

RESEARCH ARTICLE

Perceived Social Support from Family, Friends and Spiritual Experiences as Correlates of Depression

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Abstract

Depression is the origin of ill health problems in college students. It advances as one of the leading causes of mental health issues. During their college life, freshmen encounter many firsts. These include a new environment, friends, exposure to social norms and culture. The students may struggle and experience difficulty if they cannot deal with these challenges. They can become a vulnerable population. Therefore, the overall purpose of this study is to conduct a baseline assessment of college students' experiences in the university. More so, this study 1) describes the characteristics of a sample of freshmen allied medical sciences students, 2) describes the levels of perceived social support from family and friends, spiritual experiences, and depressive symptomatology among allied medical sciences freshmen; and 3) to assesses the possible association among described positive influences (spirituality, family support, peer support) to depressive symptomatology. The study utilized a cross-sectional analytic quantitative design. In selecting respondents, a consecutive sampling technique was utilized. Respondents eligible to participate included first-year full-time students in the university taking up Bachelor of Science in Nursing (BSN), Bachelor of Medical Technologist (BSMT), and Bachelor of Science in Radiological Technologist (BSRT). A total of 110 undergraduate students participated in the study. Most of the students were females younger than 20 years old. The overall perceived social support from family and friends yielded average scores. The higher the scores, the greater the perception of social support from family and friends. For their spirituality, it showed that participants scored lower, indicating a high level of spiritual experiences. Lastly, the depression scale yielded high scores indicating that the participants had signs of severe/major depression, as based on the Center for Epidemiologic Studies Depression (CES-D) scoring. The relationships between Depressive Symptoms and Perceived Social Support from Family (PSS-Family) and Friends (PSS-Friends), and Spirituality Experiences were also evaluated. It showed that Depression and PSS-Friends yielded a statistically significant relationship. However, there was no statistically significant relationship between Depression and PSS-Family. For the spirituality experiences, the test revealed that there is also a statistically significant relationship with depression. Overall, the study concludes that college life is a period of increased challenge for young allied medical health students. Their courses accompany complex and challenging responsibilities that increase tensions and anxiety. The results from these processes may cause or worsen stress when not given priority and could lead to depressive symptomatology. It was reflected that freshmen students' peer support and spiritual experiences appear to be closely associated with depressive symptomatology.

Keywords: *Allied medical sciences students, perceived social support, spirituality, depression*

Introduction

Attending university and adjusting to college life can be a stressful experience for incoming freshmen. Adapting to these life changes, the challenges they need to face in their college life put students susceptible to developing depressive symptomatology. The occurrence of depression and other mental health problems like anxiety and stress are common and have been increasing among college students. Kumaraswamy (2013) presented that 25% of the college student population report symptoms of anxiety at any given time. College students reported feelings of overwhelming anxiety and depression in the

last 12 months of their university experience. They also verbalized that it was difficult for them to function and study, thereby, affecting their individual academic performances (American College Health Association, 2015). A high level of anxiety was associated with depressive symptoms development (Reed et al., 1996), and depression rates in undergraduate students have been reported to increase over time (Ibrahim et al., 2013). Students with symptoms of depression expressed a high level of emotional suffering that accounts for undesirable events in the lives of college students.

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This experience may affect their life satisfaction academic performance, and worst, suicide (Brown & Schiraldi, 2004).

Globally, depression is considered the most common mental disorder (Cooper, 2018) with a prevalence of 2% to 15%. Because of this, the risk of committing suicide increases gradually making it an important public issue. An estimated 264 million people suffer from depression (Cooper, 2018) and over 48,000 are dying by suicide each year (Centers for Disease Control and Prevention [CDC], 2018). In 2015, the American College Health Association (ACHA) survey reported that 50% of students in universities (42% of men and 53% of women) have hopelessness feeling any time in the past 12 months, 65% felt gloomy (55% of men and 70% of women), and 35% (30% of men and 37% of women) described that they feel so depressed that it affects their daily function. The World Health Organization (WHO) foresees that in the year 2030 signs of depressive symptomatology will upsurge. Thus, depression would be the top cause of disease burden worldwide (WHO, 2011). In the Philippines, 3.3 million Filipinos were reported to suffer from depression, with suicide rates in 1.7 females and 2.5 males per 100,000 (Department of Health, 2019). According to the study of de Wit et al. (2011) and Wang et al. (2016), the incidence of depressive symptoms is more likely to females than to males. In addition, Pratt and Brody (2014), reported the survey done in 2009–2012 by the National Health and Nutrition Examination that 7.6% of individuals aged 12 and older experienced moderate to severe depression. In 2015, around 16.1 million people aged 18 years or older had experienced at least one major depressive symptomatology (National Institute of Mental Health, 2017).

Though stress is an inevitable part of life (Blanco et al., 2008), it becomes more prevalent among college students (Prince, 2015). University students encounter stressors inherently unique with the educational system, which varies with their contemporaries who did not enroll in college. According to Dyson and Renk (2006), there is a consistent finding with the correlation of the progression of symptoms of depression and stress among students in the university. Specifically, professional courses with close interaction with people, affective involvement with the client, such as allied health courses like nursing, medical technology, and radiological technology, are highly demanding courses. Thus, the development of stress and burnout syndrome is common (Moreira & Furegato, 2013). Allied health education is perceived to be stressful and it is categorized to have different affectation on students' psychological development (Abdulghani, 2008). Studies have noted that allied medical students experience increased occurrences of stress during their college undergraduate courses. This increased level of stress may potentially harm mastery of the academic curriculum. This

pressure can lead to mental distress and hurts cognitive functioning and learning (Dahlin et al., 2005). College life experiences entail a major adjustment that could partially lead to depressive symptomatology. Several factors that affect students' adjustment include their abilities to perceive support from their social network (e.g., family and friends) and spirituality experiences. To start with, having robust social support with their university experience is an important factor that leads to success with their academic experiences and lives in general. According to Hall et al. (2004), Rayle and Chung (2007), Reed et al. (1996), Saltzman and Holahan (2002), Way and Robinson (2003), the higher a person's discernment of support from a conducive campus environment, together with their friends and family social support, the lower the prevalence of symptoms of depression in university students. On the other hand, studies have reported that there is an inverse association between depressive symptoms and spirituality of university students. This high level of spirituality may be an indicative defense aspect in mitigating the development of depression symptoms in their campus life (Muller & Dennis, 2007; Turner-Musa & Lipscomb, 2007; Young et al., 2000).

In general, the perception of support from family and friends, and spirituality is noteworthy to have a defensive aspect in the development of symptoms of depression in college students. However, there is a lack of concurrent evaluation of these factors. To better understand the perception of social support and spirituality, they may be examined together, to provide evidence, and identify what are the important roles of these factors that might affect the development of depressive symptoms. In addition, the reporting of symptoms of depression or its diagnosis varies with other countries because of cultural differences. Majority of studies were done in North America, Europe, and other Western developed countries. Few studies could be found in Southeast Asia, that is why there is a need to put the focus on a different perspective of the world.

Therefore, this study aimed to assess the depression level of college freshmen and explored multiple factors (e.g., family and friends social support, and spirituality) and their association.

Methodology

The study utilized a cross-sectional analytic quantitative design that conducted a baseline assessment of college students' experiences in the university, and factors possibly associated with depressive symptomatology (i.e. social support from family and friends, spiritual experiences) through a research survey questionnaire. For the selection process of respondents, a consecutive sampling technique was utilized. The sample included full-time first-year university students taking up Bachelor of Science in Nursing (BSN), Bachelor of Medical Technologist (BSMT), and Bachelor of Science in Radiological

Technologist (BSRT). This study utilized four different questionnaires namely Perceived Social Support from Friends (PSS-Fr) and Family (PSS-Fa) by Procidano (1992), Daily Spiritual Experiences Scale by Underwood (2006), The Center for Epidemiological Studies Depression Scale (CES-D Scale) by Radloff (1977). Permissions to use were sought and granted from their original authors.

Perceived Social Support from Friends (PSS-Fr) and Family (PSS-Fa) measures the degree to which an individual perceives support from them. Both questionnaires contain 20 items answerable by "yes", "no", or "don't know". "Yes" answers are given 1 point while "no" and "don't know" responses are given no merit. The overall scores range from 0 to 20. The higher the scores the better the perception of support. The reliability and validity of these scales were tested with college undergraduate students and generated Cronbach's alpha of .88 and .90 (Procidano & Heller, 1983). For the factor analyses, the orthogonal factor rotation in a separate study verified that the scales were composed of a single factor, which was expected from the method of the final selection of items and their internal consistency (Procidano, 1992). Hence, the scales were computed separately.

Daily Spiritual Experiences Scale (DSES) is a 16-item scale developed by Underwood (2006) that quantifies a person's spiritual experiences examining health, both physical and emotional. The scale reflected strong psychometric properties and demonstrated a high level of validity and reliability. The inter-item correlations of the tool ranged from .60 to .80, with an overall Cronbach's alpha of .94. The initial investigations exploratory factor analysis reported by Underwood and Teresi (2002), generated that the 14 items are loading on one factor (.69 to .93) and two items loading on a second factor (.77 and .78).

Center for Epidemiological Studies Depression Scale (CES-D Scale) was created by Radloff (1977) to measure depressive symptomatology in the general population. The foremost scale developed is used in the general population to quantify the epidemiology of depressive symptoms. The predecessors of this scale were established to measure signs and symptoms of depression in the hospital setting. It is a 20-item self-report scale that focuses primarily on the level of existing depressive symptoms of a person's experience (Radloff, 1977). It is described with high reliability, with a Cronbach's Alpha of .85 in the general population, and .90 in the patient sample. The score ranges from 0 to 60, the greater the score reflects a great presence of symptoms of depression. Indicative of risk for depression is a score equal to 15 or higher. Though depression is a multifaceted process, a score of 15 or higher on the CES-D scale should be furtherly screened for depression. The symptoms suggestive of a Major Depressive Disorder should have at least 5 of the symptoms and the person experiences it

for the last 2-weeks which causes an impairment of the individual's life (American Psychiatric Association, Diagnostic and statistical manual of mental disorders [DSM-5], 2013).

The researcher sent out an electronic invitation to participate in the study. The invitation to participate, cover letter with information of the study, the electronic consent form, and the survey instruments were hosted by Google Form, a free web-based survey application. Through the invitation and cover letter, the students were informed of what is required from their participation in the research and assured that their grades in the university would not be affected. Students who agreed to participate were asked to complete the questionnaire. All the data collected were treated with the utmost confidentiality. Data collection was done from March 2020 to April 2020. The invitation was posted on the social media website (Facebook). Participants were given a month to return their completed survey form. After receiving, it was then processed for validation to check if it was filled up completely and that the respondents qualified the inclusion criteria). The target was 100% participation of 152 students (BSN 84 student, BSMT 39 students, BSRT 29 students; verified with the Registrar office of the University). The researcher garnered a 72% (110 students) response rate, wherein 74% (62 students) were from BSN, 95% (37 students) were from BSMT, and 38% (11) were from BSRT. All their returned questionnaires were valid and subjected to analysis. Data from the survey were electronically stored in a password-protected cloud. Quantitative data were analyzed using IBM SPSS software. The characteristics of the sample were presented using descriptive statistics (e.g., mean, frequency, standard deviation) and chi-square for the possible relationship of the variables.

The study was subjected to an IRB clearance with protocol number (2020-013-LECATU-DEPRESSIVE SYMPTOMATOLOGY) before the data collection. The well-being of the participants is the primary concern of the researcher. Electronic consent was obtained from the participants before the administration of the survey questionnaires. The research minimized duress through the electronic means of data collection. The students' autonomy was respected. Knowing that this inquiry contains a degree of inherent risk, individuals participating may feel personal and emotional disturbances interrelated in their discovery of oneself while completing the questionnaires. A debriefing statement with contact details of the researcher and the university's guidance office was given out. The variables in this study may contain sensitive issues for some individuals. Respondents who encountered personal and emotional disturbances during the completion of the survey were instructed to coordinate with the University Guidance Counseling. The investigator asked for the assistance of the University Guidance Counseling to provide a standby channel for the anticipated psychological need of the students and it was acknowledged. The participants' age and

Table 1. Participants' Profiles

Variable		n = 110	Percentage
Age	Below 20 years old	85	77
	20 years old and older	25	23
Sex	Male	21	19
	Female	89	81
Program	BSN	62	56
	BSMT	37	34
	BSRT	11	10

Table 2. Descriptive Factors

Variable	Score Range	$\bar{x} \pm SD$
Perceived Support from Family (PSS-Family) ^a	0-20	11.58±5.90
Perceived Support from Friends (PSS-Friends) ^b	0-20	14.45±3.55
Spirituality ^c	16-92	30.59±12.45
Depressive Symptoms ^d	0-60	29.51±9.38

Notes: ^a High score indicates a great perception of support from family;
^b High score indicates a great perception of support from friends;
^c Low Score reflects a high level of spirituality;
^d A score of 16 or greater identifies risk for depression.

Table 3. Depressive Symptoms per Category

Variable		n = 110	Percentage	$\bar{x} \pm SD$	Scores ≥ 16
Age	Below 20 years old	85	77	30.14±8.87	81
	20 years old and older	25	23	28.65±7.67	23
Sex	Male	21	19	31.75±8.64	20
	Female	89	81	30.20±8.84	84
Program	BSN	62	56	30.55±8.34	58
	BSMT	37	34	32±9.18	36
	BSRT	11	10	24.8±6.43	10

sex were collected from their personal information. Electronic mail was not required. The results were reported only as aggregate data to ensure the anonymity of the participants. After the completion of the survey, the storage of the information will be kept for up to two years, after which it will be deleted.

Results

Table 1 presented the profile of the 110 undergraduate students (62 BSN students, 37 BSMT students, 11 BSRT students) who participated in the study. Most of the students were younger than 20 years old ($n=85$, 77%) and were female ($n=89$, 81%).

Table 2 illustrated the mean scores for each of the variables assessed. The mean score for Perceived Social Support from Family (PSS-Family) was 11.58 (± 5.90), while the mean score

for Perceived Social Support from Friends (PSS-Friends) was 14.45 (± 3.55). As to their Daily Spiritual Experiences, the mean score of the sample of health sciences students was 30.59 (± 12.45). Lastly, the depression scale reflected a mean score of 29.51 (± 9.38). Further, Table 3 showed the CES-D Scale who scored 16 or greater per category of the participants.

Table 4 showed the cross-tabulation of the sample's mean scores of the independent variables perceived social support from Family, perceived social support from Friends, and Spirituality Experiences with Depressive Symptoms. Looking at Depression and Perceived Support from Friends (PSS-Friends), the analysis showed a statistically significant relationship ($X[540] = 599.63$, $p = .04$). However, Perceived Support from Family (PSS-Family) investigation ($X[720] = 751.43$, $p = .20$) yielded no statistically significant relationship

Table 4. Cross-tabulation of Depressive Symptoms and independent variables PSS-Family, PSS-Friends, Spirituality Experiences

Chi-Square Tests	Depressive Symptoms		
Independent Variables	Value	df	p-value
PSS-Family	751.43 ^a	720	0.20
PSS-Friends	599.63 ^a	540	0.04*
Spirituality Experiences	1439.93 ^a	1296	0.00*

Note: * = Significant relationship ($p < .05$)

with depression. For the spirituality experiences, the test revealed that there is also a statistically significant relationship ($X[1296] = 1439.93$, $p = .00$) with depression.

Discussion

The overall purpose of this study is to conduct a baseline assessment of college students' experiences in the university. More specifically, this study 1) described the characteristics of a sample of freshmen allied medical sciences students; 2) described the levels of perceived social support from family and friends, spiritual experiences, and depressive symptomatology among allied medical sciences freshmen; and 3) assessed the possible association among described positive influences (spirituality, family support, peer support) to depressive symptomatology. Most of the participants in this study are less than 20 years old and most are females. According to Demaray and Malecki (2002), Rueger et al. (2010), females and younger adolescents' (Bokhorst et al., 2010) perceptions of social support are far greater when compared to males and older adolescents. The study of Bokhorst et al. (2010), reported that 12-year-old children rely mostly on their parents rather than friends for support. However, when children reach the age of 18 onwards, they become more sociable with friends; hence, the scores are then inverted.

Perceived social support from family and friends, overall, yielded average scores. The higher the scores the greater the perception of social support from family and friends. Support in freshmen students played an important component in the development of social relationships and psychological well-being in their college life (Rayle & Chung, 2007). The data reflected that students perceived social support from their family and friends. It was noteworthy that the perceived support from friends yielded better scores when compared to family social support scores. Because of the participants' age group, this is the time of their college experiences where they interact more with their friends and their confidants. Hence, it may be the reason why support from friends reflected better scores. Having a social support network from family members and friends that a student can go in times of need especially in their beginning college life is indeed essential. Further, the scores from PSS-friends were seen to be associated with depression. Freshmen

who feel that their family would be there to help them in time of need and felt that they matter to friends, significantly have lesser academic-related stress compared to those who expressed the feeling of no support (Rayle & Chung, 2007). Similar to the study of Auerbach et al. (2011) that described increased perceived social support from friends were more likely to experience fewer depressive symptoms.

For their spirituality, it showed that the participants have lower scores indicating a high level of spirituality. Thus, a high level of spirituality may indicate a protective aspect in contradiction to the development of depressive symptoms in college students as reported by previous studies (Muller & Dennis, 2007; Turner-Musa & Lipscomb, 2007; Young, et al., 2000). Freshmen year is the time when their spiritual growth increases as they become young adults who start to search for meaning in their lives. Similar to the study of Bryant et al. (2003), it reported that during freshmen it is where the students begin to examine their religion and spiritual beliefs. This is the phase students develop their ability to have hypothetical thinking and utilize abstract concepts to serve as the foundation of their faith. It was remarkable to find out that there is a substantial association between spirituality and depression. The stress students face during the time of transition with their university life could be handled or faced successfully with increased spirituality. Spirituality has fostered considerable curiosity in the literature. It has been associated with an improved physical and mental well-being of students (Salsman et al., 2005). This may indicate that when a person's level of spirituality increases, the development of depressive symptomatology decreases. Synonymous to the study of Alorani and Alradaydeh (2018), it reported that there is a significant association between perceived social support and spirituality in college students. In addition, optimistic health habits have also been consistently associated with spirituality. However, findings on spirituality and mental health association still have mixed results. Some studies found positive associations, while others reported a negative association between spirituality and depression (Koenig, 2001). Despite the inconsistencies, the study reflected that spirituality and depressive symptomatology are closely associated. The same was true with the research output of Salsman et al. (2005), which reported a significant connection between psychological functioning, spirituality, and depression.

It was noted from the literature that when a person faces a stressful encounter they often turn to spirituality. However, the efficacy of coping with spirituality in resolution to stressful events still has a diverse standpoint (Ano & Vasconcelles, 2005). With an increased multidisciplinary care focus, psychologists are being called to closely work with students' well-being. Spirituality is a noticeable aspect of a person and has a noteworthy implication concerning psychological functioning, especially with freshmen students (Moss & Dobson, 2006). It is at this stage where the grasp of their spirituality strengthens and furtherly developed and it was observed that spirituality may affect individual psychological well-being. Overall, support from family members, friends, and spirituality have been described to serve as a defensive aspect in mitigating the development of depressive symptoms in university students.

Lastly, for the depression scale, it yielded high scores indicating that the participants had signs of severe/major depression, based on the Center for Epidemiologic Studies Depression (CES-D) scoring, however, the scale was not intended to be used as an individual diagnostic tool for clinical depression. Therefore, the participants' average group score can be an indication that they are susceptible to severe/major depression. The emerging adulthood developmental perspectives of mental health, interpersonal relationships, and social functioning appear to be a period of the strained and challenging part of college students' university life (Arnett, 2000). It is consistent with others' findings for depressive symptoms (Galambos et al., 2006), that freshmen year is a time of intensified stress (Goff, 2011).

College life experiences, as explored in the study, showed intertwined with stress and depressive symptomatology. This stress or crisis the student faces with their experiences in the university showed a major risk of developing depression in freshmen students. It was important to note that facing personal stress with university life at times needs immediate assistance. Having strong social support keeps the student able to handle this college life experience challenges. This relationship that provides support plays a critical role in how students function in their day-to-day life. Psychologists emphasized that having a strong foundation of social support networks is important. When faced with a crisis or reaching a goal, professional experts say that most people overcome this with the support of their family and friends. Studies have provided research data on the link between various aspects of health, social relationships, and well-being (American Psychological Association, 2019). It is the support from family and friends that builds people up giving that extra boost during a time of distress. The strength to carry on and move on, often comes from these networks of social support, for an individual to thrive, especially in college (Feeney & Collins, 2015).

The stressors in the allied medical professions educational system have been constantly recognized in the literature for

almost five decades. As early as the 1930s, healthcare professionals and students in the allied medical field were being polled about the challenges and difficulties related to training (McKay, 1978). Many of the stressors identified in those early years of education are analogous to the stressors on allied health students today (Moreira & Furegato, 2013).

Allied medical professions education programs like nursing, medical technology, and radiological technology are among the stressful professions. From the academic preparations, training, and related learning experiences, the student runs into circumstances that require them to take important decisions that could impact the patient's well-being. These processes may result in stressful events in their college experiences. When not given priority, it could lead to depressive symptomatology. These attributes of proactive disposition, adept attitude, and high level of cognitive skills are regularly required both among allied health students and health professionals in practice. Stress and depression may greatly affect the performance of students and qualified health professionals (Moreira & Furegato, 2013). Students who experience depressive symptomatology, disturb the amount and quality of social interactions within the University. Thus, special attention may be given to these students that may reduce depressive symptoms. This may lead to the improvement of students' college life experiences, and an overall improved social functioning and academic performance.

For young students – as with the allied medical health students – their courses involve the experience of the transition from secondary school to university academic life, which is accompanied by a surge in complex challenging responsibilities, increasing tensions and anxiety (Dweck et al., 2014). Seeing this, the acknowledgment of stress in students is essential, so that preventive measures that mitigate the predisposing factors of stress may be strategized and put into action, ensuring its consequences to a bare minimum, to improve students' health and performance in the university.

Depression is the origin of ill health problems in college students. It advances as one of the leading causes of mental health issues (Mokrue & Acri, 2015). During their college life, freshmen encounter many firsts. These include a new environment, friends, exposure to new social norms and culture. The students may struggle and experience difficulty if they cannot deal with these challenges and can become a vulnerable population.

In summary, the present study concludes that college life is a period of increased challenge for young allied medical health students. Their courses are accompanied by complex challenging responsibilities, increasing tensions and anxiety. The result from this process may cause or worsen stress. When not

given priority, it could lead to depressive symptomatology. It was reflected that freshmen students' peer support and their spiritual experiences appear to be closely associated with depressive symptomatology.

Therefore, it is deemed important to assess the beginning phase of the students' university life experiences. One of which is through research; therefore, the replication of the study for future research with a wider-range and diversified population is recommended.

Limitations of the present study are the use of a self-report questionnaire and limited homogenous sample. Replication of these findings in diverse samples is needed.

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