



THE ROLE OF PERCEIVED SOCIAL SUPPORT ON PSYCHOLOGICAL WELL-BEING OF UNIVERSITY STUDENTS DURING THE COVID-19 PANDEMIC.

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ABSTRACT

Past research revealed concerns over the depressive symptoms and psychological well-being of university students. The present study utilizes a stratified random sampling to examine the role of perceived social support on psychological well-being between depressed and non-depressed university students during the COVID-19 pandemic in Malaysia. This study recruited a total of 244 university students from different universities across Malaysia from November 2021 to July 2022 through social media such as Facebook, Instagram, and WhatsApp.

A prevalence rate of 50.4% of university students was found to present significant depressive symptoms. There is a significant correlation between perceived social support and psychological wellbeing (r = 0.769, p < 0.05). Non-depressed university students reported significantly higher on their perceived social support and psychological well-being than university students with significant depressive symptoms with values of p<0.001 and p<0.043. Among depressed university students, perceived social support from friends and significant others was reported to be significantly lower than non-depressed university students with a value of p<0.001 and p<0.023.

Overall, the present study discovered that a higher level of perceived social support could predict greater psychological well-being and reduced depressive symptoms among university students. Hence, perceived social support should be promoted as an effective intervention for university students due to its accessibility and cost. Future research should look into the effectiveness of perceived social support and other psychological resources for university students with different mental health concerns.

KEYWORDS

Perceived social support, psychological well-being, depressive symptoms, university students, COVID-19, pandemic.

INTRODUCTION

University life is a significant transition that prepares adolescents to enter adulthood [1]. It has been argued that many young adults experience difficulties with maintaining their well-being and began to develop

adulthood mental disorders in adolescence [2]. Previous research [1] reported that depression has been one of the common mental disorders experienced by university students because of the challenges encountered in academic life, sleep quality, friendship satisfaction, and self-confidence. Nahas et al [3] found that 36.4% of university students in Malaysia experienced mild to severe

depressive symptoms before the COVID-19 pandemic. Another study [4] conducted in New York City during the pandemic revealed that 23% of university students suffered from moderate depressive symptoms, followed by 15.3 moderate to severe depressive symptoms, and 12% severe depressive symptoms. The high prevalence rate and negative impact of depression have implied the need of identifying coping resources for university students to improve their psychological well-being during this critical period [5].

In addition to significant changes in university life due to the impact of the COVID-19 pandemic, Debowska et al [6] suggested that the alarmingly high rate of university students who experience depressive symptoms has raised concern over their psychological well-being. Gaining social support has become more challenging for university students during the COVID-19 pandemic because of the lockdown and movement control [5]. There are many situational factors such as the loss of gatherings, physical teachings in classes, and university activities caused by the COVID-19 pandemic that caused an adverse impact on the psychological well-being of university students [7].

Grey et al [8] revealed that the risk of developing depression was 63% lower when perceived social support was adequate. As for undergraduate students, perceived social support has also been identified as one of the valuable resources that could reduce depressive symptoms and improve their psychological domain of quality of life [9]. The study conducted by Alsubaie et al [9] argued that perceived social support has served as a protective factor for undergraduate students who are vulnerable to developing depressive symptoms. It was found that the perceived social support from family and friends was a significant predictor that could improve the quality of life among university undergraduate students and reduce their risk of experiencing depressive symptoms. University students who perceived a greater level of social support also reported that they had better adaptation to their university life [9].

Nahas et al [3] suggested that university students who perceived to have a greater level of social support from family, friends, and significant others would have experienced a higher level of psychological well-being during the COVID-19 pandemic. The present research aims to acknowledge and highlight the importance of perceived social support to undergraduate students and the mental health community in Malaysia so that it could

be emphasized as a coping resource that could possibly help to reduce depressive symptoms among undergraduate students and improve their psychological well-being during future academic circumstances.

METHODS

The current study was designed to investigate the significant role of perceived social support on psychological well-being among depressed and non-depressed university students during the COVID-19 pandemic in Malaysia which was based on the pilot study on students' mental health among university students in Malaysia [10].

To ensure ethical considerations were met, an ethical approval letter was obtained from the UPSI Human Research Ethics Committee (approval number: UPSI/PPPI/PYK/ETIKA(M)/014(251)) prior to the online recruitment of undergraduate students.

A snowballing sampling method was used to recruit a diverse sample of university students from different universities in Malaysia. Potential participants were approached through various communication platforms, including WhatsApp, Facebook, Instagram, and email, and were provided with a link to an online questionnaire on Google Form. The inclusion criteria required participants to be undergraduate students between the ages of 18 and 25 with a good understanding of the English language. The study was limited to Malaysian university students only. Participants were given access to the Participant Information Sheet and Informed Consent Sheet, which provided detailed information about the research process, including its nature, potential risks and benefits, and their right to voluntary participation.

PARTICIPANTS

Participants were selected based by stratified random sampling. They were recruited from different universities or colleges in Malaysia with ages ranging from 18-25. They were informed about the research via phone, email, Instagram, and Facebook. They were given the link to assess to the 'Participant Information Sheet' and 'Informed Consent Sheet' which include detailed information about the research procedure, nature, risks, benefits, and their consent to voluntary participation. Participants who scored between 14 and 63, which indicates mild to severe depressive symptoms, on the BDI-II Questionnaire [11] were categorized as the depressed group, while participants

whose scores did not demonstrate significant depressive symptoms were categorized as the non-depressed group.

MEASUREMENT INSTRUMENTS

There were three measurement instruments used in the current study. The Beck Depression Inventory-II (BDI-II) [11] was used as a self-report measure for the evaluation of the severity of depression among university students across Malaysia. The Multidimensional Scale of Perceived Social Support (MSPSS) was used to measure the perceived social support of friends, family, and significant others among the participants [12]. The 18-item Psychological Wellbeing Scale (PWB) was selected to assess the psychological well-being of the participants [13,14].

STATISTICAL ANALYSIS

The present study utilized Pearson correlation coefficients to assess the bivariate relationships between perceived social support and psychological well-being. An independent t-test was carried out to examine if perceived social support could significantly predict the psychological well-being of university students between university students who were in depression and non-depression groups. The three subscales of perceived social support which included peers, family, and significant other were analyzed to see how well they predict the six subscales (autonomy, positive relationship with others, environmental mastery, self-acceptance, purpose in life, and personal

growth) of psychological well-being. The statistical analysis was performed using SPSS (version 24.0) software. The data were tested at a significant p<0.05 to examine both the strength and functional relationship between the two variables in both depressed and non-depressed groups.

RESULTS

Table 1 sets out that 244 participants were recruited for the present study. Among the 244 participants, 132 (54.0%) were females, and 112 (45.9%) were males. In respect of race of participants, 70 (28.7%) were Malays, 132 (54.0%) were Chinese, 40 (16.3%) were Indians, and 2 (0.8%) were others. The marital status of participants was that 9 (3.6%) were married, and 235 (96.3%) were single.

Socioeconomic status was represented by the participants' household income. According to Table 1, the category of B40 (Bottom 40 with household income less than RM4849) accounted for 156 (63.9%), followed by 82 (33.6%) M40 (Middle 40 with household income between RM4850 and RM10959), and 6 (2.4%) T20 (Top 20 with household income above RM10691). Thus, the present study's results would be more representative of the university students who came from the B40 socioeconomic status in Malaysia.

TABLE 1: PARTICIPANTS' SOCIODEMOGRAPHIC CHARACTERISTICS (N = 244)

Variables		N	Percentages, %	
Sex	Male	112	45.9	
	Female	132	54.0	
Race	Malay	70	28.7	
	Chinese	132	54.0	
	Indian	40	16.3	
	Others	2	0.8	
Marital Status	Single	235	96.3	
	Married	9	3.6	
Socioeconomic Status	B40 (Bottom 40)	156	63.9	
	M40 (Middle 40)	82	33.6	
	T20 (Top 20)	6	2.4	

Notes: N = 244

A prevalence rate of 50.41% for university students in this study in Malaysia was reported as experiencing significant depressive symptoms. The mean score of the depressed group on the BDI-II revealed that the severity of depression among university students in Malaysia fell under the

moderate range. There were 28 participants (11.47%) who presented mild depressive symptoms, followed by 57 (23.36%) moderate, and 38 (15.57%) severe. There is a strong positive significant positive correlation between perceived social support and psychological well-being

among the participants (r=0.769, p<0.05). The correlation analysis indicates that the higher the perceived social support, the higher the psychological well-being among university students with depressive symptoms.

As set out in Table 2, the statistical results revealed that perceived social support from friends was reported to be highly significantly among the non-depressed group (M=4.32, SD=0.57) than the depressed group (M=3.45, SD=1.35) among the three subscales of MSPSS. The highest significant difference was found in the perceived social support from significant others between the depressed (M=2.87, SD=1.49) and the non-depressed group (M=5.61, SD=1.12). Even though there was no statistically significant difference in the perceived social support from a family between depressed and non-depressed groups, the mean score of perceived social support from family was found to be greater among the non-depressed group (M=4.90, SD=0.57) than in the depressed group (M=2.79, SD=1.33).

Among the subscales of the PWB scale, the statistical findings have shown that personal growth had the highest mean score (M=5.85, SD=0.76) among the non-depressed

group. The statistical differences in personal growth and environmental mastery between depressed and non-depressed groups are highly significant with a value of p< 0.001. In addition, other PWB subscales which include positive relations with others, and purpose in life were also observed to have a significant difference between both depressed and non-depressed groups. Self-acceptance was reported to have the highest difference in the total PWB scale between the depressed and the non-depressed groups (M=2.66, 95% Cl=2.41-2.91).

Based on Table 2 data, the statistical t-tests indicate that the level of perceived social support among university students in the non-depressed group is significantly higher than those in the depressed group. The value of p<0.043 on the total PWB scale was found to be significantly higher among the non-depressed group than in the depressed group. The mean score of the total PWB scale for the non-depressed group was 5.29 ± 0.63 as opposed to 3.37 ± 0.76 for the depressed group. The t-tests suggest that university students in the non-depressed group reported having significantly greater psychological well-being than peers who experienced significant depressive symptoms with a value of p<0.05.

TABLE 2: MEAN SCORE (±SD) OF MSPSS AND PWB SUBSCALES FOR DEPRESSED AND NON-DEPRESSED UNIVERSITY STUDENTS

Subscales	Non-Depressed	Depressed	t(df)	p-value
	Group (n=121)	Group (n=123)		
Friends	4.32 ± 0.57	3.45 ± 1.35	6.54 (164.49)	<0.001*
Family	4.90 ± 1.27	2.79 ± 1.33	12.68 (241.80)	<0.751
Significant Other	5.61 ± 1.12	2.87 ± 1.49	16.19 (226.75)	<0.023
Autonomy	5.32 ± 0.91	3.83 ± 1.02	12.05 (239.99)	< 0.497
Environmental Mastery	5.06 ± 0.94	3.34 ± 0.68	16.42 (219.21)	<0.001*
Personal Growth	5.85 ± 0.76	3.70 ± 1.21	16.56 (205.40)	<0.001*
Positive Relations with	5.47 ± 0.89	2.91 ± 1.13	19.63 (231.02)	<0.086
Others				
Purpose in Life	4.55 ± 0.83	3.60 ± 0.81	9.01 (241.59)	< 0.535
Self-Acceptance	5.48 ± 0.91	2.83 ± 1.06	21.06 (237.41)	<0.204
Total MSPSS	5.43 ± 0.79	3.04 ± 1.13	19.16 (217.87)	<0.001*
Total PWB	5.29 ± 0.63	3.37 ± 0.76	21.39 (234.98)	<0.043

^{*}p-value is statistically significant at the 0.05 level (2-tailed)

DISCUSSION

The maladaptive adjustment could cause significant impact on university students' psychological well-being, especially when they did not find appropriate resources to

mitigate their psychological adjustments during the COVID-19 pandemic [15]. Rudenstine et al [4] reported increased severity and prevalence of depression among university students after the pandemic started. Of 244 university students recruited to complete the online questionnaires across Malaysia, the current study found a prevalence rate

of 50.41% of university students who experienced mild, moderate, and severe symptoms. Before the pandemic started, a previous local study by Nahas et al [3] reported a prevalence rate of 36.4% of university students who demonstrated significant depressive symptoms. The present study has shown that the prevalence rate of depression among university students in Malaysia has increased significantly from 36.4% to 50.41% after the pandemic occurred. The significant increase in the prevalence rate of depression has given warning signs to the mental health community with regards to the need of exploring available and accessible psychological resources for university students who are currently struggling with depressive symptoms during the COVID-19 pandemic in Malaysia.

Perceived social support has been explored in recent studies regarding its effect on the prediction of psychological well-being among university students with depressive symptoms during the COVID-19 pandemic [5,16]. It was reported by Yu et al [5] that 71.2% of university students reported a moderate level of perceived social support (p<0.001) and experienced reduced depressive symptoms. Similar findings were reported in the present research that perceived social support was reported to have a significant impact on the psychological well-being of university students (p<0.001). The present study also found that non-depressed university students had significantly better perceived social support (M=5.43, SD=0.79) and psychological well-being (M=5.29, SD=0.63) than university students with significant depressive symptoms (M=3.04, SD=1.13; M=3.37, SD=0.76). The statistical evidence supports the predicting role of perceived social support on the psychological well-being of university students.

In comparison with perceived social support from family and significant other, the perceived social support from friends was reported to be the highest (M=3.45, SD=1.35, p<0.001) among university students with significant depressive symptoms, and these statistical findings could indicate that these university students reported that they perceived the most social support from their friends during the COVID-19 pandemic. The present study found that the perceived social support from friends was positively associated with the PWB scale(r=0.733) and negatively associated with depressive symptoms (p<0.001). Ioannou et al [17] also reported a negative association between perceived social support from friends (b=-0.214, p= 0.002) and depressive symptoms. Social support from friends

could be more predictive of university students' depressive symptoms and psychological well-being because they were in the transitional stage in which they moved away from houses and shared more personal experiences with their peers [9]. However, it is important to highlight that both non-depressed and depressed university students perceived moderate social support from friends, this could indicate that most university students still felt supported by the social support provided by their peers.

University students who experienced significant depressive symptoms reported least on their perceived social support from family (M=2.79, SD=1.33) compared with nondepressed peers (M=4.90, SD=1.27). The current research found that there is no significant difference in the perceived social support from the family between these two groups (p<0.751). The low score of perceived social support on family for these university students could be explained by the possible effects of the pandemic. Some university students might experience distress due to family conflicts, loss of financial income in the family, or loss of family members [18]. Nevertheless, consistent with past research [17] which indicated a significant association between perceived social support from family and depressive symptoms (b=-0.214, p=0.002), the present study found that university students who perceived greater social support from family were found to report reduced depressive symptoms. The present research highlights the findings from previous research [9,17] that perceived social support from friends and family should be considered the first source of social support for university students with depressive symptoms due to the close proximity, especially during the difficult period of the pandemic.

Furthermore, perceived social support from significant other was found to be the greatest for non-depressed university students (M=5.61, SD=2.87) compared to friends and family. This indicates that most non-depressed university students perceived significantly higher social support from their significant other which led to their positive psychological well-being. Even though loannou et al [17] did not suggest that perceived social support from significant others predicts depressive symptoms (b=-0.080, p=0.238), the current study of current study reported opposite findings (p<0.023) that was consistent with another past study [19]. Aydin et al [19] argued that perceived social support from significant others had a significant effect (p=0.025) on nursing undergraduate students because of their longer time spent with significant others). The present research found that perceived social

support from significant others among depressed peers was significantly lower (M = 2.87, SD = 1.49) compared to their non-depressed peers (M = 5.6, SD = 1.12). The low score could be explained by factors such as social isolation, absence of significant other, loss of significant other, and lack of physical and emotional intimacy with significant other due to the pandemic [19].

In Malaysia, professional psychological therapy services are primarily available to private university students, while government universities provide counseling services that may not adequately address severe mental health issues. As a result, some students may need to turn to costly private professional services as an alternative. Thus, more peer support and online psychoeducation on support therapy should be offered because social support from friends, family, and significant others would often come cost-free [7]. The present research suggests strong evidence that the negative impact of the COVID-19 pandemic on the severity of depressive symptoms and psychological well-being among university students could be buffered with the protective effect of perceived social support.

Unlike the past study [17] that reported similar findings on the role of perceived social support on psychological well-being had an overrepresentation of female university students as sample data (78% of females), the current research recruited a more representative sample of university students with 48.59% males and 50.41% of females university students. The present study did not explore the effect of gender on the level of perceived social support and psychological well-being of university students with significant depressive symptoms because past researches [17,20] reported no significant difference between males and females on these variables. However, it would be beneficial to study if perceived social support differed between males and females with depressive symptoms.

The current research was conducted using online self-reported questionnaires and the possibility of participants making response bias might concern the quality of the research results. However, the biases have been managed by using a questionnaire with high reliability and validity. For instance, the reverse scoring included in the PWB scale would challenge the participants to read through the questions carefully before they chose their responses [13,14].

Past studies [3,4] revealed that university students who resided in urban areas were more likely to experience

depressive symptoms due to stressful environments. The present research did not identify the location of participants even though it was found that the majority of the university students were represented by populations whose household income was under the category of B40 (Bottom 40). Hence, it would be valuable for future research to include a demographic characteristic of urbanization as one criterion to assess the severity of depressive symptoms, perceived social support, and psychological well-being of university students residing in urban and rural areas.

On the other hand, Ramli et al [18] indicated that university students classified as the B40 population faced difficulties with online academic learning due to limitations of internet access in rural areas. Although internet access could be a challenge for these university students, Ramli et al [18] discussed that academicians and lecturers had been developing different teaching methods such as engaging in frequent messages and phone calls for effective online learning. Even though most university students are returning to physical classes after the pandemic, Ramli et al [18] highlighted that the personal attention communication provided by lecturers were the most important factors that helped university students feel supported. Hence, the role of perceived social support emphasized in the current study could be supported as an effective intervention for reducing depressive symptoms and improving the psychological well-being of university students during the endemic or any future pandemics.

Even though perceived social support should be highlighted and promoted because of its approachability as a psychological resource during the COVID-19 pandemic, it would be beneficial for future research to study the pathways of how perceived social support was accounted for the university students' psychological wellbeing. Wilson et al [21] emphasized that perceived social support was a catalyst for promoting psychological wellbeing, but the pathways manifested by perceived social support should be explored in order to discover its bidirectional relations with other constructs. Similar research should be replicated to explore how pathways such as mindfulness, savoring, self-compassion, and constructs could have a significant association with perceived social support. Future research on the topic would help the mental health community to understand better the multiple factors that contribute to the positive association of perceived social support and psychological

well-being for university students who experience significant depressive symptoms.

CONCLUSION

The present study found a prevalence rate of 50.41% of university students who experience depressive symptoms during the COVID-19 pandemic in Malaysia. The statistical analysis indicated that there is a strong positive correlation between perceived social support and psychological well-being among university students with significant depressive symptoms. In addition, the present research reported that university students with significant depressive symptoms had significantly lower perceived social support and reduced psychological well-being than their non-depressed peers.

In comparison with other psychological resources such as seeking professional mental health services, perceived social support is considered more accessible and could be provided at a low tangible cost. In order to mitigate the severity of depressive symptoms and increase the psychological well-being of university students, the current research suggests that perceived social support should be promoted as effective prevention and intervention.

Future research should be conducted based on the recommendations discussed so that university students in Malaysia could have better access to a variety of psychological resources, especially during a difficult period like the pandemic.

References

- Islam MA, Barna SD, Raihan H, Khan MNA, Hossain MT. Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A webbased cross-sectional survey. PLoS One. 2020 Aug 26;15(8):e0238162. doi: 10.1371/journal.pone.0238162
- 2. Obi SN, Bewei EC. Mindfulness, school connectedness, perceived social support and psychological well-being of University Students in Ibadan, Nigeria. IFE Psychol. 2020;28(1).
- 3. Nahas ARMF, Elkalmi RM, Al-Shami AM, Elsayed TM. Prevalence of depression among health sciences students: Findings from a public university in Malaysia. J Pharm Bioallied Sci. 2019;11(2):170. doi: 10.4103/JPBS.JPBS_263_18

- Rudenstine S, McNeal K, Schulder T, Ettman CK, Hernandez M, Gvozdieva K, et al. Depression and Anxiety During the COVID-19 Pandemic in an Urban, Low-Income Public University Sample. J Trauma Stress. 2021 Feb 12;34(1):12–22. doi:10.1002/jts.22600
- 5. Yu M, Tian F, Cui Q, Wu H. Prevalence and its associated factors of depressive symptoms among Chinese college students during the COVID-19 pandemic. BMC Psychiatry. 2021 Dec 29;21(1):66. doi: 10.1186/s12888-021-03066-9
- Debowska A, Horeczy B, Boduszek D, Dolinski D. A repeated cross-sectional survey assessing university students' stress, depression, anxiety, and suicidality in the early stages of the COVID-19 pandemic in Poland. Psychol Med. 2022 Nov 2;52(15):3744–7. doi: 10.1017/S003329172000392X
- Villani L, Pastorino R, Molinari E, Anelli F, Ricciardi W, Graffigna G, et al. Impact of the COVID-19 pandemic on psychological well-being of students in an Italian university: a web-based cross-sectional survey. Global Health. 2021 Dec 6;17(1):39. doi: 10.1186/s12992-021-00680-w
- Grey I, Arora T, Thomas J, Saneh A, Tohme P, Abi-Habib R. The role of perceived social support on depression and sleep during the COVID-19 pandemic. Psychiatry Res. 2020 Nov;293:113452. doi: 10.1016/j.psychres.2020.113452
- Alsubaie MM, Stain HJ, Webster LAD, Wadman R. The role of sources of social support on depression and quality of life for university students. Int J Adolesc Youth.
 2019 Oct 2;24(4):484–96. doi: 10.1080/02673843.2019.1568887
- Mohamed NF, Govindasamy P, Rahmatullah B, Purnama S. Emotional Intelligence Online Learning and its Impact on University Students' Mental Health: A Quasi-Experimental Investigation. Pertanika J Soc Sci Humanit. 2022 Jun 15;30(2):665–80. doi: 10.47836/pjssh.30.2.13
- 11. Wan Mahmud WMR, Awang A, Herman I, Mohamed MN. Analysis of the Psychometric Properties of the Malay Version of Beck Depression Inventory II (BDI-II) Among Postpartum Women in Kedah, North West of Peninsular Malaysia. Malays J Med Sci. 2004 Jul;11(2):19–25.
- Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. J Pers Assess. 1988 Mar;52(1):30–41. doi: 10.1207/s15327752jpa5201_2

- 13. Ryff CD, Keyes CL. The structure of psychological well-being revisited. J Pers Soc Psychol. 1995;69(4):719–27. doi: 10.1037/0022-3514.69.4.719
- 14. Ryff CD, Almeida DM, Ayanian JZ, Carr DS, Cleary PD, Coe C, et al. National Survey of Midlife Development in the United States (MIDUS II), 2004-2006: Documentation of Psychosocial Constructs and Composite Variables in MIDUS II Project 1. Inter-university Consortium for Political and Social Research [distributor]; 2010.
- 15. Arslan G, Yıldırım M, Zangeneh M. Coronavirus Anxiety and Psychological Adjustment in College Students: Exploring the Role of College Belongingness and Social Media Addiction. Int J Ment Health Addict. 2022 Jun 21;20(3):1546–59. doi:10.1007/s11469-020-00460-4
- 16. Leong Bin Abdullah MFI, Mansor NS, Mohamad MA, Teoh SH. Quality of life and associated factors among university students during the COVID-19 pandemic: a cross-sectional study. BMJ Open. 2021 Oct 7;11(10):e048446. doi:10.1136/bmjopen-2020-048446
- 17. Ioannou M, Kassianos AP, Symeou M. Coping With Depressive Symptoms in Young Adults: Perceived Social Support Protects Against Depressive Symptoms Only Under Moderate Levels of Stress. Front Psychol. 2019 Jan 14;9. doi: 10.3389/fpsyg.2018.02780
- Ramli MF, Majid M, Badyalina B. Impeding Factors Towards the Effectiveness of Online Learning During Covid-19 Pandemic among Social Sciences Students. Int J Learn Dev. 2020 Nov 6;10(4):37–49. doi: 10.5296/ijld.v10i4.17921
- Aydın A, Kahraman N, Hiçdurmaz D. Determining the levels of perceived social support and psychological well being of nursing students. J Psychiatr Nurs. 2017; doi: 10.14744/phd.2017.95967
- Kalpana Rani E. Perceived Social Support and Psychological Well-Being: Testing the Unique Association and Gender Differences among Young Working Adults. Int J Indian Psychol. 2016 Mar 25;3(2). doi: 10.25215/0302.065
- Wilson JM, Weiss A, Shook NJ. Mindfulness, self-compassion, and savoring: Factors that explain the relation between perceived social support and well-being. Pers Individ Dif. 2020 Jan;152:109568. doi: 10.1016/j.paid.2019.109568