A measure for perceived social support for university students: Implication for campus leaders

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ABSTRACT

Social support plays a crucial role in an individual's life. Individuals who experience strong, positive social relationships and feel supported by others tend to report lower levels of anxiety, depression, and psychological stress. Social support may come from family members, friends, and significant others in life. Looking at the importance of social support in university students' lives, there have been a few scales to measure social support, and one of them is the Multidimensional Perceived Social Support Scale, which was developed in a Western country. This study examined the validity of the Malay version of the Multidimensional Perceived Social Support Scale in a sample of 443 Malaysian university students. Results support the high reliability and validity of this scale. Confirmatory factor analysis reported the expected three-factor structure and a high correlation between factors and scales. In addition, internal consistency was good, and correlation analysis with the Satisfaction with Life Scale proved the theoretical relations among the constructs. The findings suggest that MPSS-M is a reliable and valid tool to measure social support among students in higher education institutions. Campus leaders and student affairs professionals may use the scale to identify the source of support among students. Implication for university management is also discussed.

Keywords: higher education, Malay, the multidimensional scale of perceived social support, educators

INTRODUCTION

Perceived social support is a person's belief in the assistance or support they receive through their interactions with others. This description encompasses their social contacts and the quality of the assistance they get (Dour et al., 2014), which may include friends, family members, and significant individuals in their life. Social support is described as "an individual's feeling of general support from individuals in their social network, which increases their functioning and/or may buffer them from unfavorable consequences" (Demaray & Malecki, 2003). In a few studies, perceived social supports were shown to impact the quality of life (e.g., Van Droogenbroeck et al., 2018; Oldfield et al., 2016; Beeri & Lev-Wiesel, 2010; Slund et al., 2010), reduce anxiety in adolescents (Raknes et al., 2017), aids university student adjustment (Solberg & Valdez, 1994), moderates the link between positive psychological qualities and subjective well-being (Khan & Husain, 2010), academic achievement (Baker, 2013), and retention (Baker & Robnett, 2012).

Meanwhile, a lack of social support may influence job quality, workplace changes (Rytsälä et al., 2006), and university students' levels of resilience (Khairina et al., 2020). Stress and despair can result from a lack of social support, which can lead to more significant mental disorders such as suicidal ideation, personality disorder, or other indications of a mental condition. People who suffer from social anxiety, on the other hand, may sense less social support (Barnett et al., 2020).

Individuals who lack social support are usually lonely and have fewer friends to listen to their troubles since they avoid interacting with others.

Meanwhile, a lack of social support may impact work quality and workplace adjustments (Rytsälä et al., 2006) and affect university students' resiliency level (Khairina et al., 2020). The lack of social support may lead to stress and depression, which may turn into more serious mental problems like suicidal thoughts, personality disorders, or other symptoms of mental disorders. On the other hand, people who suffer from social anxiety may perceive less social support (Barnett et al., 2020). Individuals lacking social support always feel lonely and have fewer friends to listen to their problems because they always avoid communicating with others. Less social support may result in a lower level of life satisfaction and a greater likelihood of developing psychiatric symptoms (Hansen et al., 2018; Bosworth et al., 2008), requiring more time to recover from mental problems (Hybels et al., 2016), being more vulnerable to stress (Chao, 2012), and affecting the rate of relapse among individuals with depression (Backs-Dermott et al., 2010). People who receive greater social support have a deeper feeling of belonging, identity, and a more meaningful existence.

Due to the pandemic situation, many sectors have been affected, including the economic, social, technology, and education sectors. This also affects university students who must adapt to new circumstances and situations. Many non-essential services are directed to close, and learning sessions at school or university are completely diverted to online learning. During the pandemic period, university students were reportedly anxious, depressed, bored, and restless during the learning sessions, which may cause a lack of focus during online learning (Muniruzzaman & Siddiky, 2021). This situation will get worse if it is not controlled, and thus, the university should play its role in offering support to students who face challenges during online learning. First-year students should be given exposure and support and a good learning environment to maintain their learning momentum (Chong & Soo, 2021). One of the supports includes psychological support by identifying sources of social support that can positively impact students' psychological condition. Students must provide a conducive environment for them to grow and cope with the challenges in life. Besides, the identified sources of social support can act as a source of motivation and the catalyst for enthusiasm for students.

Given the significance of social support in the lives of university students, a few measures may assist higher education counsellors, educators, and management teams in determining the sources of social support among higher education students. The most often used scales are the Social Support Questionnaire (SSQ) developed by Sarason et al. (1987; 1983) and the Interpersonal Support Evaluation List (ISEL) developed by Cohen & Hoberman (1983), which counsellors can use to understand their clients' support systems better. Zimet et al. (1988) developed the Multidimensional Perceived Social Support Scale (MPSS) to examine an individual's impression of social support. MPSS was developed to examine people's views of social support from friends, family, and significant others. MPSS stands out when compared to other measurements. Firstly, MPSS was reported to be one of the instruments with psychometric consistency, and it has been widely utilized in both clinical and nonclinical settings across a wide range of demographic backgrounds and nationalities (Bagherian-Sararoudi et al., 2013). Secondly, most of the other scales did not incorporate three unique types of social support—family, friends, and significant others (Bruwer et al., 2008; Zimet et al., 1988). Data on different types of social support may benefit higher education counsellors when developing student wellness programs. Third, MPSS is a quick, user-friendly, and time-effective self-report instrument (Rizwan & Aftab, 2009; Bruwer et al., 2008), reducing test-taker bias. Fourth, the MPSS is one of the most recent scales for measuring social support, having been established in the late 1980s.

MPSS has been validated on a variety of populations, including adults, adolescents, students, and psychiatric patients around the world, including the youth population in South Africa (Bruwer et al., 2008), the adolescent population in Mexican America (Edwards, 2004), Turkish higher education students (Duru, 2007; Basol, 2008), medical students population in Thailand (Wongpakaran & Wongpakaran, 2012), adolescents population in Arab American (Ramaswamy et al., 2009), higher education students population in Pakistan (Rizwan & Aftab,

2009), and women in the postpartum phase population in France (Dennis & Dowswell, 2013). Three of these validation studies validated the two-factor structure of social support (eg. Tonsing et al., 2012; Chou, 2000; Stanley et al., 1998). Meanwhile, Pakistani population research has supported a one-dimensional model of social support (e.g., Akhtar et al., 2010). We also looked at a few validation studies that had been completed in Malaysia.

A review of past studies conducted in Malaysia indicated that three studies tested the validity of MPSS in the Malay version in Malaysia. Firstly, the study conducted by Lee, Moy, and Hairi (2017) on a sample of secondary school teachers in Peninsular Malaysia showed a good internal consistency of MPSS-M and support for its divergent and convergent validity. However, the result contrasted with most past research, especially compared to the original study (Zimet et al., 1988). Lee et al. (2017) revised the original factor structure of MPSS as they yielded a two-factor structure with eight items. However, they did not compare their findings with three validation studies conducted in China and South Asians, which reported a two-dimensional model (Tonsing et al., 2012; Chou, 2000; Stanley et al., 1998;). This explanation is important to convince readers of their findings.

Secondly, a study by Ng et al. (2012) on the samples of a psychiatric outpatient clinic in Malaysia has been reviewed and showed good internal consistency and support for construct and predictive validity. However, they did not report the factorial validity of MPSS-M, as this is very important to support a good psychometric instrument. Thirdly, a study conducted by Razali and Yusof (2014) on medication adherence in schizophrenia reported a good internal consistency of MPSS-M. Nevertheless, no factor structure validity has been reported. Even though there were three studies have been conducted to validate MPSS-M, it was found that there were some issues in the studies, especially in providing strong evidence on the factor structure of MPSS-M. We also noted the critiques by Dambi et al. (2018) on the poor methodology of cross-cultural validation done for MPSS-M in their review. With this inconsistent result, it might not be convincing for counsellors and the management team to use this scale due to the reliability and validity issues. Hence, this validation study is conducted to support the psychometric properties of MPSS-M as it is a widely used instrument by counsellors, researchers, educators, and other significant professionals worldwide.

The primary goal of this research is to examine the psychometric properties of the Malay version of Multidimensional Perceived Support Scales in higher education settings. Specifically, there are two hypotheses to be tested. First, will the factor structure of the original MPSS be replicated in the Malay version of MPSS? It is hypothesized that even in the Malay version, there is a correlated three-factor structure of MPSS-M. Second, could the MPSS-M possess good reliability and validity? It is hypothesized that MPSS-M will possess high reliability and validity.

METHOD

The study included 443 university students (77.4% female, n=344; 22.1% male, n=98, Mage=22.58, age range 19-52 years). The majority of the participants (n=342) were Malays, followed by Chinese (n=42), Indians (n=22), and others (n=37). The sample's educational attainment includes 6.8% with a diploma, 82.6% with a bachelor's degree, 9.5% with a master's degree, 0.2% with a Ph.D., and the remaining did not indicate their academic history. 95.3% (n=422) of the participants were single, 4.3% (n=19) were married, and 0.2% did not indicate their relationship status. The majority of participants (n=356) were Muslims, followed by Christians (n=32), Buddhists (n=30), Hindus (n=16), and others (n=3). 40.6% were from the education department, 36.1% from the human and development fields, 18.3% from the arts and social sciences, 5.1% from Islamic studies, and 0.6% from other fields.

MPSS-M. The initial 12 MPSS questions (Zimet et al., 1988) were developed to measure perceived social support. MPSS-M comprises three components: family, friends, and significant other support. Each question had seven replies ranging from strongly disagree to agree strongly. The MPSS can have a score ranging from 12 to 84, with higher scores showing more perceived social support. The coefficient alpha values were reported to be 0.87 (family), 0.91 (significant others), 0.85 (friends), and 0.88 for overall scale score dependability (Zimet et al., 1990).

We altered the Satisfaction with Life Scale (SWLS) to assess life satisfaction (Diener et al., 1985). SWLS was created to evaluate global cognitive assessments of life satisfaction. Using a seven-point Likert scale, participants expressed their agreement with five propositions. SWLS was translated into Malay using back-to-back translation processes (Brislin, 1970). M-SWLS has a strong internal consistency, with a coefficient alpha value of 0.81.

The questionnaires were distributed to the participants who were voluntarily involved in the study. Respondents will mark their consent to participate in this research by answering the questionnaire. The researcher was present in the lecture hall to administer the questionnaire.

The recommendations from the transcultural adaptation of the assessment instrument were followed (Brislin, 1970). First, MPSS was translated into Malay by one independent expert translator from the counselling field. Then, the other expert from the English language field did the back translation from Malay to English. Then, the researcher and two expert translators discuss both translated versions. Both translated versions of the questionnaire were then checked to identify possible problems in item comprehensibility. After some discussion, the authors agreed that all of the translated items were well comprehended, and so were retained.
A Statistical Package for the Social Sciences (SPSS) was used to enter the data. The data were screened, and 12 cases were removed due to uncompleted responses on more than one part of the questionnaire, reducing the initial sample to n=443. The AMOS version 24 was used to perform confirmatory factorial analysis.

FINDINGS AND DISCUSSION

Findings
Statistical analysis
We used AMOS version 24 to do a confirmatory factor analysis to test the construct validity. The chi-square statistic (2) and p values, Tucker Lewis index (TLI), comparative fit index (CFI), goodness-of-fit index (GFI), and root mean square error of approximation (RMSEA) were used to analyze the data. An RMSEA score of less than 0.05 is regarded as good, a value of less than 0.08 is considered decent, and a value of less than 0.10 is deemed average (Kline, 2005). Cronbach's alpha, a reliability analysis, was also done to investigate the MPSS-internal M's consistency. Values greater than 0.7 are regarded as good (Field, 2013). Pearson's correlation analysis (p-value .05) was used to assess concurrent validity.

Preliminary analysis
Before commencing data analysis, a few statistical assumptions and the suitability of the sample size were validated. Structural equational modeling requires a minimum of 100 to 200 samples (Kline, 2005). A sample size of five to ten individuals was suggested by Grimm and Yarnold (1995) for each observed variable. This study's conceptual model comprises 17 observed variables, and Confirmatory Factor Analysis (CFA) requires at least 170 samples. This study had over 400 responses, demonstrating the appropriateness of the sample size. The skewness and kurtosis values varied from -2.00 to +2.00, indicating that no assumptions of normality were violated in the current investigation (Tabachnick & Fidell, 2013). Before data analysis, a few statistical assumptions and the sample size's appropriateness were tested. A minimum of 100 to 200 samples is required to perform structural equational modelling (Kline, 2005). Grimm and Yarnold (1995) also recommend a minimum sample size of five to ten participants per observed variable. In this study, the conceptual model incorporates a total of 17 observed variables. Therefore, at least 170 samples are required to run CFA. 400 respondents were involved in this study, which confirms the sample size's sufficiency. Skewness and kurtosis values varied from -2.00 to +2.00, indicating that no assumptions of normality were violated in the current study, as Tabachnick and Fidell (2013) suggested. The non-normal distribution is indicated by a cut-off value of 5. (Bentler, 2005). In this study, the multivariate kurtosis coefficient and critical ratio were somewhat higher than the stipulated value, but this is acceptable because normality breaches are common in larger sample sets (Pallant, 2013). Taking this point, data analyses can proceed.

Structural validity

The initial three latent variables model consists of 12 items (family, friends, significant others). The $\chi 2$ was found to be significant for the hypothesized model, $\chi 2(51) = 155.88$, p <.001. The fit indices reported a good fit of data, GFI = 0.90, CFI = 0.95, TLI = 0.94, and RMSEA = 0.109 with good factor loadings, which is above 0.7 (p < .001) (see Figure 1). Figure 1 reveals the acceptable model of the three-factor structure of MPSS-M. However, a better model is sought as the RMSEA value is average (Kline,2005). Therefore, the lowest loaded factor has been identified and re-specified in this model by omitting the lowest loaded factor, item SO3 (0.72).
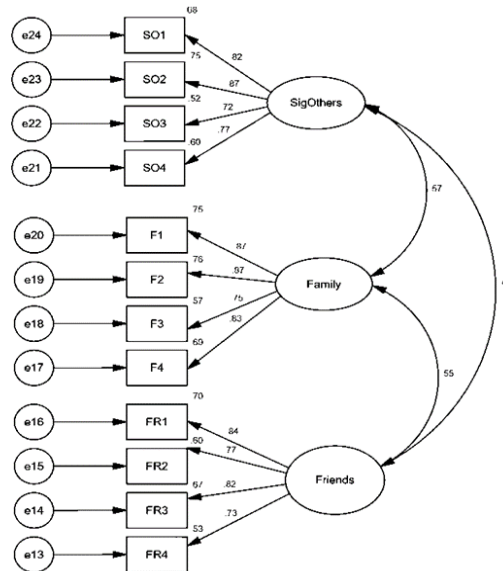
**Figure 1. The Output of the Hypothesized Measurement Model
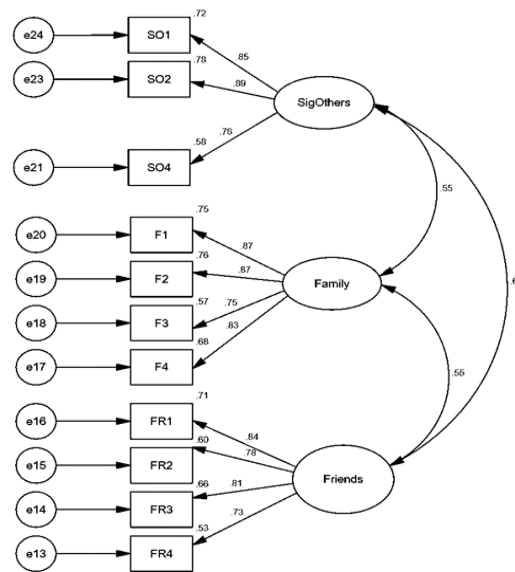with a Three-Factor Structure**

Figure 2 depicts the output for the re-specified measurement model. In addition, the model fit indices for the re-specified model showed a significant value for $\chi 2$, $\chi 2$ (41) = 4.24, p <.001 (see figure 2). GFI = 0.93, CFI = 0.96, TLI = 0.94, and RMSEA = 0.08 were strong fit indices. All loaded factors were above 0.7. After removing one item, SO3, the RMSEA value has improved to 0.08. Then, item SO3 was re-examined, in which the statement was "I have a special person who is a real source of comfort to me". SO3 might not apply to certain people because sometimes people do have a special person in their life, but it is not necessary that person is the only source to comfort people in a stressful situation. Therefore, the re-specified three-factor model was accepted as it was a strong fit for the data and may retain the original factor structure. Thus, further discussion will be based on the estimation from this model.

Concurrent validity

The perceived social support construct and life satisfaction have been connected and had a significant positive link (r=0.10, p<.01). The finding confirms MPSS-concurrent M's validity. Perceived social support has also been linked to higher levels of good psychological outcomes such as life satisfaction and well-being (Wilson et al., 2020).

Reliability analysis

Cronbach's Alpha was used to analyze the internal consistency of reliability coefficients in MPSS-M. MPSS-M overall Cronbach's alpha was 0.91, including 0.91 for the family subscale, 0.90 for the friend's subscale, and 0.91 for significant other subscales. The result validates the dependability of MPSS-M and its subscales based on the usual rule of thumb of 0.70 (Field, 2013).

Figure 2. The output for a re-specified model for measurement model with a three-factor structure

Discussion

Based on these findings, a few important things were concluded. First, the findings strongly support the psychometric properties of MPSS-M, affirming its alignment with the original version. Interestingly, there were two possible solutions for the construct validity of MPSS-M: either to retain 12 items or to revise the original 12 items to 11 items, as the RMSEA value in the hypothesized model is average. Upon thorough review of both the original and modified versions of the MPSS-M, the re-specified model has been accepted, and the three-factor structure has been retained as its original. As for these, the original factor structure of the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) was retained, consistent with the results of most previous studies (e.g., Laksmita et al., 2020). Moreover, a new interesting finding on MPSS, excluding SO3, was added to the literature. These findings were also highlighted in the previous work by Cheng and Chan (2004) and Chou (2000) where there was some vagueness on this item as it reported a strong correlation between the significance of others and family subscales. These findings support our proposition on the potential problematic item in significant other subscales. Notably, Zimet et al. (1990) also acknowledged this ambiguity. Future researchers should explore precisely what constitutes a "significant other" to individuals in these contexts.

Some cultural implications were drawn from this study. "I have a special person who is a real source of comfort to me," was the statement for item SO3. In this sense, cultural variations between individualist and collectivist cultures may contribute to Malaysian society's differing conclusions compared to most Western research findings. Malays, who are associated with a collectivist society, comprise most of Malaysia's population. Collectivist societies encourage solidarity, mutual support, respect, politeness, and peaceful coexistence. It depicts a way of living that stresses the interconnected self (Markus & Kitayama, 1991). The idea of belonging or unity is more important than how an individual feels. As a result, the capacity of individuals to distinguish themselves from their family of origin may not be necessary.

It is possible that individuals still receive social support from significant others. However, the source person is not the "one and only" support for them because emotional dependency on family members is much stronger. This finding explains the uniqueness of family culture in Malaysia. The participants in the study perceived that they received the highest social support from their family, followed by friends, and the last, significant others. In addition, perceived social support was found to be positively correlated with the satisfaction of life, indicating that

life satisfaction will be higher when a person receives higher social support. Here, the findings again support this point, as the lowest social support comes from significant others.

Implication for higher education setting

There are a few implications that can be highlighted in this study. First, counsellors in higher education may use MPSS-M in counselling. This may help the counselor understand the sources of social support their clients need. The use of psychological tests may help them to explore their clients' issues well. On top of that, the counsellor may use MPSS-M in their guidance and psycho-education programs. These may help them to identify the significant roles of social support in students' life. For educators, it is important to understand the social environment of their students. Social support information may help educators plan their lessons, activities, and programs by considering their social support as a motivational source. Hopefully, this might help reduce the number of dropout students, as it can be utilized in the early phase of dropout decision-making by the students (Bäulke et al., 2022). Finally, the university management should consider the well-being of students when designing and proposing campus activities. Activities that may play as social support should be encouraged. Suitable activities that consider their psychological well-being will promote the development of a healthy personality, which, in turn, helps students perform academically.

Social support is important in enhancing higher education students' life satisfaction, specifically for the program to increase life satisfaction. This fact is also supported by Shelton et al. (2017), who found that social support might positively impact an individual with low independent self-construal. Counsellors and educators in higher education settings should be aware that even if peer friends surround students and clients, they still need support from their family of origin. In this case, the counsellors and educators may play an important role in highlighting this in any programs involving parents, such as interaction day and registration day for first-year students. The university is important in ensuring students' engagement with other parties, especially with friends, family, and the community. Students' engagement might influence student academic performance (Lardy et al., 2022).

In addition, higher education counsellors and educators also need to investigate students' cultural backgrounds. Cultural differences may have some impact on students. In this study, the family emerges as the most significant source of support for students, which aligns with the values of collectivist communities, where familial bonds often serve as a critical source of strength. Family support can enhance an individual's overall functioning and well-being, providing a solid foundation for personal and academic success. Moreover, this support system can be a valuable resource in counselling settings. Counsellors are encouraged to explore clients' family backgrounds, even in individual counselling sessions, as family dynamics play a crucial role in shaping mental health. As Cheng et al. (2017) demonstrated, perceived social support mediates the relationship between parental attachment and life satisfaction, suggesting that a strong attachment to a parent can significantly influence an individual's mental well-being. When adolescents encounter life challenges, they tend to seek support from others, including family, friends, and significant others, to cope with problems. In addition, support from family helps to decrease stress levels and increase psychological well-being (Wang & Castañeda-Sound, 2008). This also highlighted the possibility of family counselling being practised in the higher education setting. Emotional support from the family becomes highly significant to a person as it is the main predictor of happiness (Dominguez-Fuentez & Hombrados-Mendieta, 2012). This is very important to the counsellor in helping their clients.

Suggestions for future research

Despite this, several key points should be highlighted, which may serve as valuable considerations for future researchers conducting studies in this field. These insights can be used to guide and refine future research approaches, ensuring a more comprehensive understanding of the subject matter. The cross-sectional study design makes it impossible to determine the causal association between perceived social support and life happiness. Therefore, it is suggested that future researchers validate MPSS-M by examining the validity of this scale using other types of

validity, such as testing its relationship with alternate established scales that measure social support with consideration of a longitudinal study. In addition, future researchers may want to explore family roles as a motivation source for higher education students to maintain their well-being. A qualitative study may provide a deeper insight into the researcher's understanding of this area.

CONCLUSION

Psychological tests not only help individuals explore themselves better, but they also help counsellors and educators to understand their students and clients further. Therefore, the translation and validation process must carefully consider the cultural differences, especially when the tests originated from Western countries. Researchers should be aware of the cultural differences between the test's developer and the context of its application. By doing so, the researcher can translate their research findings to be more practical. Based on the findings of this study, counsellors are encouraged to confidently utilize the MPSS-M when exploring their clients' social support systems. In conclusion, these findings prove that the MPSS-M is a psychometrically sound instrument and applicable to higher education settings in assessing perceived social support. The MPSS-M holds potential for broader application in counselling services and future research involving higher education students.

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