Stressors and Coping Mechanism of Physical Therapy Students of Lyceum of the Philippines University- Batangas

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Abstract: Stress has multifactorial etiology and its effectsvarieson how individuals react and adapt. It is considered as one of the universal factors that influence health problems and is associated with musculoskeletal disorders such as low back pain and myofascial pain syndrome of trapezius muscles. Allied health professional programs require extensive knowledge-based learning, skills and attitude. Thisresultsto increased stress on students. The purpose of this study was to identify the stressors and coping mechanisms among enrolled physical therapy students in Lyceum of the Philippines University-Batangas (LPU-B). This study utilized a descriptive design in which participants were recruited from the total number of physical therapy students enrolled in LPU-B. Modified and survey questionnaires from journal on Murdoch University Veterinary students was given twice from July to August 2014 among physical therapy students of LPU-B in terms of written questionnaire and interview, respectively. Results show that the academic aspect is the major stressor followed by intrapersonal, environmental and intrapersonal, respectively. Spiritual strategy is use as coping mechanism followed by cognitive, physical non-adaptive and emotional adaptive, respectively. This study concluded that among the stressors, physical therapy students in all year levelsexperienced academic stress primarily. To cope up with these stressors, all year level used spiritual strategy.

Keyword:*stress, stressor, coping mechanism, physical therapy students*

INTRODUCTION

Stress among medical students is inevitable as a result of academic load and the demand on balancing between social and academic life. With the rigorous academic workload, frequent

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examination agenda, teaching and learning processes, physical therapy is included in the high stress levels programs aligned with medicine, dentistry and pharmacy. According to Gupta, Jones and Tucker (2006), allied health professional programs require extensive knowledge-based learning, skills, attitude, and vast time which results in lesser time for recreation and relaxation that lead the student to change their lifestyle. As supported by a study by Ahmed, Gomanthi and Sreedharan (2013) it has been mentioned that lack of recreation; worries with regards to the future and high parental expectation give rise to the student's psychosocial stressors.

Stress may be of good or abysmal among individuals in both physical and mental aspect depending on the adaptation and adjustments. It is a typical part of life which can be experienced in home, office, industry and academic environment. Medical students who face greater weight of stress as a result of multifactorial causes may experience negative outcome in terms of emotional, mental and social heath. Ideal stress can be effective to improve learning ability; however, additional and prolonged stress can be a cause of health problems according to a study conducted by Sohail (2013). Cognitive and learning functioning of students may be compromised which lead to low self-esteem and academic performance. Similar to the previous study, female students were found to be more stressed than male students. Academic stress in relation to learning, demanded time and conflict with other activities is known to be the major sources of stress among physiotherapy students followed by financial and personal stress (Gupta et al., 2006). Unsupportive interaction with other students and teachers and financial issues also contribute to stress. A recent study by Aribo, Daniel and Ekpenyong (2013), reported that students who present with higher mental pressure and stress have higher incidence of low-back pain and increased activity of trapezius muscle which associates to neck pain. With the greater consequences of stress to students, psychological disorders such as suicide attempt and ideation can be alarming and may require immediate attention.

According to the Asian American Psychological Association (2007), suicide is the second leading cause of death among Asian Americans aged 15-34 and has the highest rate among aged 20-24 (12.44 per 100,000). There are estimated of 1,100 college student who commit suicide annually (Sexton-Radek, 2012). Similar study on suicide conducted by Gunnell, Lebanan-Dalida and Redaniel (2011) in the Philippines particularly in urban areas concluded that male rate is consistently higher than female rate from 1984-2005. Supporting this, last 2013, two reported incidents of physical therapy students (1st and 5th year) from different universities in the Philippines committed

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suicide due to failing grades and repeated affiliation. Both of them were suffering from depression (The Philippine Star, 2013).

With regards to the effects of stress on clinical performance, it can hamper the ability of individual concerning performance (group and individual), attention, memory, and decision making. Conversely, effective performance such ability to adapt to changing situations, effective communication and resource allocation has been found in stressed situation among team. However, stress is inversely related to attention and memory. Enhanced stress can lead to distraction and bias which decrease the ability to focus on relevant information. It can also compromise the working memory (capacity to store and manipulate information for short term period), memory consolidation (new memories are rendered into long term memory) and memory retrieval components (ability to remember memories). It is also related to decision-making process which results to impulsiveness and confusion (LeBlanc, 2009).

Psychological, behavioral and biological homeostasis of health may be at risk following stressful events. Further effects of these were related to mood disorders, hypo-immune system dysfunction, changes in CNS function and even mortality. Changes in body systems involving nervous, cardiovascular, endocrine and immune functioning promote production of stress hormone which is later followed by release of other hormones that would aid in elevating blood pressure, thus, sympathetic response of central nervous system (CNS) could cause sustained hyperactivity of the heart and other vascular organs. Vital systems initiating imbalance due to stress may result to alarming impediments. Psychosocial intervention can improve health and lessen the stress-related imbalances (Ironson, Schneiderman& Siegel, 2005).

As stated by Bin et al. (2011), dealing and adopting from stress is called coping mechanism. Positive coping mechanism like religion active coping, positive re-interpretation, acceptance and planning may reduce the effect of stress on the students. On the contrary, negative coping styles which involve alcohol intake and drug abuse further impair the effects of stress according to the study of Ahmed et al. (2013). Enhanced or impaired performance of the students will depend on how they will cope with stress whether it is positive or negative means. Multiple coping mechanisms were being utilized by the students to deal with the stressful circumstances. Self-affirmation may be effective in stress effects in academic performance and improve problem-solving ability under stress (Creswell, Dutcher, Harris, Klein & Levine, 2013). In another study, active lifestyle with regular physical activities presents with positive effects in reducing the stress among college students and even promotes enhanced interpersonal relationship (Nies& Wilson-Salandy, 2012).

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This study aimed to identify the causes and level of stress as well as coping mechanisms among enrolled physical therapy students in Lyceum of the Philippines University-Batangas (LPU-B).

METHODOLOGY

Research design

This study utilized descriptive design which involved enrolled physical therapy students from Lyceum of the Philippines University Batangas (LPU-B). It identified the causes of stress and coping mechanism among physical therapy students in LPU-B and correlated the demographic profile with the stressors and coping strategies.

Respondents and sampling plan

Participants were recruited purposively from the total number of PT students enrolled in LPU. This comprised the total population of 103 (19 from 1st year, 34 from 2nd year, 22 from 3rd year, 17 from 4th year and 11 from 5th year). Enrolled PT students from 1st semester of AY: 2014-2015 were included. Students with diagnosed psychological disorder, those who refused to participate from the study and the researchers were excluded. No sampling process made since the researchers used the total population of subjects.

Ethical approval

The ethical approval for the use of human subjects in this study was sought from the Research Committee of the College of Allied Medical Professions of Lyceum of the Philippines University. Informed consent was provided to the participants before conducting the study. Participants were assured that all data would remain confidential.

Research instrument

A total of 74-item survey questionnaires composed of two sections was modified from survey journal on Murdoch University Veterinary students (Arold et al. 2005). It was modified after doing focus group discussion among the 10 students in Physical Therapy program and was validated by an expert. The first part of the survey (26 items) is a 5-point frequency scale which identified the stressor of participants. The second part (23 items) is another 5-point frequency scale which ascertained the coping strategies that the participants typically use. Demographic section was also included which comprised age, student, relationship and parental status, last semester's general average, race/culture, religion, living situation and curricular activities.

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The items from each of the sections are shown in Appendices 1, 2, and 3.

Data gathering procedures

Participants were asked to answer the survey questionnaires after obtaining an informed consent. Questionnaires were given one month before the examination to control the confounding factor for stress on examination. Face validation was conducted after the phase 1 implementation of the study using the same questionnaire (Horovitz, Jones, Marx, Menezes& Warren, 2003). First implementation was conducted one week before preliminary examination on July 2014 and face validation was conducted one week before midterm examination on August 2014.

Statistical analysis

The needed data was tallied, encoded and interpreted using different statistical tools. These include frequency distribution, weighted mean, independent sample t-test, Chi-Square test and Analysis of Variance (ANOVA) to answer the objectives of the study. All data were treated using PASW ver.18 to further analyze the result using 0.05 alpha level.

RESULTS AND DISCUSSIONS

With a required Quantitative Point of Index (QPI) for admission to every higher year of study under Retention Policy, students are expected to pass all the courses otherwise, probationary status will be mandated and in the least favorable situation, a student will no longer be admitted for re-enrolment (LPU College of Allied Health Professionals: Retention Policy).

Table 1 presents the demographic distribution of participants with a total population of 103 physical therapy students in LPU-B. In terms of age, 19 were under 15-16 age range, 49 in 17-18 age range, 26 in 19 -20, 8 in 21-22, and 1 in ages 23 and up. 29 were male and 74 were female. All year levels were included with nineteen 1st-year, thirty-four 2nd-year, twenty-two 3rd-year, seventeen 4th-year and eleven 5th-year. 29 participants have boyfriend/girlfriend, 73 participants have no boyfriend/girlfriend and 1 participant is married. 90 were Batangueño, 8 were Quezonian, 2 were Mindoronian, 1 Bulaqueño, 1 Samarnon and 1 Cebuana. 96 participants were Roman Catholic, 3 were Born Again, 2 were IglesianiKristo and 2 were Protestant. 59 participants have parents living together, 29 were separated, 9 with parental loss and 6 were annulled, 64 were living together with their parents or guardians, 36 were living at boarding house or dorm and 3 were living in other situation. 100 participants have no part time while 3 participants have part time job.

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Table 1
Percentage Distribution of the Respondents' Profile

	Profile Variables	Frequency	Percentage (%)
Age	15-16	19	18.40
	17-18	49	47.60
	19-20	26	25.20
	21-22	8	7.80
	23↑	1	1.00
Sex	Male	29	28.20
	Female	74	71.80
Student status	1st year	19	18.40
	2nd year	34	33.00
	3rd year	22	21.40
	4th year	17	16.50
	5th year	11	10.70
Relationship Status	**If Single**		
	w/ BF/GF	29	28.20
	No BF/GF	73	70.90
	If Married		
	Separated (e.g. OFW)	1	1.00
Geographic location	Batangueño	90	87.40
	Quezonian	8	7.80
	Bulaqueño	1	1.00
	Mindoronian	2	1.90
	Samarnon	1	1.00
	Cebuano	1	1.00
Religion	Roman Catholic	96	93.20
	Iglesiani Cristo	2	1.90
	Born Again	3	2.90
	Protestant	2	1.90
Parental Status	Live together	59	57.30
	Separated	29	28.20
	Divorced/Annulled	6	5.80
	Parental Loss	9	8.70
Living situation	Parent/guardian's home	64	62.10
	Boarding house/Dorm	36	35.00
	Others	3	2.90
Part-Time Job	Yes	3	2.90
	No	100	97.10

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Majority of the respondents are still on the process of maturity which can be a factor on how they will response on stressors they will encounter throughout their college life. In relation to this, relationship status, geographic location and parental status may also affect both cause of stress and coping strategies. Individuals who are engage with marriage or mutual relationship may seek help from their partner to be able to handle their stress. Similarly, individual from different settings have different customs and tradition which may aid in stress reduction. Religion, by example, in which believing in higher power may be one of the most prioritized coping strategies. Part-time job may lessen or increase the stress in such as a way that it helps in dealing with financial difficulties but it may also require more physical demand and time which practically stress out an individual.

Individuals who still not reach their maturity level somehow have different manner and approach in viewing stress as well as handling it. Having a romantic relationship may be a source of relating and relieving the stress by talking to somebody. Religion may be of substantial part in dealing with stress in which individuals carry out pressure and worry caused by stress in believing in higher poer. By means of praying, going to church or by talking to a priest or other spiritual leader, students may release their stress. As part of coping with financial difficulties, part-time job also suggest an added stress particularly in time management especially when job time and study time overlap.

Studies conducted by Ironson et al. (2005) and Salam, Yousuf, Bakar&Haque (2013) stated that young individuals may feel helpless and more likely associate to negative coping strategies. It also mentioned that teenagers who are exposed to prolonged stressors may be an increased risk for anxiety and mood disorder. According to a study conducted by Salam et al. (2013), students who are not involved in romantic relationships are found to be more stressed than those who are involved (51.7%). However, it is also mentioned that it can also be an added stress especially when problems with parents appear. Sohail (2013) also agreed that texting or calling a friend can be a way of emotional coping to relieve stress. Studies conducted by Salama et al. (2013), Aribo et al. (2013), Ahmed et al. (2013) and Sohail (2013) support that religion take part in the majority of coping in which students enlighten themselves to find solution and take action to negate their stress.

Table 2 shows the major stressors among each year level. Academic stressors always rank first among all level. From the first year level, environmental, intrapersonal, and interpersonal stressors followed respectively. From the second, third, and fourth year level whose ranking of stressors are the same, academic stressor is followed

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by intrapersonal, environmental, interpersonal stressors. From the fifth year level, intrapersonal, environmental and interpersonal followed respectively.

Table 2
Stressors among each Year Level

Year level	R	Stressor	Mean Value	VI
1	1	Academic	3.68	U
	2	Environment	2.89	Of
	3	Intrapersonal	2.84	Of
	4	Interpersonal	2.47	O
		Composite Mean	2.57	Of
2	1	Academic	3.38.	Of
	2	Intrapersonal	2.74	Of
	3	Environment	2.56	Of
	4	Interpersonal	2.15	O
		Composite Mean	2.71	Of
3	1	Academic	4.24	U
	2	Intrapersonal	3.86	U
	3	Environment	3.14	Of
	4	Interpersonal	2.71	Of
		Composite Mean	3.49	Of
4	1	Academic	3.52	U
	2	Intrapersonal	2.76	Of
	3	Environment	2.71	Of
	4	Interpersonal	2.18	O
		Composite Mean	2.79	Of
5	1	Academic	3.27	Of
	2	Intrapersonal	2.91	Of
	3	Environment	2.55	Of
	4	Interpersonal	2.36	O
		Composite Mean	2.77	Of

Legend: 4.50 – 5.00 = Almost Always or Always; 3.50 – 4.49 = Usually; 2.50 – 3.49 = Often; 1.50 – 2.49 = Occasionally; 1.00 – 1.49 = Rarely or Never

It is expected that allied medical students get burned out from the academic aspect regardless of the level. Most of the first-year students are expected to adjust from the high school period to tertiary level especially in dealing not just with academic work loads but also with the environment and dealing with interpersonal relationship. Second-year students exhibit less adjustment period since they already adapt to college life and environment. Third year and fourth-year students may already adjusted from the all the college life changes

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especially about the academic loads. Fifth-year students or the interns experience the lowest academic stress since they only have one subject to take (Research 2) which focus primarily on their thesis. However, interns are required to take their weekly exams as part of their internship program.

Major subject (e.g. Zoology) may be a bulk for second year students compare to previous major from first year level (e.g. Biology) and may demand more time to study. Comparing with the mean value of academic stress among third-year students on other year levels, these students experienced the highest stress owing to the considerable increase bulk of major subjects since this level is subjected to physical therapy proper. Third-year students have the highest intrapersonal stressor given that eating and sleeping habits may change in accordance to the response of academic workloads. New responsibilities and demands will also add on the stressors of the students. First-year and fifth-year students who both often experience intrapersonal stressors may be because of less change in sleeping habits and health since first-year students have lower academic load than other year levels. When it comes to interns, though they experience new responsibilities and new environment from different affiliated centers, they have less academic workload. Second-year and fourth-year students have the same frequency in experiencing intrapersonal stress. This is unlikely to happen since both year levels require great time and focus to maintain good academic status. But because the time frame of this study only cover the first two period of the semester, it may be inferred that during these periods, academic loads are not that demanding and students still can loosen up. Allied medical profession surely a good career but it also requires great amount of financial resources upon taking the course. As the level increases, there is a higher probability that tuition fees will increase as well which put the students and financial supporter a greater burden. Living environment may also be a factor in inducing the stress in which the place may be noisy or lack equipments in studying. Interpersonal stressors rank fourth among all year level. First-year and fifth-year students are likely to experience this since both level experience new environment. Both levels will meet new acquaintance with different personality and customs. This may be difficult in students especially if an individual in not into socialization.

A study conducted by Bakar et al. (2013) and Ahmed et al. (2013) agreed that academic-related stressors like frequency of exam, course load and time management are the major stressors among medical students.Bakar et al. (2013) mentioned in their systematic review that during academic examinations, students experienced higher stress than those who are not. Same result is found on study conducted by Salam et al. (2013) and Yusoff, Liew, Ling, Tan, Loke, Lim, &

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Rahim (2007) that greatest source of academic stress is found during final examinations. They also discussed that financial difficulty, interpersonal conflicts, problems with parents, clinical exposure also exhibit marked stress among medical students.An addition to these, adjustment and parental expectation also intensify the stress of students according to the study conducted by Nandi, Hazra, Sarkar, Mondal, &Ghosal (2012) and Sohail (2013).

Table 3
Stressors Experienced by the Respondents

	Before			After		
Indicators	**WM**	**VI**	**R**	**WM**	**VI**	**R**
Interpersonal						
1. Difficulties with people at university (e.g. professor, classmate)	2.13	O	2	2.29	O	1
2. Forming new work or social relationships	2.66	Of	1	2.10	O	4
3. Difficulties in my personal relationships (family, boardmate, boy/girlfriend)	2.03	O	3	2.13	O	3
4. Isolation from my culture, family, friends or my usual social activities	1.71	O	4	2.21	O	2
Composite Mean	2.13	O		2.16	O	
Intrapersonal						
1. Decline physical or psychological health	2.01	O	7	2.88	Of	7
2. Change in sleeping habits	3.43	Of	1	3.28	Of	2
3. Change in eating habits	2.85	Of	3	3.11	Of	3
4. Death of family member/friend	1.62	O	8	2.91	Of	6
5 Lack of support for my studies from my family or partner	1.53	O	9	2.41	O	9
6. Lack of control over PT course content, processes, or sequence of units or activities	2.51	Of	4	3.72	U	1
7. Lack of recognition by universities staff for my efforts in meeting the demands of the PT program	2.20	O	6	2.81	Of	8
8. Being inexperienced	2.30	O	5	3.10	Of	4
9. New responsibilities	3.03	Of	2	3.01	Of	5
Composite Mean	2.39	O		2.99	Of	

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Table 3 (cont.)
Stressors Experienced by the Respondents

Academic						
1. Increased academic and practical workload of the PT program	3.45	Of	2	3.73	U	3
2. Exams or other academic activities	3.59	U	1	3.93	U	2
3. Instructor/professor's behavior and attitude	2.60	Of	4	3.41	Of	4
Composite Mean	3.21	U		3.69	U	
Environment						
Financial difficulties	2.20	O	1	2.32	O	3
Extracurricular activities	2.00	O	4	2.06	O	4
Tools and equipment problems	2.14	O	2	3.50	U	1
Living environment problems	2.06	O	3	2.78	Of	2
Composite Mean	2.10	O		2.64	Of	
Over-all Composite Mean	2.41	O		2.88	Of	

Legend: 4.50 – 5.00 = Almost Always or Always; 3.50 – 4.49 = Usually; 2.50 – 3.49 = Often; 1.50 – 2.49 = Occasionally; 1.00 – 1.49 = Rarely or Never

Table 3presentsthe causes of stress among all year level.During the first implementation, academic (2.60), intrapersonal (2.39), interpersonal (2.13) and environmental stressors (2.10) are found to be major causes of stress respectively. Under academic stressors, majority were stressed on exams or other academic activities. Under intrapersonal stressors, majority were stressed on change in sleeping habits. Under interpersonal stressors, forming new work or social relationships stressed the majority of the participants. During the second phase of the study, stressors identified were under academic, intrapersonal, environmental and interpersonal stressors. Compared with phase 1, changes in most stressors were identified. Participants were stressed under academic with lower grades than anticipated. Under intrapersonal stressors, lack of control over physical therapy course content, processes or sequence of units or activities considered as the major cause of stress. Under environment stressors, problem with equipment they rely onwas identified as major stressor. Under interpersonal stressors, difficulty with people at university was considered as the major stressor.

Although there are different set of stressors among the participants, these are correlated with each other in which the common denominator is the academic demand. As expected from a 5-year program, students deal with everyday exams (both pre and post) in almost all subject bulks. Students may burnout and experience

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increased mental burden in which then result to increased stress level. Students are engaged with longer hours to study major subjects such as Anatomy, Physiology, Medical Surgical and other PT subjects. Therefore, they spend lesser hours in social activities. Oftentimes, students go through sleep deprivation especially during major examinations hence, stress level increase. Despite the fact that physical therapy students spend longer hours to study, some students receive lower grade than expected. Because of this, students may experience changes in eating habits in which students use this to cope with their stress. Moreover, there are still other aspects that need to be considered. Interpersonal relationship also matter. But sometimes, this also give the students further stress. There will be times when faculty-student relationship is not in good terms which may lead to difficulty in studying and listening to discussion. Other aspects include financial difficulties and equipment problems like laptop which stir up stress level.

Results are consistent with previous researches in which rigorous academic curriculum with examination and getting a poor marks stress medical students (Ahmed et al., 2013, Aribo et al., 2012, Bakar et al., 2013, Dahlin et al., 2007, Gupta et al., 2006, Sexton-Radek, 2012 &Sohail, 2013,). Because of this, students tend to have lesser sleep to take more time to study. According to study of Lemma, Gelaye, Berhane, Worku and Williams (2012), sleeping deprivation has serious health consequences and may increase the level of stress. When it comes to other cause of stress, Sohail (2013) also stated that teacher's attitude has a big impact on students. Aribo et al. (2013) and Ahmed et al. (2013) mentioned that unsupportive interaction with other students and teachers and financial hardship may cause psychosocial distress. However, no study directly supports that equipment problem may be a major cause of stress but Sohail (2013) expressed that lack of materials to be used in learning may cause students to be more stressed.

Table 4 shows the coping strategies used by each year level in which spiritual strategies rank first among all year level followed by cognitive strategies except for second year level which uses physical adaptive as second top coping strategies. Physical adaptive strategies rank third in all level. Physical non-adaptive and emotional coping strategies rank last.

Both spiritual and cognitive coping mechanisms are positive strategies in dealing with different stressors. In terms of spiritual aspect, individuals believe in faith in Supreme Power in which they tend to go further despite all pressure and demand from loads from both academic and non-academic as long as they believe in their faith. When it comes to cognitive strategies, individuals look for someone who may be a friend, professor or expert to discuss their stress with. Physical

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adaptive strategies is another useful strategy where students make time to unwind for refreshment after a stressful events whether inside or outside the school requirements. Students also relax using certain techniques and they maintain healthy habits. Physical non-adaptive and emotional coping strategies are two mechanisms are not useful and will just increase the stress further. It will also cause the students more potential problems if they tend to use these.

Table 4
Coping Mechanisms among each Year Level

Year level	R	Coping Mechanism	Mean Value
1	1	Spiritual	3.84
	2	Cognitive	3.32
	3	Physical Adaptive	3.11
	4	Physical Non-adaptive	2.42
	5	Emotional Adaptive	2.00
2	1	Spiritual	3.41
	2	Physical Adaptive	2.85
	3	Cognitive	2.68
	4	Physical Non-adaptive	2.65
	5	Emotional Adaptive	2.24
3	1	Spiritual	4.29
	2	Cognitive	3.62
	3	Physical Adaptive	2.86
	4	Physical Non-adaptive	2.62
	5	Emotional Adaptive	2.43
4	1	Spiritual	3.94
	2	Cognitive	3.18
	3	Physical Adaptive	2.76
	4	Physical Non-adaptive	2.53
	5	Emotional Adaptive	2.29
5	1	Spiritual	3.91
	2	Cognitive	3.36
	3	Physical Adaptive	2.91
	4	Physical Non-adaptive	2.45
	5	Emotional Adaptive	1.91

Legend: 4.50 – 5.00 = Almost Always or Always; 3.50 – 4.49 = Usually; 2.50 – 3.49 = Often; 1.50 – 2.49 = Occasionally; 1.00 – 1.49 = Rarely or Never

Since all levels possess two positive coping strategies as their top most way of handling stress, it may indicate that even though there is a high number of stressor, students will still be able to maintain balance and focus since their strategies in handling stress are effective.

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However, as allied medical students, it is a common scenario where the health of the student is sometimes compromise due to sleep deprivation and late meal time. With this, students who use physical adaptive strategies beat this kind of situation. Despite of sleep deprivation and changes in appetite, students are still able to find ways in keeping themselves on track. Less use of non-adoptive and emotional strategies may implicate that PT students are unlikely to experience potential problems like addiction, suicide and unlawful actions.

These results are consistent with Ahmed et al. (2013), Yusoff et al. (2011), Salam et al. (2013) and Aribo et al. (2013) in which spiritual strategy may lead the students in planning of good and efficient actions to deal with stress. In relation to religion, it is connected to cognitive strategy in which Leblanc (2009), mentioned that as an effective performance, students use problem-focused method to control stress and decrease not just the mental burden but also the emotional distraction. Recent studies conducted by Sohail (2013) and Salam et al. (2013) also found that seldom students use non-adaptive mechanism to cope with stress.

Table 5
Coping Strategies

	Before			After		
Indicators	**WM**	**VI**	**R**	**WM**	**VI**	**R**
Spiritual						
1. I look for comfort in a belief in a power greater than myself	3.74	U	2	4.15	U	1
2. I take time to reflect on my life and try to stay aware of what's really important for me	3.78	U	1	3.98	U	2
3. I regularly attend a place of worship	3.18	Of	3	3.27	Of	3
Composite Mean	3.57	U		3.76	U	
Physical Adaptive						
1. I take time for interests outside university work	3.00	Of	2	3.60	U	2
2. I use exercise to make myself feel better	2.70	Of	4	2.64	Of	5
3. I engage in sexual behaviors to improve my mood/state of mind	1.68	O	6	1.45	R	6
4. I use forms of relaxation such as meditation, yoga, muscle relaxation or sleeping	3.31	Of	1	3.76	U	1
5. I maintain a healthy diet (e.g. eating well-balanced meals, eating regularly, eating in moderation)	2.92	Of	3	2.82	Of	3
6. I maintain healthy sleeping habits	2.52	Of	5	2.73	Of	4
Composite Mean	2.69	Of		2.80	Of	

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Table 5 (cont.)
Coping Strategies

Indicators	Before			After		
	WM	**VI**	**R**	**WM**	**VI**	**R**
Physical Non-adaptive						
1. I use alcohol and/or other substances (e.g. marijuana, shabu, prescribed or non-prescribed drugs) to make myself feel better	1.30	R	5	1.32	R	5
2. I eat a lot	3.45	Of	1	3.75	U	1
3. I engage in behaviors harmful to myself in order to relieve negative emotions (binge drinking, taking risks)	1.48	R	4	1.43	R	4
4. I go to sleep to avoid problems	2.81	Of	3	3.42	Of	2
5. I get into compulsive habits to deal with pressures (e.g. playing, exercise, housework, dieting)	2.88	Of	2	2.88	Of	3
Composite Mean	2.38	O		2.53	Of	
Emotional Adaptive						
1. I take my frustration/ aggression out on others	2.06	O	3	2.34	O	1
2. I purposefully let my negative feelings out through emotional outbursts (e.g. cry, scream, have tantrum)	2.60	Of	1	2.27	O	2
3. I delay on doing assignment for university or placement work	2.28	O	2	2.26	O	3
4. I am purposefully late for lectures, duty, appointment, etc. as a means of avoiding things	1.52	O	4	1.49	R	4
Composite Mean	2.12	O		2.07	O	
Cognitive						
1. I ask for advice/support from others	3.68	U	1	3.80	U	1
2. I discuss my workload and pressures, or ask for help from supervisors/professors	2.83	Of	5	2.00	O	5
3. I express my feelings, talk about things, and ask for advice/support from friends/family/peers	3.57	U	2	3.75	U	2
4. I acquire personal skills that could be useful in my life (e.g. time management, assertiveness)	3.46	Of	3	3.33	Of	3
5. I use a systematic approach to dealing with problems	3.11	Of	4	2.97	Of	4
Composite Mean	3.33	Of		3.14	Of	
Over-all Composite Mean	2.82	Of		2.86	Of	

Legend: 4.50 – 5.00 = Almost Always or Always; 3.50 – 4.49 = Usually; 2.50 – 3.49 = Often; 1.50 – 2.49 = Occasionally; 1.00 – 1.49 = Rarely or Never

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Table 5 reveals the coping strategy mostly used by the participants in this study. Spiritual means of coping has a composite mean of 3.57 being the topmost coping mechanism used by the students. Spiritual coping is followed by cognitive coping (3.33), physical adaptive coping (2.69), physical non-adaptive coping (2.38), and lastly emotional adaptive coping (2.12) for the first phase of the study. No changes were noted as to the ranking of the strategies used for the second phase of the study (spiritual coping=3.76, cognitive coping=3.14, physical adaptive=2.80, physical non-adaptive=2.53, and emotional adaptive coping=2.07).

Dealing with stress and pressure, students try to cope up by taking a time to reflect on one's life, trying to stay aware of what is really important for one's self and looking for a comfort in a belief in a power greater than one's self under spiritual coping. Concerning physical adaptive coping, most of the students use forms of relaxation (meditation, yoga, muscle relaxation, or sleeping). Other students seek advice or support to manage their stress. Some students choose to purposefully release their negative feelings through emotional outbursts and take out their frustrations or aggressions out on others. These strategies somehow lessen the pressure of stress but in fact, it's not beneficial not just to participants but also on others. Emotional outbursts may cause further and prolong stress level.

Most of the participants are believer of God which may associate to the highly spirited students who still able to do all academic demand despite the overlapping stressors they experiencing. After taking examinations, students consume a longer hours of sleep to compensate the sleep deprivation they experienced during review. Eating a lot, an example of physical non-adaptive aspect, may divert the students' thought other than stress. It is clinically proven that eating especially sweets decrease level of pressure, anxiety and other negative emotion since it contains that stimulate happy hormone. However, few students utilize this which indicates less possible incidents of hormonal imbalance and changes in metabolism. Instead, talking to somebody may lessen the weight of stress and liberate their frustration.

In a similar studies conducted by Bin et al. (2011), Yussof et al. (2013), and Ahmed et al. (2013), majority of the students use religion (including praying/meditating) or spiritual coping to deal with stress which correlates to this present study. As a Christian, they consider praying as the supreme means of confronting with difficulties. With numerous coping strategies the students are using, Ahmed et al. (2013) imparted that it is important that planning and recognizing one's capability is being practiced to be able to effectively achieve lesser stress. It was also stated that lesser use of emotional strategies indicates students' maturity since they now focus on their cognitive ability. The

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same explanation is pointed out when using non-adaptive method such as drinking and smoking.

CONCLUSIONS

This study concluded that among the stressors the LPU-B physical therapy students experienced, all year levels go through academic stress. First-year level experienced environmental, intrapersonal and interpersonal stress, respectively. Second-year level experienced intrapersonal, environmental and interpersonal stress. Major year level (3^{rd}-5^{th}year) experienced the same ranking of stress in which intrapersonal, environmental and interpersonal stress followed to academic stress respectively. To cope up with these stressors, all year levels used spiritual strategy followed by cognitive method except for second-year level that used physical adaptive method. These are followed by physical non-adaptive and emotional mechanisms.

RECOMMENDATIONS

Based on the results and conclusions of this study, the researchers recommend to devise stress-reducing interventions and education for the students and faculty such as regular counseling, seminars, open-forum, retreat, etc. Researchers also suggest to manage stress and to enhance positive coping mechanism using spiritual, physical and practical method. Establish programs or activities for recreation to improve students' talent and stress management ability, and render this study as one of the bases for amendment and reform of the program curriculum to develop the students' learning ability and interest.

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