Gender Differences on Perceived Social Support and Psychological Distress among University Students

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Abstract

Understanding the importance of perceived social support is becoming an important issue in fast moving life for students. The study is conducted to evaluate the gender differences on the variables of perceived social support and psychological distress among university students. Gender difference of perceived social support and psychological distress among university students was hypothesized for current study. Sample comprised of 562 volunteer subjects (male 273 and female 289) between age ranged from 15 to 30 years. DASS-21 and MPSS scales were used to measure the variables. Descriptive statistics t-test and Pearson Product Moment Correlation were computed with the help of SPSS version 22. No significance difference of perceived social support (-3.095; p=.002) found among male (Mean=4.831) and female (Mean=5.74) university students. Also no significant gender difference found on the variable of psychological distress t(560)=-1.308; P=.191 among male (Mean=24.824) and female (Mean=23.633) university students. The results further indicates significant negative correlation (r=-.149) between measures of psychological distress and perceived social support. However, male depression score (Mean=8.227) found higher than female (Mean=7.491) counterparts with t(560)=1.980; p=.048). Opinion can be established that female receive higher social support from significant others, friends and family thus having lesser stress, anxiety and depression as compare to male students.

Keywords: Depression, Anxiety, Stress and Social Support

1. Introduction

University education is not only a source of upward social mobility between classes, it is also a tool to achieve basic element of social class including wealth, power and prestige. The era of technology, globalization and competitive business environment demands highly competitive educated workforce. To create such a workforce, the university students need to be provided with the right skills-set to cope with the upcoming workplace challenges. However, in Pakistan, a university student has to face various academic burdens. Students fulfill demands created by various members of society including family members, friends, face financial issues, struggle and strive in a competitive university environment. All of

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these factors result in creating problems in seeking social support, that is unavailability of guidance due to cultural stigma (Husain et al., 2019).

Demands of challenging environment influence psychological health and social relationships of male and female students. It is essential to identify mental health problems of university students to prevent them from any potential harm. Mental health of adolescent is becoming a global issue (Blanco et al., 2008; Gore et al., 2011) Increased rate of psychological distress specifically in any one gender may increase the chances of personal and social problems, consequently, increasing the chances of substance dependence and abuse (Patel, Flisher, Hetrick, & McGorry, 2007).

Education especially in the institutions of higher education requires a better psychological dexterity to process and to understand study related information to apply in practical life. The mental peace comes from a peaceful mind so as to function properly to its main purpose. In the fast changing world with lots of societal complexities and demands of corporate world, there is a high level of competition to excel upon and hence greater need to perform. This can result in stressful situations which can of course affect the human mind.

Narrowing down our concern, we come to the adolescent stage of university students. The fast changing world demands mentally healthy students. The educational institutions want to provide quality human capital. This demand then breaks down into a range of causations of stress upon the university student. And combined with the socio-cultural factors, there can be harmful consequences to the young adult mind which this research addresses as psychological distress. Depending on how a student may cope with these educational, social and cultural problems, the student may be at high risk of psychological order ideation. One way that students, like all human societies do, is by seeking support in a perceived trust institution of their making.

Among mental health variable social support is one of vital elements. Socially, the basic sources of support are family, friends and significant people having relationship of love, care, concern and trust (Zimet et al., 1988). These sources play vital role in personal and academic life of students (Aris Safree, Md Yasin, & Mariam Adawiah Dzulkifli, 2011). Social support positively impacts physical and mental wellbeing (Wilks, 2008). It also influences mental health of adolescents (Cohen & McKay, 1984). Social supports from various sources leave positive impact on student performance (Trockel, Barnes, & Egget, 2000). It helps to cope with different stressors in performing any task (Rees & Freeman, 2009). Such support help to perform better in students' social and academic lives (Awang, Kutty, & Ahmad, 2014). With provision of ample social support, the negative effects of psychological distress can be reduced by engaging young adolescents in healthy positive social activities. Positive commitments also limit to indulge in ideation of negative thoughts.

A study conducted by Eskin et al. (2019) stated that religion as a positive contributing factor to an individual mental health.

Higher perceived social support from family, friends in challenging situations affect positively on psychological wellbeing, academic advancement and dealing with situations that may cause stress. However, low perceived social support creates various psychological, social and academic problems among students. Prior research studies have provided the evidence that low perceived social support adversely affects mental and physical health of young adults (Pedersen et al., 2009). Lower levels of social support create various mental illnesses like depressive and anxious behavior (Eskin, 2003).

Such support from social link and its influence has been studied from various parameters, gender differences being one of such variables. Moreover, it has been observed and assumed that Pakistani culture and its societal norms are more appreciative of and favorable to the males, whereas females are often provided lesser social support and appreciation. Gender creates a big individual difference among university students so it will be very useful to study about the effects of gender differences on social support and its impact on the levels of psychological distress. Studies identified that the nature of social interaction and ability of gaining social support is different in both male and female genders (Matud et al., 2003). Though, social support is equally important for both genders. However, the type and amount of social interface and provision is different between men and women. It is noted that social support to males and females differs among different societies, based on their culture. Females expect and get more family support than male adolescents (Tam et al., 2011). There are many research studies which have already been conducted on the topic of gender differences and its impact on mental well-being of adolescents (Roothman, Kirsten, & Wissing, 2003; Ryff & Singer, 1996) studied various culture to see variation of sex roles differences and concluded that traditional culture consider sex roles differences more than the modern culture.

As far as psychological distress is concerned, stress is an important contributing factor which plays a critical role in the academic career of university students. Males and females address and deal stressor differently (Tam et al., 2011). Gender differences can be seen in coping strategies of stress, where, males adopt problem focused strategies while females opt more emotional focused strategies to resolve their daily life problems (Endler & Parker, 1990; Matud, 2004).

Female adolescents use emotional strategies to resolve their daily problems; this helps them to get more attention from various sources. In contrast, male adolescents use negative coping strategies to resolve their daily issues such as; denial, venting, or use of drugs that may increase the chances of anxiety and depression level (Blalock & Joiner, 2000; Cooper et al., 2006; Whatley, Foreman, & Richards, 1998). It has been found that females have higher ability of socialization and get more social support as compared

to male students (Ramaswamy, Aroian, & Templin, 2009). Consequently, gender partiality increases the chances of various stress and other psychosocial issues among male adolescents, which results in high level of stress among male students (Matud et al., 2003). Thus, it may be concluded that males are getting less social support from all three major sources including significant others, family and also friends.

Generally, it has been reported that psychological distress affects university students all over the world (Dyrbye, Thomas, & Shanafelt, 2006; Humphris et al., 2002; Nerdrum, Rustøen, & Rønnestad, 2006; Stallman, 2010; Vazquez, Otero, & Diaz, 2012; Verger et al., 2009). Psychological distress is also used to predict the mental health (Drapeau et al., 2012). The psychological hardiness to deal with various stressors among male adolescent is found higher than female adolescents. For their presuming tough mindedness and the ability to sustain various pressures, males may be taken for granted. Eventually, this also become the cause of withdrawal of social support of various sources from male adolescents, such as family, friends and significant others. In contrast to this, females are getting edge over males in getting attention from all sources of social support. This support also benefits them in coping with various psychological disturbance including depression, anxiety and stress.

Gender based study has been widely employed to assess relationship and effects of perceived social support on psychological distress. Prior researchers have found gender differences in the relationship between social support and psychological illness (Antonucci & Akiyama, 1987) in different settings (Flaherty & Richman, 1989; Okamoto & Tanaka, 2004). Such gender based variation in provision of social support creates imbalance in society. Higher rate of psychological distress in one gender is a sign of disparity in any society. Even though Matud et al., (2015) found higher impulsive control among males than female, but the situation is alarming and it seems that, males are becoming more prone to psychological distress due to various reasons. High rate of mental disorder among male increases the chances of social imbalance and personality disorders and substance abuse or dependence (Patel et al., 2007). Considering these factors, there is a need to research more in order to find the gender based ratio. Thus, it is critical to study gender differences in perceived social support to resolve the issues in adolescence population e.g. (Chubb, Fertman, & Ross, 1997; Colarossi, 2001; Dumont & Provost, 1999). Gender differences between university students is mainly focused in this study.

On the basis of above literature following hypotheses ware formulated for this study:

- a. There would be significant difference on the variable of perceived social support between male and female university students.
- b. There would be significant difference on the variable of psychological distress between male and female university students.
- There would be significant relationship between perceived social support and psychological distress among university students.

2. METHODOLOGY

2.1 Participants

Students were selected from eight top ranked private and public universities and degree awarding institutions of Pakistan from the metropolitan and cosmopolitan city of Karachi. It is assumed that students studying in these education institutions of Karachi belonged almost from all major and minor areas of Pakistan. Data was stratified faculty wise representing five foremost faculties including business, engineering, health, social sciences and sciences. The convenient sampling technique was used to select the male and female students across the five faculties. Initially 627 participants with an age range of 16-35, were approached, but prior to statistical analysis, the questionnaire were reviewed in order to identify missing data. As per our research design 65 forms of the participants were excluded from study. The reason behind was that their questionnaires were incomplete or few of them were not filled seriously. Our final sample comprised of a total of 562 with approximately equal gender ratio of 48.6% (n=273) male and 51.4% (n=289) female. Most students (54.1%) were aged between 16 to 20 years.

2.2 Measures

2.2.1 Demographic Information form

This form included information of the participants related to their age, gender, family structure, programs, semester, grade point average (GPA, last semester and cumulative), birth order, father and mother education and profession, frequency of prayers offering daily and practice of physical exercise, residential area and family income.

2.2.2 Depression Anxiety and Stress (DASS-21)

Psychological issues including depression, anxiety and stress measured with the help of short version of Depression, Anxiety and Stress Scale (DASS-21; Lovibond & Lovibond, 1995). Responses received through four point Likert scale.

2.2.3 The Multidimensional Scale of Perceived Social Support

The variable including the perception of support from family, friends and significant others measured with the use of The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet and Farley, 1988) with seven point Likert scale. In a study Rizwan and Aftab (2009) assessed properties of same scale on Pakistani young adults.

2.3 Procedure

Data receive from eight public and private sector top ranked universities located in Karachi, Pakistan. The researcher approached and met administration of these universities. After permission from these authorities participants were approached with the help of staff member of the respected universities. Current study purpose was explained to the participants. Consent was taken from agreed participants.

Rapport was established and confidentiality was assured. All participants took part in the study on voluntary basis and they were free to withdraw from study at any point of time. All ethical consideration was followed during administration of measures. Sequence of the administration of measures and medium of instruction was kept constant in every administration set up. Any query from participants during administration phase was objectively addressed. Data was collected in group administration of measures. After administration of measures participants were thanked for their cooperation valuable contribution. In the end cooperation from administrators and relevant staff of all the universities were appreciated and acknowledged.

2.4 Scoring and Statistical Analysis

Scoring of the measures was done with help of the respective manual provided. After scoring data was tabulates by using Microsoft Excel. Version 22 of Statistical Package for Social Science used for descriptive statistics and t-test was computed through Pearson.

3. Results

Descriptive statistics summarized demographic characteristics of sample as shown in following table 1. Equal gender ratio was tried to maintain, most of the samples are from the age range of 16 to 24 years.

Table 1: Demographic Characteristics of Students

Variable	f	(%)
Gender		
Male	273	48.6
Female	289	51.4
Age		
16-20	304	54.1
21-24	233	41.5
25-30	21	3.7
31-35	1	0.2

Table 2: Gender differences on variables of Perceived Social Support and Psychological Distress

Variable	N	Gender	M	St. Dev	Df	t	Sig.	
Perceived Social Support	273	Male	4.831	1.36470	560	-3.095	.002	
	289	Female	5.174	1.26176	300			
Significant Others	273	Male	4.707	1.66915	5 (0	2 115	025	
	289	Female	5.013	1.75571	560	-2.115	.035	
Family	273	Male	4.979	1.58754		2 020	.000	
	289 Female 5.479 1.4928	1.49287	559	-3.839	.000			
Friends	273	Male	4.808	1.44817		560	1 920	0.60
	289	Female	5.026	1.39425	500	-1.820	.069	
Psychological Distress	273	Male	24.824	10.35998		560	1.308	.191
	289	Female	23.633	11.17119		1.500	,171	
Depression	273	Male	8.227	4.24694	560	1.980	.048	
	289	Female	7.491	4.54691	500	1.900	.040	
Anxiety	273	Male	7.945	3.93709		501	.554	
	289	Female	7.743	4.11428	560	.591		
Stress	273	Male	8.652	3.97230	5 40	727	462	
	289	Female	8.397	4.19293	560	.737	.462	

Table 3: Correlation Analysis between Perceived Social Support and Psychological Distress

Variable	s (N=562)	Sig Ot	Family	Friends	SocSupt
Depr	r	215 ^{**}	234**	118**	227**
Anxty	r	056	144**	029	091*
Stress	r	049	113 ^{**}	.016	059
PD	r	128 ^{**}	192 ^{**}	053	149**

^{**}indicates level of significance at 0.01

The results further indicates significant negative correlation (r=-.149) between measures of psychological distress and perceived social support. Analysis of subscales indicating a significant negative relationship of the variable of depression with perceived social support (r=-.227) and subscales' i.e. significant others (r=-.215), family (r=-.234) and friends (r=-.118).

Analysis indicates there is significant relationship of psychological distress with perceived social support (r=-.149) and its subscales i.e. significant others (r=-.128) and family (r=-.192). Psychological distress was insignificantly associated with social support from friends (r=-.053).

Analysis of subscales indicates that there is significant negative relationship of anxiety with perceived social support (r=-.091) and its subscale of family (r=-.144), however insignificant relationship was found on subscales of social support from significant others (r=-.056) and friends (r=--.029).

On the variable of stress significant association of perceived social support was found only with subscale of family (r=-.113). Stress was found insignificantly associated with the measure of social support (r=-.059) and subscales of friends (r=.016) and significant others (-.049).

4. Discussion

To assess gender differences on social support an independent t-test was used to compare the difference among male and female responses of perceived social support. The significant value is .002. Therefore, we may conclude the significant difference between male and female gender of perceived social support. The mean value of female respondents is greater than the male respondents. These values indicate that on average female respondents have more perceived social support than male respondents. While discussing the pattern of our results, gender differences on perceived social support were observed. On an average, the level of perceived social support among female students is higher than that of their male counterparts. There are a number of possible explanations for this pattern. One possible explanation arises from the observation that females tend to be more emotionally expressive. This could lead to the possible reason for them to receive more social support from multiple sources, as compared to males (Hess et al., 2000).

Another possible reason for our pattern of result can be the skills of socialization. Females are said to be better at such skills, possibly, because they have more opportunities to interact with people. As much of their time is spent performing household chores, they get more chances of sharing their problems with other members of the family and other social circles, and therefore, ultimately have more chances of getting

support in society as compare to males who spend more time in field or office jobs. Gender differences have also been found in the variable of psychological distress (Bíró, Ádány, & Kósa, 2011; Nerdrum et al., 2006). According to Bukhari and Afzal (2017) gender differences were found in perceived social support from significant others. Female adolescents perceived support from the sources are higher than male adolescents (Rueger, Malecki, & Demaray, 2008).

On the other hand, males are responsible for earning the bread and butter for their families (Marsden, 1987). They spend more time resolving issues related to the outside boundaries of house that their family might be facing, for example, security and communication related problems. Because of this, they may become alone and this gap of interaction with the social support providers create a sense of isolation and perceived social support lesser than females. Jeannie A. Perez (2012) in his study concluded that females achieve better results on the variables of positive relations with others and purpose of life better than their male counterparts, while males received higher scores on the variables of autonomy. In another study, (Sagone & Caroli, 2014) identified that male participants of their study receive significantly higher score on the variable of environmental mastery as compared to female participants. A third factor may be due to physiological difference and genetic disposition (Boardman, Blalock, & Button, 2008). Females are generally perceived as being male dependent and supposedly physically less powerful, so in return they get more sympathy which may lead to high perceived social support.

Socio-culturally, disproportionate support of university administration, teachers, relatives and many other person to the female gender are one of the major causes of higher levels of moral, interest, confidence and motivation among them. On the other hand, the ability of receiving social support is also better among female adolescents that gives them an edge over male adolescents. The higher test scores of perceived social support of significant others among female students indicates that this source of support ultimately impacts their psychological well-being. On the other hand, the lower score of male respondents indicates that lower perceived social support of significant others among male student increases their vulnerability to various psychosocial problems including depression, anxiety and stress.

During the adolescent age, various issues can be resolved only by family members (Moore et al., 2002). Generally, females express their emotions more easily than males (Hess et al., 2000). In a broader social context, females as compared to male university students spend a greater time with their family members due to their pattern of social life while males spend much of their time out of home with friends, playing outdoor games or taking care of family related outdoor tasks like purchasing of grocery items, maintenance of vehicles, the house and facilitation of transportation for all family members. The greater chances of interaction for female adolescents with family members creates a better emotional attachment with the family, better chances of sharing personal problems and chances of greater support. Higher score

of perceived social support of family among female gender indicating that family support impact on academic performance and psychological wellbeing.

Up to certain extent, the possible contributing factors to mental health are common for males and females. For example, rapid technological over load, bombardment of information through various social and electronic media, developing philosophy of life on individual basis instead of following a moral compass, confusion of family structure and individual role conflict within the family, detachment from grand narrative, financial and economic constraints, poor access to and availability of health care facilities, stigmas related to treatments of mental illnesses, divided education system on socioeconomic basis and above all, transitional change from dependent college life to independent university survival, with its accompanying intense academic pressure from various sources, poor transportation facilities and poor or no provision of mental health treatment facilities and counseling services.

During university life both genders face various problems that contribute to psychological distress and are equally vulnerable to psychological distress. Although, looking at the overall statistics, both genders have common mental health issues with no significant difference found in the cases of two major contributing elements of psychological distress, i.e. anxiety and stress, the current research has identified a marginal significant difference in the case of depression, which is also a major element of psychological distress.

5. Conclusion

Consequently, it is noted that, ignorance and social isolation of male students is increasing. Social expectations of greater independence of males and assumptions that they do not require nearly as much attention and support as their female counterparts do, accompanied by environmental mismatches and extraordinary perceptions are creating various psychosocial problems among male students. Neglect due to the higher gender based expectations from males and superior gender based perception as well as social isolation resulting from the prevalent inability of males to make closer and better social relationships is making male students more vulnerable to psychological distress, specifically depression, in comparison to females (Rosenfield & Mouzon, 2013). The finding of this research is similar to the prior researches (Ben-Ari & Gil, 2004; Koeske & Koeske, 1989; MacGeorge, Samter, & Gillihan, 2005), which also contend that there is a significant negative relationship between social support, especially that of one's peers and depression.

5.1 Limitation and Future Direction

To see the substantial association between perceived social support and psychological distress of student population of both male and female genders, it is recommended to include the students from other remaining levels of education including primary, secondary and higher secondary education. By adding

various levels of education, the students belonging from other age groups will also be under consideration and a conclusion may be drawn that may be helpful to develop long term educational strategies and policies for decision makers. Another important issue for further research is to study the relationship of perceived social support on some other relevant variables such as self-esteem and emotional intelligence. Other demographic variables e.g., family structure and birth order may also be included in future studies.

5.2 Implication of the Study

This study paves way for further research in this area as to ensure a systematic distribution of social support across the two genders. It is implicated that university students need careful dealing and handling by various social influencers including parents, teachers, university management and other relevant policy makers. Most of the male students are very reserved and are unable to openly demonstrate their personal reservations from negative behavior of people. Such attitudes from the society towards gender signifies the fact that providing social support to one gender is being done at the expense of damaging the support system for the other gender, thence leading to negative results.

References

- Antonucci, T. C., & Akiyama, H. (1987). An examination of sex differences in social support among older men and women. *Sex roles*, *17*(11-12), 737-749.
- Aris Safree, Md Yasin, & Mariam Adawiah Dzulkifli. (2011). The Relationship between Social Support and Academic Achievement. *International Journal of Humanities and Social Science*, 1(5), 277-281.
- Awang, M. M., Kutty, F. M., & Ahmad, A. R. (2014). Perceived Social Support and Well Being: First-Year Student Experience in University. *International Education Studies*, 7(13), 261-270.
- Ben-Ari, A., & Gil, S. (2004). Well-being among minority students: The role of perceived social support. *Journal of Social work, 4*(2), 215-225.
- Bíró, É., Ádány, R., & Kósa, K. (2011). Mental health and behaviour of students of public health and their correlation with social support: a cross-sectional study. *BMC public health, 11*(1), 871.
- Blalock, J. A., & Joiner, T. E. (2000). Interaction of cognitive avoidance coping and stress in predicting depression/anxiety. *Cognitive therapy and research*, *24*(1), 47-65.
- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S.-M., & Olfson, M. (2008). Mental health of college students and their non–college-attending peers: results from the national epidemiologic study on alcohol and related conditions. *Archives of general psychiatry*, *65*(12), 1429-1437.
- Boardman, J. D., Blalock, C. L., & Button, T. M. (2008). Sex differences in the heritability of resilience. *Twin Research and Human Genetics*, *11*(1), 12-27.
- Bukhari, S. R., & Afzal, F. (2017). Perceived social support predicts psychological problems among university student. *The International Journal of Indian Psychology, 4*(2), 18-27.
- Chubb, N. H., Fertman, C. I., & Ross, J. L. (1997). Adolescent self-esteem and locus of control: A longitudinal study of gender and age differences. *Adolescence*, 32(125), 113-130.

- Cohen, S., & McKay, G. (1984). Social support, stress and the buffering hypothesis: A theoretical analysis. *Handbook of psychology and health, 4*, 253-267.
- Colarossi, L. G. (2001). Adolescent gender differences in social support: Structure, function, and provider type. *Social Work Research*, *25*(4), 233-241.
- Cooper, C., Katona, C., Orrell, M., & Livingston, G. (2006). Coping strategies and anxiety in caregivers of people with Alzheimer's disease: the LASER-AD study. *Journal of affective disorders*, *90*(1), 15-20.
- Drapeau, A., Marchand, A., & Beaulieu-Prévost, D. (2012). Epidemiology of psychological distress *Mental illnesses-understanding*, *prediction and control*: IntechOpen.
- Dumont, M., & Provost, M. A. (1999). Resilience in adolescents: Protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. *Journal of youth and adolescence*, *28*(3), 343-363.
- Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. *Academic medicine*, *81*(4), 354-373.
- Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of personality and social psychology*, *58*(5), 844.
- Eskin, M. (2003). Self-reported assertiveness in Swedish and Turkish adolescents: A cross-cultural comparison. *Scandinavian Journal of Psychology*, *44*(1), 7-12.
- Eskin, M., Poyrazli, S., Janghorbani, M., Bakhshi, S., Carta, M. G., Moro, M. F., . . . Aidoudi, K. (2019). The Role of Religion in Suicidal Behavior, Attitudes and Psychological Distress Among University Students: A Multinational Study. *Transcultural psychiatry*, 1363461518823933.
- Flaherty, J., & Richman, J. (1989). Gender differences in the perception and utilization of social support: Theoretical perspectives and an empirical test. *Social Science & Medicine, 28*(12), 1221-1228.
- Gore, F. M., Bloem, P. J., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., . . . Mathers, C. D. (2011). Global burden of disease in young people aged 10–24 years: a systematic analysis. *the Lancet,* 377(9783), 2093-2102.
- Hassan, A., Faiz, R., & Iqbal, N. (2017). Gender, Generation and Transition Leadership: Towards a Conceptual Framework. *Global Management Journal for Academic & Corporate Studies*, 7(1), 48.
- Hess, U., Senécal, S., Kirouac, G., Herrera, P., Philippot, P., & Kleck, R. E. (2000). Emotional expressivity in men and women: Stereotypes and self-perceptions. *Cognition & Emotion, 14*(5), 609-642.
- Humphris, G., Blinkhorn, A., Freeman, R., Gorter, R., Hoad-Reddick, G., Murtomaa, H., . . . Splieth, C. (2002). Psychological stress in undergraduate dental students: baseline results from seven European dental schools. *European journal of dental education*, *6*(1), 22-29.
- Husain, M. O., Umer, M., Taylor, P., Chaudhry, N., Kiran, T., Ansari, S., . . . Husain, N. (2019). Demographic and psychosocial characteristics of self-harm: the Pakistan perspective. *Psychiatry research*, 12286.

- Jeannie A. Perez. (2012). Gender Difference in Psychological Well-being among Filipino College Student Samples. *International Journal of Humanities and Social Science*, 2(13).
- Koeske, R. D., & Koeske, G. F. (1989). Working and non-working students: Roles, support and well-being. *Journal of Social Work Education*, *25*(3), 244-256.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behaviour research and therapy, 33(3), 335-343.
- MacGeorge, E. L., Samter, W., & Gillihan, S. J. (2005). Academic stress, supportive communication, and health. *Communication Education*, *54*(4), 365-372.
- Marsden, P. V. (1987). Core discussion networks of Americans. American sociological review, 122-131.
- Matud, M. a. P., Ibañez, I., Bethencourt, J. M., Marrero, R., & Carballeira, M. (2003). Structural gender differences in perceived social support. *Personality and Individual Differences*, 35(8), 1919-1929.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37(7), 1401-1415.
- Matud, M. P., Bethencourt, J. M., & Ibáñez, I. (2015). Gender differences in psychological distress in Spain.

 International Journal of Social Psychiatry, 61(6), 560-568. doi:10.1177/0020764014564801
- Moore, K. A., Chalk, R., Scarpa, J., & Vandivere, S. (2002). Family Strengths: Often Overlooked, but Real. Child Trends Research Brief.
- Nerdrum, P., Rustøen, T., & Rønnestad, M. H. (2006). Student psychological distress: a psychometric study of 1750 Norwegian 1st-year undergraduate students. *Scandinavian Journal of Educational Research*, *50*(1), 95-109.
- Okamoto, K., & Tanaka, Y. (2004). Gender differences in the relationship between social support and subjective health among elderly persons in Japan. *Preventive medicine*, *38*(3), 318-322.
- Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *the Lancet*, *369*(9569), 1302-1313.
- Pedersen, S. S., Spinder, H., Erdman, R. A. M., & Denollet, J. (2009). Poor Perceived Social Support in Implantable Cardioverter Defibrillator (ICD) Patients and Their Partners: Cross-Validation of the Multidimensional Scale of Perceived Social Support. *Psychosomatics*, *50*(5), 461-467.
- Ramaswamy, V., Aroian, K. J., & Templin, T. (2009). Adaptation and psychometric evaluation of the multidimensional scale of perceived social support for Arab American adolescents. *American Journal of Community Psychology, 43*(1-2), 49-56.
- Rees, T., & Freeman, P. (2009). Social support moderates the relationship between stressors and task performance through self-efficacy. *Journal of Social and Clinical Psychology*, 28(2), 244-263.
- Rizwan, M., & Aftab, S. (2009). Psychometric properties of the multidimensional scale of perceived social support in Pakistani young adults. *Pakistan Journal of Psychology, 40*(1).

- Roothman, B., Kirsten, D. K., & Wissing, M. P. (2003). Gender Differences in Aspects of Psychological Well-Being. South African Journal of Psychology, 33(4), 212-218. doi:10.1177/008124630303300403
- Rosenfield, S., & Mouzon, D. (2013). Gender and mental health *Handbook of the sociology of mental health* (pp. 277-296): Springer.
- Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2008). Gender differences in the relationship between perceived social support and student adjustment during early adolescence. *School Psychology Quarterly*, 23(4), 496-514. doi:10.1037/1045-3830.23.4.496
- Ryff, C. D., & Singer, B. (1996). Psychological Well-Being: Meaning, Measurement, and Implications for Psychotherapy Research. *Psychotherapy and Psychosomatics*, *65*(1), 14-23. doi:10.1159/000289026
- Sagone, E., & Caroli, M. E. D. (2014). Relationships between Psychological Well-being and Resilience in Middle and Late Adolescents. *Procedia Social and Behavioral Sciences, 141*, 881-887.
- Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, *45*(4), 249-257.
- Tam, C.-L., Lee, T.-H., Har, W.-M., & Pook, W.-L. (2011). Perceived social support and self-esteem towards gender roles: Contributing factors in adolescents. *Asian Social Science*, 7(8), 49.
- Trockel, M. T., Barnes, M. D., & Egget, D. L. (2000). Health-related variables and academic performance among first-year college students: Implications for sleep and other behaviors. *Journal of American college health, 49*(3), 125-131.
- Vazquez, F. L., Otero, P., & Diaz, O. (2012). Psychological distress and related factors in female college students. *Journal of American college health*, *60*(3), 219-225.
- Verger, P., Combes, J.-B., Kovess-Masfety, V., Choquet, M., Guagliardo, V., Rouillon, F., & Peretti-Wattel, P. (2009). Psychological distress in first year university students: socioeconomic and academic stressors, mastery and social support in young men and women. Social psychiatry and psychiatric epidemiology, 44(8), 643-650.
- Whatley, S. L., Foreman, A. C., & Richards, S. (1998). The Relationship of Coping Style to Dysphoria, Anxiety, and Anger. *Psychological Reports*, 83(3), 783-791. doi:10.2466/pr0.1998.83.3.783
- Wilks, S. E. (2008). Resilience amid academic stress: The moderating impact of social support among social work students. *Advances in social work*, *9*(2), 106-125.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, *52*(1), 30-41.