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The Influence of Social Support on Postgraduate Students' Psychological Well-being: Self-Esteem as a Mediator

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The study aimed to examine the impact of social support and self-esteem towards postgraduate students' psychological well-being in Malaysian public universities and self-esteem as a mediator. In all, 335 postgraduate students from 13 public universities in Malaysia participated in this study. The present study conducted employing the quantitative research method using an online questionnaire. Convenient sampling was used to gather the data. Postgraduate students received the online questionnaire through postgraduate groups. The data were analysed using the PLS-SEM version 3.3.9. The validity and reliability of survey items, as well as the link between variables, were evaluated using the measurement model and structural model. The findings in this study indicate that social support and self-esteem have significant impact on psychological well-being. Besides, self-esteem plays partial mediation on social support and psychological well-being. The findings would be useful in helping university administrators, supervisors, counsellors, friends, and family members recognise the need to boost postgraduate students' psychological well-being and discover the solution to do so. For postgraduate students to be psychologically well-adjusted, their self-esteem and social support must be strengthened. To gain a more in-depth comprehending, a mixed methods technique may be adopted in future research. Furthermore, future study shall be able to compare the psychological health of local postgraduate students with international postgraduate students.

Introduction

The concept of well-being is a psychological construct that seems to be vital. Positive life outcomes are linked with psychological well-being and that it is a significant indicator of

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the overall well-being (Tan, Huang, Geng, Cheung, & Zhang, 2021). In educational context, mental health is perceived as the outcome of a healthy life and a crucial aspect in students' success in adjusting to college/university life (Morales-Rodríguez, Espigares-López, Brown, & Pérez-Mármol, 2020). Nowadays, graduate students face additional academic stresses, as they must juggle a number of tasks, including taking courses, managing projects and writing papers (Eleftheriades, Fiala, & Pasic, 2020). Besides, there is an increasing concern that being a university student especially for postgraduate student is a more challenging phase and known to be arduous for individual. The absence of mental problem and the existence of psychological health are now considered as part of mental health (Tang, Tang, & Gross, 2019). They are needed to build better will power in order to remain engaged while also taking care of their own well-being (Chakma, Li, & Kabuhung, 2021).

Based on the General Health Questionnaire, Zegeye, Mossie, Gebrie, and Markos (2018) reported a significant level of stress among postgraduate students in Ethiopia university. According to GHQ-12 results, 32% of postgraduate are at risk of developing a common mental issue, particularly depression in Flanders, Belgium (Levecque, Anseel, Beuckelaer, Heyden, & Gisle, 2017). According to the results, 51% of respondents had at least two signs of deteriorating psychological well-being during their study degree and 40% had three or more (Levecque et al., 2017). In Malaysian public university, Vasugi and Che Hassan (2019) stated that 37.4% of postgraduate students suffer moderate depression. The main rationale for this could be that postgraduate students have typically experienced problems like isolation (Ali & Kohun, 2006; Barry, Woods, Warnecke, Stirling, & Martin, 2018; Janta, Lugosi, & Brown, 2014) and lack of confidence (Bailie, 2009; Holmes, Waterbury, Baltrinic, & Davis, 2018; Patterson, 2009).

Mental health (or lack of same) is often linked to tension, isolation, psychological distress, depression and/or social support when examined via a social/ behavioural perspectives (Schmidt & Hansson, 2018). In addition, isolation may be characterized by the lack of significant social interaction (Prakash & Flores, 1985). Social support is one of the causes that protects mental health from stress (Tahmasbipour & Taheri, 2012). Social support reduces an individual's perception of the risks and severity of stress when they are under it by improving their perceived coping mechanisms (Wang, Cai, Qian, & Peng, 2014). A number of studies have shown that postgraduate journey is often a lonely one (Jeyaraj, 2020). Despite the fact that most postgraduate students reported obtaining adequate assistance, the findings revealed that a large number of students received inadequate support from a Finnish university (Peltonen, Vekkaïla, Rautio, Haverinen, & Pyhäältö, 2017).

University students who perceive themselves to have a high degree of social support show more satisfaction with life and fewer feelings of hopelessness and isolation (Aydin, Kahraman, & Hıçdurmaz, 2017). Social relationships are strongly influence coping and stress (Gates, 2001). It is necessary to emphasize the necessity for learners to develop their individual informal social networks in order to fulfil their individual requirements. (Awang, Kutty, & Ahmad, 2014). In sum, social support can help to reduce the postgraduate students' psychological problems. For example, social support is a component that could help people decrease their levels of stress and cope better with stressful situations (Mohd Yasin & Dzulkipli, 2010). They could seek help or take inspiration from their family, friends, or other important person in their lives.

The most favoured coping technique among undergraduates refers to different strategies of coping (e.g., socializing with pals, seeking guidance from others, talking to others for

emotional comfort (Ganesan, Talwar, Norsiah, & Oon, 2018). Undoubtedly, postgraduate students need more social support such as family, friends, and others to encourage them to stay motivated and persistent in their learning process. As a result, postgraduate students' opportunities for overcoming the difficulties of the postgraduate journey are expected to differ, leading to a greater or reduced chance of a poor experience (Peltonen et al., 2017). Besides, social support can help people become more confident about themselves because it gives them the sense that they are value and welcome by others (Ioannou, Kassianos, & Symeou, 2019).

The concepts of self-esteem and stress are closely tied (Farhan & Khan, 2015). Also, self-esteem encompasses self-belief, emotions and behaviour and also includes physical traits such as self-evaluation of one's own attractiveness or one's own appearance appraisal (Kumar, Lal, & Bhuchar, 2014). Low social interaction, despair, anxiety, eating problems, school failure, and risky behaviour can all be linked to a weaker sense of self-esteem (Mann, Hosman, Schaalma, & Vries, 2004). Thus, self-esteem is a motivating factor that affects how people perceive themselves and how they cope (Mann et al., 2004). When a person's lacks self-esteem, uncertainty causes them to be in lowered mood, so they compare themselves to others (Lau, 2019).

Orth and Robins (2013) stated that self-esteem and depression are related; individuals with poor self-esteem are more likely to suffer from depression, both clinical and less severe forms and are more likely to feel useless, incompetent, and inadequate. Self-esteem may aid in the prevention or reduction of depression or anxiety symptoms (Lee, 2021). As a result, people who have greater level of self-esteem consequently claim to be happier and have a higher quality of life. (Ozpolat, Isgor, & Sezer, 2012). Regardless of stress, high self-esteem is correlated with a lower risk of depression. To put it differently, low self-esteem inclines people to depression in both good and poor times, regardless of their circumstances (Baumeister, Campbell, Krueger, & Vohs, 2003). Besides, Kong, Zhao, and You (2013) stated that the linked between social support and other subjective well-being components is mediated by global self-esteem. Thus, instead of focusing on the subjective well-being of graduate students, there is a gap for this research to investigate the function of self-esteem as a mediator in the correlated between social support and psychological health. To conclude, self-esteem is a positive thinking about oneself that can increase the confidence of postgraduate students.

It is essential to mention that most research in the field of psychological well-being have concentrated mainly on adolescents and undergraduate students. There has been too little attention given at Malaysian public universities on postgraduate students' positive functioning, as well as the function of self-esteem in mediating roles. Social support and self-esteem are the crucial aspects that will impact individual's psychological well-being and need to be taken into consideration. As a result, the current study explored how social support and self-esteem are linked to overall psychological health. The role of self-esteem as a mediator was investigated to determine whether it plays a mediating effect in the correlated between social support and psychological well-being. Figure 1 shows the conceptual framework in this research.

Research Objectives

The predictors that influence psychological well-being serve as the framework for the present research. The goal of this research was to comprehend social support and self-esteem effects in postgraduate students' psychological health at Malaysian public universities.

- To examine the relationship between postgraduate students' social support and psychological well-being in Malaysian public universities.
- To examine the relationship between postgraduate students' social support and self-esteem in Malaysian public universities.
- To identify whether the influence of social support on psychological well-being is fully or partially explained by self-esteem (mediator).

Research Questions

- How is the relationship between social support and psychological well-being among postgraduate students in Malaysian public universities?
- How is the relationship between self-esteem and psychological well-being among postgraduate students in Malaysian public universities?
- Is the relationship between social support and psychological well-being of postgraduate students mediated by self-esteem?

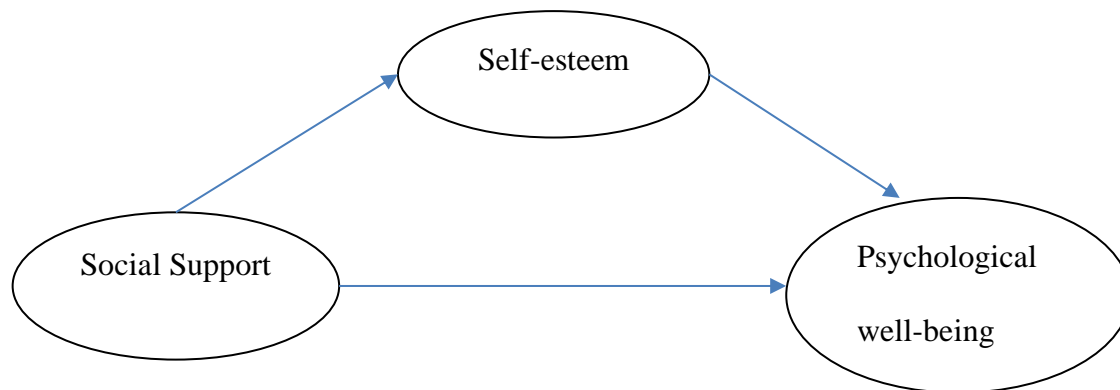


Figure 1. Conceptual Framework

Methodology

Participants

The population in the present study was postgraduate students from public institutions in Malaysia. The sample involved 335 postgraduate students (master's and doctoral). It was difficult to reach out to postgraduate students as the universities were unable to provide the email addresses of postgraduate students. As a result, the data were collected using a convenience sampling method instead. The online questionnaire link was distributed to postgraduate students individually and in postgraduate groups. The data were provided by the use of a self-administered, structured and the findings of measurement model and structural model were evaluated using the PLS-SEM version 3.3.9 software.

Instrumentation

Social Support

The instrument of social support modified based on the instrument of Zimet, Dahlem, Zimet, and Farley (1988). It was created as a short, psychometrically sound way to evaluate the appropriateness of receiving emotionally social support (Zimet, 1998) namely The *Multidimensional Scale of Perceived Social Support (MSPSS)* was used in the present study. The instrument was based on three dimensions namely family, friends and significant other. It contained 12 items. The items were evaluated based on the seven-point Likert scale of 1 = "very strongly disagree" to 7 = "very strongly agree". The factor loading of all items is acceptable (above .70), with a range between .81 and .96 as shown in Table 1.

Self-esteem

A modified self-esteem instrument based on a questionnaire developed by Rosenberg (1965) namely *Rosenberg Self-Esteem Scale (RSES)* was utilised in this study. It contained 10 items related to self-esteem. However, four items (SE2, SE6, SE8, and SE9) with factor loading smaller than .70 were deleted. The items with the factor loading within the range .77 and .83 (above .70) were remained as shown in Table 1. All these items were measured based on the four-point Likert scale of 1 = "strongly disagree" to 4 = "strongly agree". According to the results, all 10 items had adequate standards of item fit and the evaluation scale item difficulty and degree of reliability were also judged to be satisfactory (Park & Park, 2019).

Psychological Well-being

The perceived of psychological well-being instrument measured based on a questionnaire developed by Ryff (1989) and Ryff and Keyes (1995) namely *Ryff's Psychological Well-Being Scales* was used in this study. The instrument was based on six dimensions namely self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life and personal growth. It contained 42 items related to psychological well-being. However, four items (SA3, EM1, PL1, and PL7) with factor loading smaller than .70 were deleted. The items with the factor loading within the range .71 and .90 (above .70) were remained as shown in Table 1. The items were evaluated based on the six-point Likert scale of 1 = "strongly disagree" to 6 = "strongly agree".

Result

Evaluation of Measurement Model

Table 1. Assessment of Convergent Validity and Reliability

Construct	Items	Reliability			Convergent Validity
		Factor loading	Cronbach's Alpha	Composite Reliability	AVE
Social Support-Family	FAM1	.89	.89	.93	.76
	FAM2	.88			
	FAM3	.81			
	FAM4	.90			
Social Support-Friends	FRI1	.86	.87	.91	.72
	FRI2	.83			
	FR13	.84			
	FRI4	.87			
Social Support-Significant Other	SIG1	.95	.97	.98	.91
	SIG2	.96			



	SIG3	.96			
	SIG4	.95			
Self-esteem	SE1	.79	.89	.91	.64
	SE2	Deleted			
	SE3	.77			
	SE4	.81			
	SE5	.83			
	SE6	Deleted			
	SE7	.82			
	SE8	Deleted			
	SE9	Deleted			
	SE10	.77			
Psychological Well-being- Self-acceptance	SA1	.82	.91	.93	.69
	SA2	.86			
	SA3	Deleted			
	SA4	.87			
	SA5	.83			
	SA6	.88			
	SA7	.72			
Psychological Well-being- Positive Relations with Others	PO1	.77	.90	.91	.63
	PO2	.83			
	PO3	.77			
	PO4	.77			
	PO5	.80			
	PO6	.85			
	PO7	.76			
Psychological Well-being- Autonomy	AU1	.71	.87	.90	.56
	AU2	.74			
	AU3	.77			
	AU4	.80			
	AU5	.78			
	AU6	.71			
	AU7	.72			
Psychological Well-being- Environmental Mastery	EM1	Deleted	.90	.92	.67
	EM2	.76			
	EM3	.75			
	EM4	.85			
	EM5	.85			
	EM6	.86			
	EM7	.84			
Psychological Well-being- Purpose in Life	PL1	Deleted	.92	.94	.75
	PL2	.90			
	PL3	.87			
	PL4	.88			
	PL5	.84			
	PL6	.83			
	PL7	Deleted			
Psychological Well-being- Personal Growth	PG1	.79	.90	.92	.63
	PG2	.84			
	PG3	.83			
	PG4	.81			
	PG5	.77			
	PG6	.76			
	PG7	.75			

Note. FAM=Family, FRI=Friends, SIG=Significant Other, SE=Self-esteem, SA=Self-acceptance, PO= Positive Relations with Others, AU= Autonomy, EM= Environmental Mastery, PL=Purpose in Life, PG= Personal Growth

Table 2. Heterotrait-Monotrait (HTMT)

	AU	EM	FAM	FRI	PG	PL	PO	SA	SIG
AU									
EM	.70								
FAM	.25	.49							

FRI	.15	.31	.54					
PG	.59	.68	.39	.29				
PL	.67	.87	.49	.29	.81			
PO	.63	.77	.53	.53	.63	.67		
SA	.70	.85	.51	.31	.69	.83	.70	
SIG	.24	.33	.50	.49	.28	.33	.49	.36

Note. AU=Autonomy, EM= Environmental Mastery, FAM= Family, FRI=Friends, PG=Personal Growth, PL= Purpose in Life, PO= Positive Relations with Others, SA=Self-acceptance, SIG=Significant Other

The result of convergent validity and reliability and the remaining items are demonstrated in Table 1. In the present study, the measurement model was performed in PLS-SEM 3.3.9 software. To achieve the convergent validity and discriminant validity [Heterotrait-Monotrait (HTMT)] four items of self-esteem and four items of psychological well-being were eliminated. The total items with factor loadings smaller than .70 were deleted (SE2, SE6, SE8, SE9, SA3, EM1, PL1, PL3). The factor loadings are all listed within the range of .71 to .96 (above .70). These items were proved to be the most reliable indicators for identifying and measuring social support, self-esteem, and psychological well-being. Besides, the AVE (average variance extracted) should be at .50 (Hair, Hult, Ringle, & Sarstedt, 2014). The convergent validity of all the variables investigated is accepted within the range .56 and .91.

The convergent and reliability are indicated in Table 1. In addition, Table 2 indicates the result of Heterotrait-Monotrait (HTMT). The HTMT values did not exceed .90, so there are no issues with discriminant validity. Due to this, for the current study, social support scale consisted of 12 items, self-esteem scale comprised six items, and psychological well-being scale had 38 items from the adapted original scale.

Second Order Constructs

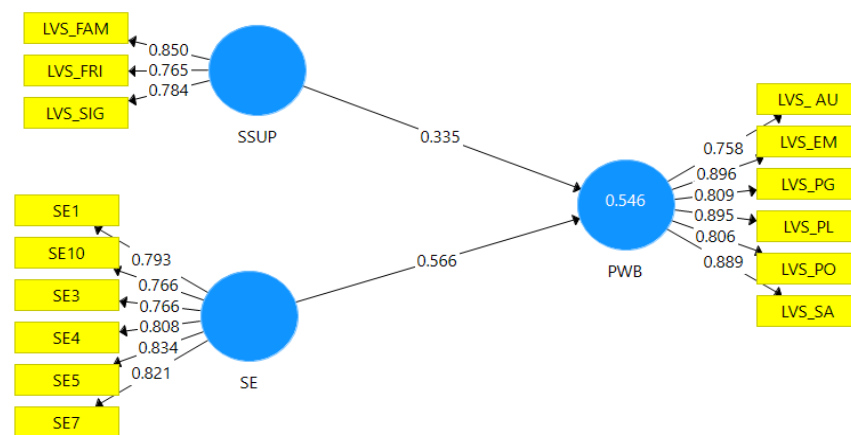


Figure 2. Second Order Constructs

Table 3. Assessment of Second Order Constructs

Latent Variables	Second Order Constructs	Reliability			Convergent Validity
		Factors loading	Cronbach's Alpha	Composite Reliability	AVE
LVS_FAM	Social Support	.85	.72	.84	.64
LVS_FRI		.77			
LVS_SIG		.78			
LVS_AU	Psychological Well-being	.76	.92	.94	.71
LVS_EM		.90			
LVS_PG		.81			
LVS_PL		.90			
LVS_PO		.81			
LVS_SA		.89			

Figure 2 shows the second order constructs. The results of the inquiry into the convergent validity and reliability of second order construct assessment are shown in Table 3. The factor loading values ranged from .76 to .90, and the AVE values were .64 and .71, indicating that the convergent validity is acceptable. Furthermore, the Cronbach's alpha values were .72 and .92 and reliability values were .84 and .94, indicating that the internal consistency reliability is adequate.

Table 4. Heterotrait-Monotrait (HTMT)

	PWB	SE	SSUP
SSUP	.60	.36	
SE	.73		
PWB			

Table 5. Inner VIF Values for Collinearity Assessment

	PWB	SE	SSUP
PWB			
SE	1.10		
SSUP	1.10	1.00	

As shown in Table 4, there were no problems with discriminant validity in this study. Table 5 indicates that the variance inflation factor (VIF) in the present study was less than 5, indicating that no collinearity issues exist. VIF values of 5 or greater suggest a problem with collinearity (Hair Jr et al., 2021). After establishing the validity and reliability of the measurement model of the first and second order constructs using the PLS method, the structural model assessment was conducted.

Evaluation of Structural Model

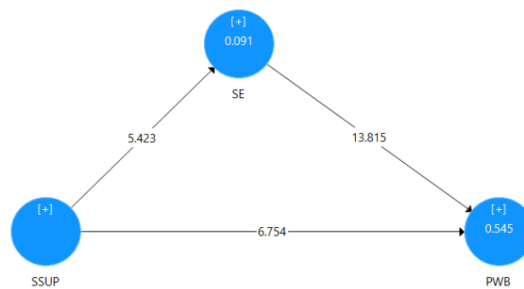


Figure 3. Evaluation of Structural Model

Figure 3 shows the evaluation of structural model. SmartPLS was used to analyse the structural model in this study. PLS-SEM is the method of choice when the research goal is theory development and prediction (Dash & Paul, 2021; Hair, Christian Ringle, & Sarstedt, 2011). PLS-SEM can be used if the structural model is complicated (multiple constructs and many indicators) (Hair, Ringle, & Sarstedt, 2011). Besides, structural equation modelling (SEM) offers a more suitable inference framework for mediation analyses, as well as for other kinds of causal analyses (Gunzler, Chen, Wu, & Zhang, 2013).

Table 6. Overview of Structural Model

Hypothesis		β	<i>t</i> -value	<i>p</i> -value	Confidence Intervals		Result
					5%	95%	
H1	SSUP-PWB	.33	6.75	.00	.25	.41	Accepted
H2	SE-PWB	.57	13.82	.00	.50	.63	Accepted
H3	SSUP-SE	.30	5.42	.00	.22	.40	Accepted
H4	SSUP-SE-PWB	.17	5.38	.00	.12	.23	Accepted

Note. SSUP=Social Support, SE=Self-esteem, PWB=Psychological Well-being
 One-tailed Level of Confidence: (95%) $t > 1.65$

Table 6 shows the finding of the structural model, after running the bootstrapping. According to the Hair, Hult, Ringle, and Sarstedt (2017), the significant value is 1.65 (significance level = 5%) for one-tailed tests. The findings revealed that social support and self-esteem have significant impact on psychological well-being where the *p*-value was less than .05. and the one-tailed test's *t*-value was higher than 1.65. Social support has the direct impact on psychological well-being ($\beta=.33$, t -value=6.75, $p<.05$) and self-esteem ($\beta=.30$, t -value=5.42, $p<.05$). Besides, self-esteem has the strongest impact on psychological well-being ($\beta=.57$, t -value= 13.82, $p<.05$). There is also a mediation effect of self-esteem ($\beta=.17$, t -value= 5.38, $p<.05$) on the relationship between social support and psychological well-being. Accordingly, self-esteem has a partial mediating role in the relationship between social support and psychological well-being as there is a significant link between the mediator (self-esteem) and psychological well-being.



Discussion

In the present study, social support and self-esteem have positive influence on postgraduate students' positive functioning in Malaysian public universities. Besides, the finding shows that partial mediation of self-esteem is relevant because the direct effect and indirect effect are significant. Social relationships are a precious asset for individual's action potential and quality of life (Lang, 2001). According to stress and coping theory, people must actively consider and balance social needs, while also identify and utilize the social resources that are accessible (Lazarus & Folkman, 1984). Wang et al. (2014) indicated that the research found that social support had an influence on the association between tension and depression, when compared to a team with a high degree of social support. Besides, it is believed that greater levels of perceived social support are linked with poor levels of depression and worry symptomatology (Zimet et al., 1988).

Kumar et al. (2014) indicated that person's social support is associated with their traits, such as how well they have built their networking skills and how effectively they have assisted others in coping with various crises or events in their lives and it also contributes to one's psychological well-being. The findings of Hämmig (2017) revealed that receiving support from a wide range of sources is protective and beneficial to one's wellness and well-being at work. Social support not just assists helps students feel less of life exhaustion, but also aids in mental health improvement in students, as evaluated by psychological well-being (Rehman, Bhuttah, & You, 2020). To demonstrate, doctoral students' social support networks provided supportive support, which supported the stress-buffer hypothesis and possibly lowered their stress levels (Jairam & Kahl, 2012). Emadpoor, Lavasani, and Shahcheraghi (2015) show that the positive influence of social support on students' positive functioning.

According to Sverdlik, Hall, McAlpine, and Hubbard (2018), for doctoral students, poor well-being and a greater incidence of mental illness have been linked to a shortage of social support and/or conflict between job and personal lives. Also, for Malaysian university undergraduates, the research shown a major inversely correlated between social support and depression, anxiety and stress (Mohd Yasin & Dzulkifli, 2010). People's perceptions of friends, family, and other people as providers of practical help, psychological support, and general assistance when they need it are referred to as perceived social support (Ioannou et al., 2019). In one example, the better the bond between the students and their peers, the stronger their psychological well-being (Sarkova et al., 2014). Similarly, those who performed better on psychological well-being rated themselves as having a better chance of making friends (Husted, 2017). According to Panahi et al. (2016), significant others support and friend assistance has influenced 43% of graduate students' psychological well-being.

Apart from that, university students who believe to have social support have improved psychological health (Adyani, Suzanna, Safuwani, & Muryali, 2019). Aydin et al. (2017) indicated that as nursing students' social support levels increase, so does their psychological well-being. According to Fauziah, Handarini, and Muslihati (2018), social support and mental health among junior secondary school students are related. Also, findings of Mohd Yasin and Dzulkifli (2010) clearly indicated negative associations between social assistance and mental issues among undergraduate students.

The link between social support and psychological well-being has been proven in numerous research. For example, study of social support conducted in various settings and cultures has shown that there is a significant correlation between social support networks and well-being (Poudel, Gurung, & Khanal, 2020). Since student is often confronted with a problem when

attempting to complete their thesis, but also because the problem will have an effect on their overall health, it has been demonstrated that social assistance will have a good influence on their mental health (Saputra & Palupi, 2020). According to Poudel et al. (2020), self-esteem was shown to be a substantial predictor of psychological well-being, and social support was also discovered to be a major factor of self-esteem. The findings indicate that for Nepalese adolescents, perceived social support indirectly influences psychological health through their self-esteem and self-esteem was also revealed as a strong factor of psychological health.

Self-esteem has the potential to influence human behaviour in a variety of contexts, including unpredictable situations, life events, social relationships, goal setting and motivation; it can also play a role in regulating well-being levels (Nwankwo, Okechi, & Nweke, 2015). The findings suggest that having a positive self-perception is linked to psychological health, happiness, adjustment, success, academic achievement, and satisfaction (Mann et al., 2004). Similarly, regardless of stress, high self-esteem negatively predicted depression overall (Baumeister et al., 2003). According to Kitamura and Kishida (2004), events that improve self-esteem contribute to greater psychological health, while events that threaten self-esteem lead to lower psychological health. According to ÇİÇEK (2021), self-esteem is a significant predictor of university students' psychological well-being.

The advantages of social support on self-esteem were shown to be most beneficial for those who indicated moderate levels of perceived stress, and these improvements in self-esteem were shown to be correlated with a decrease in depressive signs (Ioannou et al., 2019). In this study, the correlation between social support and psychological well-being was shown to be partially mediated by self-esteem. As a result, Ioannou et al. (2019) indicated that its impact on self-esteem, a feeling of safety and relatedness (all factors that contribute to higher self-esteem), perceived social support might contribute to enhance the psychological well-being. The findings by Anju Poudel, Gurung, and Khanal (2020) showed that perceived social support influences adolescent psychological health via self-esteem, suggesting that a higher degree of self-esteem is essential for a person's feeling of mental health. It aligns with the findings in the present research that self-esteem has a mediation effect between the association of social support and postgraduate students' psychological health.

The findings of Ozpolat et al. (2012) show that persons with low self-esteem are often not safe from the viewpoint of psychological well-being. In contrast, individual who have a high sense of self-esteem have a stronger psychological well-being (Awan & Sitwat, 2014). Self-esteem is a key indicator of depression, worry and tension of undergraduate students in Okinawa (Ratanasiripong, China, & Toyama, 2018). Self-esteem has moderate and important associations with the psychological well-being of pre-service teachers (Akfirat, 2020). For student athletes, self-esteem would have a significant relationship with psychological well-being (Nwankwo et al., 2015).

Scholars and theorists have established connections between poor self-esteem and a range of other ideas, with the most of their attention being focused on the links between low self-esteem and pathologies like depression (Baumeister et al., 2003). In comparison to other variables, self-esteem is the strongest predictor that correlates with psychological well-being (Fauziah et al., 2018). The current research supports the idea that self-esteem has a higher influence on psychological health.

Limitation of Study

A quantitative survey was used in the present research. There was no token of appreciation for the participants; however, they completed the questionnaire voluntarily because they valued the research's contributions. Furthermore, only postgraduate students from Malaysian public universities were involved. Since the university was unable to provide the postgraduate students' email list, thus, convenient sampling was adopted in this study.

Suggestions for Future Study

In the future, the research could use a mixed-method approach to obtain more in-depth information about the positive functioning of postgraduate students. It may also be possible to study how a person's psychological well-being is influenced by their physical well-being. Besides, future researchers could perform new study to investigate the factors of psychological well-being, with a particular focus on postgraduate students with disabilities, and counsellors working at universities can try to enhance the positive elements of students' characters.

Implications

This study fulfilled the gap that self-esteem is a mediator on the correlation between social support and psychological well-being. The university administration, supervisor, and counsellor might get the ideas to promote the positive functioning of postgraduate students. For example, student affairs department can put together such a programme that will boost their students' sense of self-worth while also assisting them in increasing their sociability to keep their internal body and mind healthy. Furthermore, the findings of the study can assist students in understanding the significance of their own self-esteem and social support to preserve health and indirectly to improve their academic performance. It is also to realise that the supervisor could identify a method to improve the quality of their supervision by enhancing their students' self-confidence during the research process. According to Mohd Yasin and Dzulkifli (2010), the result supports the value of identifying and handling social support, so that psychological difficulties do not impact students' academic performance.

Conclusion

To sum up, the findings indicate that self-esteem has the greatest influence on the postgraduate students' psychological well-being compared to social support. Social support is vital for preserving good physical and mental health (Ozbay et al., 2007). Individuals must continually identify and manage social needs, while also identify and utilise available social sources, in order to live healthily. Most of the time, graduate students study alone. If they receive more social support, it might help them feel better about themselves, be more mentally healthy, and achieve academic success.

Besides, self-esteem is essential for postgraduate students to develop self-confidence since they must learn to think critically to conduct great research and overcome challenges. Postgraduate students' social support and self-esteem can help to enhance their psychological well-being. In the future study, researchers can investigate other important factors that could influence postgraduate student' psychological well-being.

Conflict of Interest:

There are no conflicts of interest for the authors.

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