

## LONELINESS, SELF-COMPASSION, AND PSYCHOLOGICAL WELL-BEING AMONG ADULTS IN SARAWAK: SELF-COMPASSION AS THE MEDIATOR

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### ABSTRACT

*Mental health concerns are on the rise in Malaysia, particularly depression, which has doubled in prevalence from 2019 to 2023, according to the National Health and Morbidity Survey 2023. Loneliness has emerged as a significant contributor to poor mental health outcomes, negatively impacting both physical and psychological well-being. This study explored the associations between loneliness, self-compassion, and psychological well-being among adults aged 18 to 64 in Sarawak, Malaysia, and examined whether self-compassion mediates the relationship between loneliness and psychological well-being. A total of 394 participants ( $M = 32.67$ ,  $SD = 11.07$ ) were recruited using snowball sampling. Participants completed validated instruments, including the UCLA Loneliness Scale (Version 3), the Self-Compassion Scale (SCS), and the Scale of Psychological Well-Being (SPWB). Results showed that participants reported moderate levels of loneliness, self-compassion, and psychological well-being. Loneliness was significantly negatively correlated with both self-compassion ( $r = -.560$ ,  $p < .001$ ) and psychological well-being ( $r = -.508$ ,  $p < .001$ ), whereas self-compassion was positively correlated with psychological well-being ( $r = .629$ ,  $p < .001$ ). Mediation analysis revealed that self-compassion partially mediated the impact of loneliness on psychological well-being (Effect =  $-0.7855$ , 95% CI [ $-1.0248$ ,  $-0.5732$ ]). This study contributes to the literature by examining the relationships between loneliness, self-compassion, and psychological well-being within the Malaysian context, focusing on adults in Sarawak. These findings underscore the protective role of self-compassion and support its integration into culturally relevant mental health interventions.*

**Keywords:** Loneliness; Self-compassion; Psychological Well-being; Mental health; Malaysia

### INTRODUCTION

High levels of loneliness have emerged as a common experience worldwide (Surkalim et al., 2022), adversely affecting both physical and mental health (Surkalim et al., 2022; The Lancet, 2023). It is defined as a negative, unwanted, and subjective experience that pertains to the quality of an individual's interpersonal relationships or connections (Surkalim et al., 2022). Loneliness can arise from a complex interaction of environmental, developmental, and intrapersonal factors (Tiwari, 2013). A meta-analysis encompassing 113 countries revealed that loneliness is prevalent globally at significant levels, influenced by factors such as socio-economic status, health conditions, social support, caregiving arrangements, and social trust (Surkalim et al., 2022). Another study found that 32.4% of middle-aged and older adults in Malaysia report experiencing loneliness (Awang et al., 2022). While loneliness is a subjective unmet emotional need, social isolation refers to the objective lack of interpersonal relationships, and solitude denotes a voluntary choice to be alone for personal space and growth that can be fulfilling (Malcom, 2021; Tiwari, 2013). A recent study showed that loneliness significantly reduces the quality of life among Malaysian middle-aged and older adults (Foong et al., 2025).

Compassion is the ability to empathetically recognize and respond to others' suffering without judgment, while self-compassion means applying that same understanding and care to oneself. This entails recognizing and understanding one's suffering in a non-judgmental manner, fostering a desire for personal relief and healing. Self-compassion comprises three essential elements: (a) self-kindness, which involves being empathetic towards personal inadequacies or suffering rather than being critical; (b) common humanity, which entails viewing one's experiences as part of the shared human experience rather than feeling isolated; and (c) mindfulness, which involves maintaining a balanced awareness of painful thoughts and feelings without becoming overly identified with them (Neff, 2003).

Mental health is defined as a state of well-being where individuals recognize their abilities, can manage the normal stresses of life, work productively, and contribute positively to their communities (World Health Organization, 2021). Psychological well-being should encompass dimensions such as self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989). Approximately one-third of the Malaysian population experiences mental health issues (Institute for Public Health, 2015). The forces of rapid urbanization and globalization in Malaysia, as a developing nation, have led to significant cultural and lifestyle transformations for its citizens, alongside heightened levels of perceived stress (Raaj et al., 2021). Following the pandemic, there was a rise in mental health disorders, with reported rates of depression, anxiety, and stress-related symptoms at 59.2%, 55.1%, and 30.6%, respectively (Wong et al., 2021).

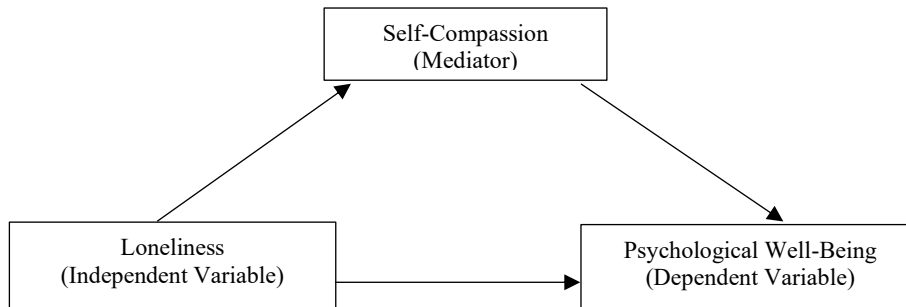
Several studies have found that higher self-compassion is associated with lower levels of loneliness. A longitudinal study revealed that higher compassion toward others and self-compassion predicted lower loneliness scores (Lee et al., 2021). Furthermore, individuals who exhibit higher levels of self-compassion have a significantly lower probability of experiencing loneliness, and loneliness is significantly associated with poorer mental health (Lahiri et al., 2021; Wollast et al., 2023). Increasing self-compassion may serve as a useful intervention for improving loneliness and psychological well-being. Due to the positive effect of self-compassion in alleviating loneliness and enhancing psychological well-being, several studies have suggested exploring the use of self-compassion as an intervention for loneliness and mental health issues (Ausie & Poerwandari, 2021; Rabasco et al., 2021; Sotiropoulou et al., 2023; Wollast et al., 2023). Constructs like self-compassion may not be as widely cultivated or encouraged in a collectivistic culture, making their role in mental health especially worth exploring in this cultural setting. Given the ongoing mental health challenges in Malaysia, including a lack of awareness, stigma, traditional beliefs, and cultural factors (Raaj et al., 2021), understanding internal protective factors such as self-compassion may provide a culturally sensitive avenue for improving psychological well-being.

Although prior research in Malaysia has investigated links between loneliness, self-compassion, and psychological well-being, the mediating role of self-compassion in this relationship remains underexplored. Furthermore, there is a scarcity of research addressing the prevalence and extent of loneliness in Malaysia during the post-pandemic era. At the same time, it remains unclear how severe the effect of different degrees of loneliness on mental health is and whether there is a limit to the influence of self-compassion in lessening loneliness.

This study aimed to examine (1) the levels of loneliness, self-compassion, and psychological well-being among people aged 18 to 64 in Sarawak, (2) the associations between loneliness, self-compassion, and psychological well-being among people aged 18 to 64 in Sarawak, and (3) the role of self-compassion as a mediator between loneliness and psychological well-being among the participants.

In line with the objectives of this study, three hypotheses were formulated to guide the research. First, it was hypothesized that individuals aged 18 to 64 in Sarawak would report significant levels of loneliness, self-compassion, and psychological well-being (H1). Second, there are significant associations between loneliness, self-compassion, and psychological well-being among people aged 18 to 64 in Sarawak (H2). Finally, the third hypothesis proposed that there are significant mediation effects of self-compassion on the relationship between loneliness and psychological well-being among people aged 18 to 64 in Sarawak (H3).

**Figure 1**  
*Conceptual Framework*



## MATERIALS AND METHODS

A cross-sectional study was conducted anonymously among adults from Sarawak, aged between 18 and 64 years, during the study period. The inclusion criteria were individuals who were Sarawakians and who provided informed consent to participate in the study. The research employed a snowball sampling method. According to the Current Population Estimates from the Department of Statistics Malaysia (2022), the population of individuals aged 15 to 64 in Sarawak is approximately 1,748,700. Using the Raosoft sample size calculator, a sample size of 385 was deemed appropriate. For populations larger than 20,000, the sample size has negligible variation (Raosoft Inc., 2004). The present study ultimately included 394 participants (M = 32.67 years, SD = 11.07).

The initial section of the study assessed the sociodemographic characteristics of the participants. This included variables such as age, gender, the highest level of education attained, ethnicity, current marital status, employment status, household income, state of residence, and health status (e.g., chronic illness).

## MEASURES AND INSTRUMENTS

### UCLA Loneliness Scale (Version 3)

The 20-item UCLA Loneliness Scale (Russell, 1996) was used to measure levels of loneliness. Each question asks participants how often they feel lonely or connected. This scale uses a 4-point rating scale, ranging from 1 (never) to 4 (always). Questions 1, 5, 6, 9, 10, 15, 16, 19 and 20 were reverse scored. A higher total score indicates a higher level of loneliness. This measure is highly reliable, with Cronbach's  $\alpha$  ranging from .89 to .94 (Russell, 1996). A Cronbach's  $\alpha$  of .89 was found in this study. No permission is required for students and researchers to use the scale for non-profit research purposes (Peplau, n.d.).

### Scale of Psychological Well-Being (SPWB)

The Scale of Psychological Well-Being (42-item) (Ryff et al., 2007) was used to measure the psychological well-being of the participants. The 42-item scale assesses six dimensions of psychological well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. This scale uses a 6-point rating scale, ranging from 1 (strongly disagree) to 6 (strongly agree). Questions 1, 2, 3, 4, 6, 7, 11, 13, 17, 20, 21, 22, 23, 27, 29, 31, 35, 36, 37, 38, and 40 were reverse scored. The overall psychological well-being score was obtained by combining the scores from each dimension. Higher scores reflect greater psychological well-being. This measure is highly reliable, with Cronbach's  $\alpha$  above .85 for all subscales: self-acceptance, .93; positive relations with others, .91; autonomy, .86; environmental mastery, .90; purpose in life, .90; and personal growth, .87 (Ryff et al., 2007). A Cronbach's  $\alpha$  of .87 was obtained in this study.

### Self-Compassion Scale (SCS)

The 26-item Self-Compassion Scale (SCS) (Neff, 2003) was used to measure the level of self-compassion among the participants. The scale comprises six subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. This scale uses a 5-point rating scale, ranging from 1 (almost never) to 5 (almost always). Overall self-compassion scores were calculated by combining the scores from each dimension, including those that require reverse coding. Questions 2, 4, 6, 13, 18, 20, 24, and 25 were reverse scored. Total scores reflect overall self-compassion, with higher scores indicating greater self-compassion. This measure is highly reliable with a Cronbach's  $\alpha$  of .92 (Neff, 2003) and a Cronbach's  $\alpha$  of .84 for the Chinese version of the SCS. A Cronbach's  $\alpha$  of .87 was found in this study.

## DATA COLLECTION PROCEDURE

Ethical approval for this study was obtained from the Human Research Ethics Committee (Non-Medical) at Universiti Malaysia Sarawak, before the initiation of data collection. Permission to use and translate the scales was granted by the respective authors. To facilitate data collection, an e-poster was designed and shared online, inviting individuals who met the inclusion criteria to complete the survey. A link to a Google Form, which included informed consent and the questionnaire, was attached to the post along with the e-poster. Participation was voluntary, and no compensation was provided.

## DATA ANALYSIS

IBM SPSS 29 was used for statistical analysis. Data were analysed using descriptive and inferential analyses (IBM Corp, 2022). Descriptive analyses involved frequency tables and percentages, means, and standard deviations for continuous data. The Shapiro-Wilk test indicated that all sample distributions significantly deviated from the normal distribution ( $p < .05$ ). However, the Central Limit Theorem states that the sampling distribution of the sample mean (or sum) will tend to be normally distributed, regardless of the shape of the original data distribution, as the sample size becomes large enough ( $n > 30$  or 40 is considered sufficient) (Field, 2012). The violation of the normality assumption should not cause major problems with a large sample (Pallant, 2016). Given the standard rule, if the sample size for each variable is greater than 30 or 40, the assumption of normality for the purpose of parametric testing is generally valid, despite the significant Shapiro-Wilk test results. Inferential analyses included the independent t-test and one-way ANOVA, which were used to compare the means of dependent variables for parametric data. Pearson's correlation was used to examine the association between loneliness, psychological well-being, and self-compassion. Mediation analysis was conducted using the PROCESS Macro (Model 4) with 5,000 bootstrap samples. Multiple linear regression analysis was used to determine the predictors of psychological well-being among the socio-demographic factors. The level of significance was set at  $p < .05$ .

## RESULTS

The sample ( $N = 394$ ) had a mean age of 32.67 years ( $SD = 11.07$ ). Most participants were female (62.9%), Chinese (64.5%), and employed (77.2%). The majority held tertiary education (60.4%), while 58.6% were single.

**Table 1**  
*Participants' Demographic Characteristics (n=394)*

	N	%	M (SD)
<b>Age</b>			32.67 (11.07)
<b>Gender</b>			
Male	146	37.1	
Female	248	62.9	
<b>Ethnicity</b>			
Malay	69	17.5	
Chinese	254	64.5	
Indian	2	0.5	
Indigenous group	69	17.5	
<b>Education</b>			
Secondary education and below	108	27.4	
Pre-U	48	12.2	
Tertiary Education	238	60.4	
<b>Marital Status</b>			
Single	231	58.6	
Married	163	41.4	
<b>Religion</b>			
Islam	44	11.2	
Christian	229	58.1	
Buddhism	84	21.3	
Atheist	27	6.9	
Others	10	2.6	
<b>Employment Status</b>			
Employed	304	77.2	
Unemployed	90	22.8	
<b>Household Income</b>			
B40 (Less than RM5,250)	234	59.4	
M40 (Between RM 5250 – RM11,819)	122	31.0	
T20 (RM11,820 and above)	38	9.6	
<b>Region</b>			
Southern Sarawak (Kuching, Samarahan, Serian, Sri Aman, Betong)	123	31.2	
Central Sarawak (Sibu, Sarikei, Kapit, Mukah)	69	17.5	
Northern Sarawak (Miri, Limbang, Bintulu)	202	51.3	

**Note.** *M* = Mean; *SD* = Standard Deviation.

Participants reported a moderate level of loneliness ( $M = 47.00$ ,  $SD = 9.97$ ). This mean score falls near the theoretical midpoint of the UCLA Loneliness Scale (range = 20–80), suggesting a moderate perceived sense of loneliness. Similarly, self-compassion ( $M = 83.73$ ,  $SD = 14.84$ ) and psychological well-being ( $M = 180.23$ ,  $SD = 27.83$ ) were above the midpoints of their respective scales, indicating moderate to moderately high levels of self-compassion and psychological well-being.

No significant differences in loneliness scores were found across gender, employment, education, income, or region. Similarly, there were no significant differences in loneliness based on education level,  $F(2, 391) = 0.20$ ,  $p = .20$ ; income,  $F(2, 391) = 0.40$ ,  $p = .67$ ; or region,  $F(2, 391) = 1.54$ ,  $p = .22$ . Those who are single reported significantly higher loneliness ( $M = 48.19$ ,  $SD = 10.31$ ) than married participants ( $M = 45.31$ ,  $SD = 9.25$ ).

Multiple linear regression analysis of sociodemographic predictors of psychological well-being indicated no significant impact of gender, ethnicity, marital status, religion, employment status, monthly household income, and region on psychological well-being. Among all variables, only age and education level were significantly associated with higher psychological well-being scores (Refer to Table 2)

**Table 2**  
*Multiple Linear Regression Analysis of Sociodemographic Predictors of Psychological Well-being*

Predictor	B	SE	$\beta$	t	p
(Constant)	156.08	12.74	—	12.25	<.001
Age	0.45	0.14	0.18	3.12	<.001*
Gender	-2.71	2.97	-0.05	-0.91	0.36
Ethnicity	-0.25	1.54	-0.01	-0.16	0.87
Education Level	3.81	1.02	0.20	3.75	<.001*
Marital Status	-2.40	3.30	-0.04	-0.73	0.47
Religion	-2.44	1.29	-0.09	-1.90	0.06
Employment Status	4.81	3.59	0.07	1.34	0.18
Household Income	4.41	2.27	0.11	1.94	0.05
Region	-1.67	1.63	-0.05	-1.02	0.31

**Note.** *B* = Unstandardized Coefficient; *SE* = Standard Error;  $\beta$  = Standardized Coefficient. The dependent variable is psychological well-being.

Correlation analysis showed that loneliness was negatively correlated with both self-compassion ( $r = -0.560, p < .001$ ) and psychological well-being ( $r = -0.508, p < .001$ ). Self-compassion was positively correlated with psychological well-being ( $r = 0.629, p < .001$ ) (Table 4). Age was positively associated with self-compassion and well-being but negatively correlated with loneliness.

**Table 3**  
*Pearson's Correlations Between Age, Loneliness, Self-compassion, and Psychological Well-being*

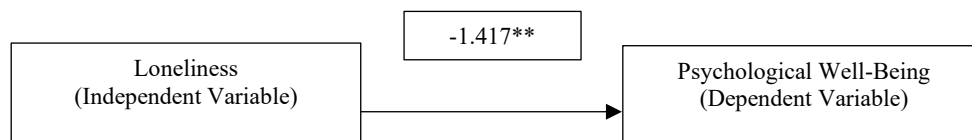
Variable	1	2	3	4
1. Age	1			
2. Total Loneliness	-0.13*	1		
3. Total Self-compassion	0.17**	-0.56**	1	
4. Total Psychological Well-being	0.14**	-0.51**	0.63**	1

**Note.** \* $p < .05$ ; \*\* $p < .001$ .

Linear regression was conducted to examine the mediating effect of self-compassion on the relationship between loneliness and psychological well-being (Baron & Kenny, 1986). The results indicated that loneliness had a significant negative direct effect on psychological well-being ( $B = -1.417, p < .001$ ) and a significant negative effect on self-compassion ( $B = -0.833, p < .001$ ). In turn, self-compassion had a significant positive effect on psychological well-being ( $B = 0.943, p < .001$ ).

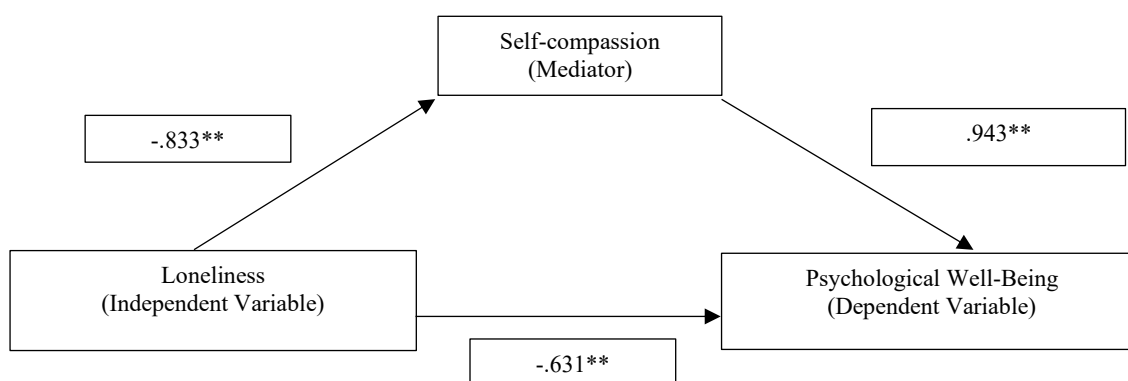
When loneliness and self-compassion were included in the same regression model predicting psychological well-being, the negative effect of loneliness was reduced ( $B = -0.631, p < .001$ ), indicating partial mediation. Mediation analysis was conducted using PROCESS Macro (Model 4). Bootstrapping (5000 samples) indicated a significant indirect effect of loneliness on psychological well-being through self-compassion (Effect =  $-0.7855$ , 95% CI  $[-1.0248, -0.5732]$ ). Because the confidence interval did not include zero, mediation was supported.

**Figure 2**  
*Total effect of loneliness on psychological well-being*



\* $p < .05$ ; \*\* $p < .001$

**Figure 3**  
*Mediating Effect of Self-compassion Between Loneliness and Psychological Well-being*



\* $p < .05$ ; \*\* $p < .001$

The conceptual framework illustrates the associations between loneliness, psychological well-being, and self-compassion. It shows how loneliness affects psychological well-being directly and indirectly through the mediating effect of self-compassion. See Supplementary File 1: Total Effect and Supplementary File 2: Mediation Model.

## DISCUSSION

This study investigated the associations between loneliness, self-compassion, and psychological well-being among adults aged 18 to 64 in Sarawak, Malaysia. The findings revealed significant negative correlations between loneliness and both self-compassion and psychological well-being. Furthermore, self-compassion was positively correlated with psychological well-being and partially mediated the negative impact of loneliness on psychological well-being. These results highlight the critical role of self-compassion in mitigating the detrimental effects of loneliness, reinforcing the importance of interventions aimed at fostering self-compassion to enhance psychological well-being.

### Levels of Loneliness, Self-compassion, and Psychological Well-being

Participants in this study reported a moderate level of loneliness ( $M = 47.00$ ,  $SD = 9.97$ ) as measured by the UCLA Loneliness Scale. While direct comparisons to other studies are complicated by differences in instruments and scoring, this finding conceptually aligns with previous Malaysian research. For example, earlier literature has reported moderate loneliness among university students during the Movement Control Order (MCO) (Hussin et al., 2021), and 32.4% of Malaysian adults aged 40 and above were found to have experienced loneliness (Awang et al., 2022). These trends are echoed in the current study, which also observed a negative correlation between loneliness and age, suggesting that younger adults in Sarawak may be more vulnerable to loneliness. While previous studies focused on the elderly and university students (Hussein et al., 2021; Hussin et al., 2021; Mahmud et al., 2024; Muhamad et al., 2026), this study showed that there are rising unmet needs among working adults. This may reflect lingering disruptions in social networks following the COVID-19 pandemic and underscores the need for public mental health strategies that include younger and middle-aged populations, not just the elderly.

In terms of self-compassion, participants reported moderate to high levels, consistent with previous research on Malaysian young adults (Teoh & Hashim, 2020; Ying & Hashim, 2016). This suggests that self-compassion may be a relatively stable trait across age groups in this cultural context. However, the limited availability of data on self-compassion in middle-aged and older Malaysian adults highlights the need for further research across the full adult lifespan to determine whether this trend holds more broadly.

Participants also reported moderate to high levels of psychological well-being, which is somewhat lower than findings from earlier Malaysian studies, which reported generally high well-being levels (Teoh & Hashim, 2020). However, our findings are consistent with another study, which observed similar patterns among university students (Raj et al., 2017). The similarities may be attributed to overlapping demographic features, particularly the high proportion of tertiary-educated and urban-dwelling individuals in both samples.

### Loneliness and Psychological Well-Being

Furthermore, the study demonstrates significant negative correlations between loneliness and psychological well-being. The findings of this study are consistent with existing literature (Achterbergh et al., 2020; Fortuna et al., 2021; Hutten et al., 2021; Lv et al., 2022; Mann et al., 2022; Padmanabhanunni & Pretorius, 2021; von Känel et al., 2021), which indicates that loneliness is associated with lower levels of mental health and life satisfaction, leading to outcomes such as increased stress, depression, and a general decline in overall emotional and psychological health. While Lahiri et al. (2021) found no direct association between loneliness and psychological distress, they highlighted the influence of coping skills and environmental factors, suggesting that psychological well-being may depend on multiple interacting variables such as personality traits, demographics,

and coping mechanisms (Anglim et al., 2020; Lahiri et al., 2021). According to Ryff's multidimensional model of psychological well-being (1989), factors such as positive relationships and environmental mastery are key components of psychological health. Loneliness, by its very nature, may erode these domains, thereby reducing overall well-being. Furthermore, based on Erikson's psychosocial theory, the inability to form meaningful interpersonal connections during early adulthood may lead to emotional isolation, which aligns with the observed negative correlation between loneliness and well-being in this study (Munley, 1975). In Malaysia's collectivist society, individuals often derive psychological strength from close familial and community ties. Disruption to these networks may have a more pronounced psychological impact than in more individualistic cultures (Lykes & Kemmelmeier, 2014). This might explain why even moderate levels of loneliness could significantly lower well-being in the current sample.

### Self-Compassion and Psychological Well-Being

A significant positive correlation was found between psychological well-being and self-compassion, consistent with previous research (Coutts et al., 2023; Sotiropoulou et al., 2023; Voon et al., 2022), suggesting that self-compassion positively influences psychological well-being. According to Neff's (2003) conceptualization, self-compassion involves three interrelated components: self-kindness, mindfulness, and common humanity. These components foster a balanced emotional response to personal suffering, encouraging individuals to view challenges with greater perspective, rather than falling into cycles of rumination or self-criticism. This balanced self-relationship likely contributes to greater emotional resilience and improved psychological well-being.

Sotiropoulou et al. (2023) highlighted that self-compassion, particularly during the pandemic, provides individuals with a sense of safety and security, helping them manage negative emotions. Additionally, self-compassion was shown to have moderate to large negative associations with anxiety and depression, reinforcing its importance as a protective factor in psychological health (Hughes et al., 2021). Another study further reported that all six components of self-compassion were significantly and negatively correlated with various forms of psychopathology, including depression, anxiety, stress, and self-criticism (Neff et al., 2018). Given these findings, the positive correlation between self-compassion and psychological well-being can be attributed to their shared foundations in happiness and self-acceptance, which are crucial for self-regulation and support during difficult times.

### Loneliness and Self-Compassion

The significant negative correlations between loneliness and both self-compassion and psychological well-being are consistent with earlier studies (Akin, 2010; Lee et al., 2021). Akin (2010) found that loneliness was negatively correlated with self-kindness, common humanity, and mindfulness (core components of self-compassion) while being positively correlated with self-judgment, isolation, and over-identification. These results are supported by self-compassion theory, which posits that recognizing common humanity reduces feelings of isolation, distinguishing self-compassion from self-pity. In times of adversity, acknowledging shared human experiences may alleviate feelings of loneliness, reinforcing the protective role of self-compassion in psychological resilience (Neff, 2022).

### Mediation Effect of Self-Compassion

However, not all individuals who experience loneliness report equally diminished psychological well-being. This variation suggests the presence of underlying psychological mechanisms that influence how loneliness is internalized and processed. One such mechanism is self-compassion, which has emerged in recent literature as a key protective factor. Self-compassion may buffer the emotional toll of loneliness by promoting a more accepting and emotionally regulated response, reducing self-blame, and fostering internal reassurance in times of distress (Neff, 2003; Neff, 2022). This highlights self-compassion as a potential intervention target for mitigating loneliness-related mental health risks.

As illustrated in Figure 1, the total effect of loneliness on psychological well-being was both strong and negative ( $\beta = -1.417$ ,  $p < .001$ ), indicating that individuals who report higher loneliness tend to have significantly lower psychological well-being. However, when self-compassion was introduced as a mediator, this relationship changed (see Figure 2). The direct effect of loneliness on psychological well-being was reduced to  $\beta = -0.631$  ( $p < .001$ ), while loneliness remained negatively associated with self-compassion ( $\beta = -0.833$ ,  $p < .001$ ), and self-compassion was positively associated with psychological well-being ( $\beta = 0.943$ ,  $p < .001$ ). This pattern of results supports partial mediation, where self-compassion explains a significant portion of the negative impact loneliness has on well-being.

Psychologically, self-compassion may help individuals reframe their loneliness as part of the broader human experience, reducing tendencies toward self-blame and emotional over-identification. This self-attitude fosters greater emotional regulation and resilience, offering an internal buffer when social support is unavailable. Nevertheless, it is important to consider that self-compassion may not be the only factor mitigating the effects of loneliness. For instance, existing literature suggests that adversities in the lives of people with low self-compassion might help them develop alternative coping mechanisms, making them less vulnerable to deteriorating psychological health (Wang et al., 2023). This underscores the need to explore additional moderating variables, such as resilience, emotion regulation, and social cognition, which may interact with self-compassion to shape well-being outcomes.

## STRENGTHS, LIMITATIONS, AND FUTURE DIRECTIONS

This study offers significant contributions by examining the relationships between loneliness, self-compassion, and psychological well-being within the Malaysian context, focusing on adults in Sarawak. Previous research predominantly focuses on Western populations, with limited studies examining these constructs in Malaysia. This study contributes theoretically by extending self-compassion theory into a collectivist Malaysian context and by integrating loneliness research with Ryff's model of psychological well-being. Importantly, it identifies self-compassion as a mediating mechanism rather than merely a correlational factor, suggesting that loneliness undermines well-being partly through disruptions in one's internal self-relationship.

A key strength lies in the mediation analysis, which highlights the indirect role of self-compassion in mitigating the negative effects of loneliness on psychological well-being. Additionally, targeted mental health support for younger adults could address the higher levels of loneliness. Primary prevention, such as education about mental health, self-help techniques, and psychosocial skills, can be taught in universities or workplaces to reach more young adults and reduce rates of loneliness and mental disorders. The link between higher education levels and better psychological well-being suggests that policies aimed at increasing access to education should incorporate mental health literacy to maximize psychological benefits.

The findings have practical implications, reinforcing self-compassion as a protective factor against loneliness and underscoring its potential for inclusion in mental health programs aimed at enhancing psychological resilience. Furthermore, this research includes a broader age range (18 to 64 years), providing a more comprehensive understanding of the adult population in Sarawak. The significant negative correlation between loneliness and psychological well-being suggests that interventions targeting loneliness reduction could substantially improve psychological well-being. For instance, community programs such as support groups and volunteering opportunities that foster social connections can be implemented to alleviate loneliness and enhance mental health outcomes.

Despite its contributions, this study has several limitations. The sample predominantly comprised Chinese and Christian participants from Northern Sarawak, limiting generalizability to other ethnic and regional populations. While the Central Limit Theorem allows for the assumption of normality in large samples, this reliance may not fully address issues with extreme skewness or outliers. The robustness of the results may still be compromised if the underlying data distribution is severely non-normal, even with a large sample size. Additionally, the cross-sectional design precludes causal inferences. Future research should employ longitudinal designs to track changes in loneliness, self-compassion, and psychological well-being over time. Expanding the sample to include diverse ethnic, religious, and regional backgrounds will enhance generalizability.

## CONCLUSION

The findings of this study have the potential to offer new perspectives for future research and interventions. Understanding the relationship between loneliness, self-compassion, and psychological well-being can assist professionals, including researchers, mental health practitioners, and social workers, in identifying effective strategies to enhance psychosocial health among Malaysians. Beyond professional spheres, the results may also capture the interest of policymakers and community leaders, fostering greater recognition of loneliness as a significant public health issue. Moreover, as most of the existing research on loneliness and self-compassion has been conducted in other countries, this study is pivotal in determining whether similar patterns emerge within the Malaysian context. The insights gained could facilitate the development of culturally relevant interventions tailored to the specific needs of the nation.

Future research should delve deeper into the mediating role of self-compassion, particularly its interaction with other psychological constructs such as resilience, self-esteem, and coping strategies. Given that most studies on self-compassion and loneliness are conducted in Western contexts, it is crucial to explore how these constructs operate within the Malaysian cultural context. This includes examining cultural attitudes toward loneliness and self-compassion and their impact on psychological well-being. Developing culturally adapted mindfulness and self-compassion programs tailored to the social realities of Malaysians would be an important step forward. Additionally, the relationship between loneliness and specific mental health conditions, such as depression, anxiety, obsessive-compulsive disorder (OCD), and personality disorders, should be examined to highlight the need for a comprehensive approach to mental health care. By addressing these gaps, future studies can enhance understanding of the intricate relationships between loneliness, self-compassion, and psychological well-being, ultimately informing more effective mental health interventions.

## ETHICS

Ethical approval for this study was obtained from the Human Research Ethics Committee (Non-Medical), Universiti Malaysia Sarawak, under the reference number HREC(NM)/2024 (1)/81, before the commencement of data collection.

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