three facets of well-being: emotional, social, and psychological wellbeing. While there may be a consensus on what constitutes mental health in theory, the phrasing of the items in each of these instruments may measure different nuances of mental health and lead to different interpretations of mental health. This is also the case for the conceptualisation of mental health literacy. Nobre et al. (2022) operationalised mental health literacy using the Mental Health Knowledge Questionnaire (MHKQ; Yu et al., 2015) and the Mental Health-Promoting Knowledge (MHPK; Bjørnsen et al., 2019); these scales collectively assess individuals' understanding of mental health characteristics, their beliefs regarding the prevalence of mental disorders, awareness of mental health promotion efforts, and knowledge of factors contributing to maintaining good mental health. Our study operationalised mental health literacy with the Mental Health Literacy Scale (MHLS; O'Connor & Casey, 2015), which evaluates individuals' capacity to identify specific disorders or types of psychological distress, their knowledge, and beliefs about risk factors and causes, self-help strategies, available professional assistance, and their attitudes toward seeking help. A recent review of psychometric properties of mental health literacy measures demonstrated that the MHKQ was the least psychometrically robust questionnaire measure while MHPK had the most adequate psychometric properties amongst the seven available tools that measured mental health literary (see Fulcher & Pote, 2021). The psychometric adequacy of MHLS remains inconclusive; while the MHLS has been widely evaluated for its psychometric properties, the quality of evidence that the MHLS had been evaluated on was of moderate quality at best (Fulcher & Pote, 2021). While all MHKQ, MHPK, and MHLS had demonstrated adequate construct validity, the limited evidence supporting the validity, reliability, and responsiveness of these different mental health literacy measures suggests that it is necessary to interpret findings concerning different mental health literacy measures with caution (see Fulcher & Pote, 2021).

There is also limited evidence on how mental health literacy influences mental health in the way that had conceptualised by Keyes (2002) - that is, mental health is distinct from mental illnesses. Existing studies that have examined the effects of mental health literacy have largely focused on mental illnesses. Mental health literacy - measured by Mental Health Literacy Scale (O'Connor & Casey, 2015) was associated with professional help-seeking behaviour (McCabe et al., 2023), anxiety, and depression (Tambling et al., 2023). It has also been used to develop new scales to measure depression literacy (Kulwicka & Gasiorowska, 2023; Grabowski, 2021). Given that the criterion validity of mental health literacy measures is lacking (see Fulcher & Pote, 2021), it is unclear whether existing mental health literacy tools can accurately measure people's knowledge and belief about mental health (as opposed to mental illness). One study revealed that mental health literacy was correlated with help-seeking behaviours but with mental well-being (Gorczynski et al., 2017); this suggests that the mental health literacy scale may not be sensitive enough to capture people's knowledge about, and ability to recognise, the absence of mental health (as opposed to the presence of mental illnesses).

Limitations and future research

This is, to our knowledge, the first study to examine the relationship between mental health literacy and languishing, a concept that was brought about and popularised by the COVID-19 pandemic. While the present study contributes to the growing body of evidence concerning mental health literacy and mental health outcomes, it is essential to acknowledge certain limitations that may impact the

generalisability and scope of our findings, particularly that of our study's sample. The sample recruited for this study were students enrolled in a university where mental health literacy rates are likely to be higher than the population. Bishop et al. (2021) found that participants who had a bachelor's degree or higher level of education had a score of 133.65/160 on the mental health literacy scale compared to their counterparts who did not have a bachelor's degree or higher level of education, scoring 127.8/160 on the mental health literacy scale. This pattern was also observed by Miles et al. (2020), whose study investigated the relationship between mental health literacy in college-aged students from diverse backgrounds.

Furthermore, our sample consisted primarily of young adults - the age group that was most affected during the COVID-19 pandemic (Kowal et al., 2020; Na et al., 2022). Data from a longitudinal survey consisting of a nationally representative sample from the United States (n = 7830) showed that people who belonged to the age bracket 18 to 34 years old reported the highest mental distress compared to those who belonged to the other age groups 35 to 49 years old, 50 to 64 years old, and those who were above 65 years of old (Na et al., 2022). A similar study from Canada (n = 8267) also found that people below the age of 25reported the highest mean scores on scales assessing stress, anxiety, and psychological distress (Nwachukwu et al., 2020). As such, a more representative sample is required for us to understand the relationship between mental health literacy and languishing.

Other factors that influence languishing should be considered as they could affect the results found. These factors include religion, as participants see religion as a source of support; work, as those with higher languishing may have difficulties and those with low languishing may have a more positive work environment; goals, known as life purposes, can influence individuals seeking to obtain, maintain or avoid those life purposes and lastly, relationships; types of relationships can either have a detrimental or positive affect on an individual's life (Wissing et al., 2021). This indicates that MHL may not have been the only factor in the participants' languishing levels.

Finally, with "languish" being popularised during the COVID-19 pandemic as people found it helpful to use it to contextualise hard-to-explain mood changes and mental health states, "languish" may take on a different meaning from what has been theoretically and academically conceptualised (see Willen, 2022; Ismail, 2023; Hone et al., 2014). A review of four existing theorisations, conceptualisations, and operationalisations of mental health demonstrates that while there is a broad consensus on mental health constituting subjective well-being, it is a multi-dimensional construct that ends up being assessed differently depending on how people understand and interpret mental health (Hone et al., 2014). For instance, being adaptable to changing environments and possessing grit play a critical role in mental health for older adults (see dynamic-grit mindset, Ismail, 2023); this may not be the case for younger adults. As such, it warrants further research into examining 1) if theoretical conceptualisations of languishing and mental health reflect a real-world understanding of

these terms, and 2) the nuances of what mental health constitutes across different groups of people. Only when we can accurately identify what constitutes languishing and mental health can we then develop effective interventions for promoting mental well-being. To this end, further research must collect other demographic data such as nationality, or ethnicity - beyond the ones collected in our study- that would be useful in elucidating how different groups of people understand mental health.

Conclusion

HE students are particularly vulnerable to mental health difficulties, especially following crises such as the COVID-19 pandemic (Browning et al., 2021). Not only did most HE students express languishing (Wixom, 2021; Visser & Lawvan Wyk, 2021; Allen et al., 2023), they languished for a longer period of time compared to the general adult population (ONS, 2021), suggesting that they are at a greater risk of developing mental illnesses. As such, examining protective factors that may buffer against languishing is imperative. With existing findings demonstrating the negative association between mental health literacy and mental illnesses, this study investigated the role of mental health literacy as a protective factor against languishing. The results highlighted that mental health literacy was not a significant predictor of languishing. HE institutes play a significant role in helping to mitigate the potentially damaging impact on student mental health and well-being (Camfield et al., 2021). When students face setbacks and disruptions with their studies, HE students prefer to contact their lecturer or personal tutor over speaking to family members (Shafi et al., 2023), further highlighting the significance of HE institutes on HE students' well-being. This study is the first to examine the relationship between mental health literacy and languishing during the COVID-19 pandemic. However, it is far from conclusive. Based on previous findings (e.g., Kim et al., 2015), promoting mental health literacy can be advantageous for deterring mental illnesses and challenges. Yet, our study hints at the possibility that mental health literacy may not be sufficient in promoting mental health (as opposed to preventing mental illnesses). While there remains future research to be conducted to better understand the effects of mental health literacy on mental health, HE institutes can consider implementing programs that focus on developing skills and techniques for coping with emotional distress in the meantime. Among the existing mental health interventions for HE students, skill development programs—especially mindfulness programs that involve supervised practice over multiple sessions—have been the most successful in promoting positive adjustments, such as increased self-confidence and social skills (see Conley et al., 2013). Evidently, it is imperative to not only prevent mental illness but also to promote a salutogenic orientation of mental health (Mjøsund, 2021). Accordingly, more research is necessary to conclude if and how mental health literacy can help promote positive mental health.

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