

Exploring the Causes of Stress and Coping with it amongst Doctoral Level Students: Highlighting the Importance of Information Collection and Management

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Stress may hinder the efficiency and performance of individuals. However, little attention has been given to academic stress especially stress experienced by doctoral level university students. Understanding and comprehending the causes of their stress and relevant coping strategies is indeed essential for their better performance. Hence, to address this gap, the purpose of the study was to explore the stressors produced by academic environment and the stress coping strategies adopted by doctoral scholars. Unit of analysis were the individuals enrolled in doctoral studies at the Business School of University Kebangsaan, Malaysia. In-depth analysis of eight doctoral level students revealed that they, in general, share the same experiences and adopt similar coping strategies as were reported to have been experienced and adopted by students of other disciplines (i.e., nursing or psychology students). However, a lack of ability to manage information, information ambiguity and ambiguity regarding quality of one's own work emerged as the major stressors in this study, which have not previously been commonly highlighted by past researches. This study, therefore, reveals that information collection, scarcity of information resources, information ambiguity and work related ambiguity are major stressors for doctoral students. Further, it is also identified that social support, problem diversion, effective information management and time management are significant stress coping techniques. The implications and future recommendation are also discussed in the paper.

Keywords: Stress; Information Handling; Lack of Information Resources; Performance; Stress coping.

INTRODUCTION

Lazarus and Folkman (1984) contended that the perception of individuals regarding their lack of coping resources for a perceived past, present or future situation is the source of stress (Houghton, Wu, Godwin, Neck, & Manz, 2012). Fear is the main source of stress (Schager, 2009) and in turn the individuals' body shows the natural tendency for fight or flight against that stress (Clark, Nguyen, & Leiker, 2014). However, the reactions of individuals are different in similar situations (Clark et al., 2014). It is quite possible that a situation considered as stressful by a person may not be regarded as stressful by another individual. Ross, Niebling and Heckert (1999) contended that it is not the demand that causes stress rather the interpretations of that demand and its perceptions that actually bring harm.

There is evidence that some higher education students experience significant levels of stress while trying to achieve studying goals (Robotham, 2008) and in doing so, in turn, suffer from problems related to mental health (Cohen, 2013; Webb-Murphy et al., 2015). Commonly, the perception of scarcity of time and more knowledge base requirements are significant contributors of academic stress among students (Carveth, Gesse, & Moss, 1996).

Also, lack of information/knowledge and lack of skills were also prescribed as stressors (Moczko, Bugaj, Herzog, & Nikendei, 2016). Other common stressors among student can be categorized as financial stressors, self-imposed stressors and health related stressors (Goodman, 1993; LeRoy, 1988). However, it must be noted that not all stresses are negative indeed (Anderson & Pulich, 2001) and some may also have positive impacts on students in effectively responding towards challenging situations (Schafer, 1996). Challenging events can lead towards positive responses like motivation and studying harder. On the other hand, if events are viewed as threats then these may lead towards pessimistic responses like dropping out and/or avoidance (Shields, 2001).

THEORITICAL BACKGROUND

Lazarus Theory of Stress/ Transitional Model of Stress and Coping

This study is guided by Lazarus and Folkman (1984) transactional model of stress and coping. They theorize that, "stress is not a direct response to a stressor but rather one's resources and ability to cope mediate the stress response and are amenable to change, thus allowing stress to be controllable". They posit that stress is a two sided process where stressors are produced by the environment and the individual finding ways to cope with those stressors.

Lazarus and Folkman's transactional model of stress and coping is useful for coping methods evaluation of stressful events caused by the interaction between person and his environment. The core assumptions are as follows:

Primary appraisal. When encountering a stressful event, a person judges the potential threat of the event and its relevance to his well-being as harmful, threatening, challenging, positive or irrelevant.

Secondary appraisal. It relates to coping options. When faced with a stressor, the individual assesses how he can best deal with the situation and evaluates the resources available for coping with the stressors in order to create a more positive environment (Cohen, 1984).

Coping efforts. Actual coping efforts involved both, problem-focused and emotion-focused coping strategies, aimed at regulation of the problem.

RESEARCH QUESTIONS

- What are the stressors for doctoral level business education students?
- What are the outcomes of stressors for doctoral level business education students?
- How do the doctoral level business education students deal with stress?

SIGNIFICANCE OF THE STUDY

It has been documented that stress is being experienced by students (Aherne, 2002; Brown & Ralph, 1999). In spite of this, students and academic stress did not gain ample focus among researchers (Michie, Glacha, & Bray, 2001). Past research work on academic stress has mainly focused on students related to nursing (Prymachuk & Richards, 2007; Lo, 2002), law (Clark & Rieker, 1986), hospitality (Jogarathnam & Buchanan, 2004), psychology (Hughes, 2005; McCarthy, Moller, & Fouladi, 2001), and social work (Dzieglelewski, Turnage, & Roest-Martl, 2004). Social sciences and especially doctoral level students did not gain much attention of researchers. In this regard, this study has implications for students of social sciences especially doctoral level students. Further, it has implications for academicians, and researchers as well enabling them to understand and better comprehend the phenomenon. Also, this study will contribute to literature as it explores the stress related phenomenon on doctoral scholars.

Past studies on academic stress have mainly focused on quantitative approach with the assumption that stress can be measured objectively. On the other hand, relatively fewer studies have applied qualitative techniques. This methodological gap demands researchers to use qualitative techniques to explore subjective explanation of stress among students. To address this gap, with the use of in-depth interviews, this qualitative study design is aimed to highlight the subjective views of students regarding their stress and their subsequently adopted stress coping techniques/resources. Thus, this study will contribute to the already available literature on this issue.

There has also been a lack of research on stress among Asian university students as most of the research on these issues are dominated by studies from west especially, North America. This study, as it will be conducted in a Malaysian university, will serve as reducing this gap in literature. The exploration of stressors,

effects and coping strategies of PhD students will equip the present and future students with better understanding of stressors and suitable coping skills required to handle the stress and will practically contribute towards students' academic and research performance.

LITERATURE REVIEW

Stress has been discussed in various ways. It has been associated with environmental demands, response to demands and coping strategies related to cognition (Moos, 1987). According to Lazarus and Folkman (1984), the perception of individuals regarding their lack of coping resources for a perceived past, present or future situation is the source of stress among those individuals. Lazarus in his initial work pointed out that stress is a transactional phenomenon which is dependent on the meaning of the stimulus to the perceiver (Lazarus, 1966). Later, Lazarus and Cohen (1977) argued that stressors are internal or external demands which can upset the balance and affect physical and psychological well-being of a person. They further argue that the stressors require action to regain balance (Lazarus & Cohen, 1977).

Montero-Marin, Prado-Abril, Demarzo, Gascon, and García-Campayo (2014) also emphasized that stress is a normal part of everyday life and one cannot be escape from it. Further, due to the association of majority of people living in cities and their links with workplaces, need is to design effective policies to promote mental health especially in work environments (Montero-Marin et al 2014). The job stress attacks when ineffective coping strategies are used to avoid stress. So, better stress coping techniques may help in avoiding stress. Further, according to Nandan and Krishna (2016), stress has an effect on the job performance that may lead to the higher absenteeism and declining mental and physical health.

As far as the consequences of stress are concerned, the deterioration in a person's performance and/or his morale is most evident and common among many possible consequences of stress. These reactions of stress are often being described as 'burnout' (Freudenberger, 1974). The burnout is characterized by depersonalization, emotional collapse and lessened personal achievements (Maslach, 1982). According to Johns (2008), stress can affect work performance of employees and contributes negatively to organizational effectiveness. He presented the notion that motivation declines as a side effect of stress. Further, he mentioned that stressful events may cause changes in an individual that can even weaken the focus and disrupt human psychological functioning. He also joins the strings between the absenteeism and work stress.

A number of factors may enhance the likelihood of incidences being considered as stressful. Perception about an event's uncontrollability (McFarlane, Norman, Streiner, & Roy, 1983), overwhelm (Cohen & Williamson, 1988), and/or ambiguity (Billings & Moos, 1984; Gal & Lazarus, 1975) may increase the likelihood of considering an event as stressful and may act as stressors. Further, financial constraints, examination pressure, and time demands (Aherne, 2002; Verschoor &

Markus, 2011); pressure from parents, conference with new individuals, and anxiety about failure (Schafer, 1996); extra workload pressure (Ross et al., 1999); lack of information and lack of skills (Moczko, Bugaj, Herzog, & Nikendei, 2016) are commonly cited stressors for students. Similarly, according to Videmšek et al. (2013), stress occurs when people try to cope with the duties, responsibilities and other forms of pressure associated with their jobs.

Study related stressors are important for majority students and are the more frequent than other stressors (Abouserie, 1994). Meeting deadlines and perception of extensive workload are the key sources of study related stress (Misra, McKean, West, & Russo, 2000). Fear of failure is also associated with the perception of high workload. Although, fear of failure can help motivate the students to work hard and perform well but in some extreme cases it can lead towards unnecessary emotional and physical distress among students (Schafer, 1996). Another important source of stress is examination (Abouserie 1994; Verschoor & Markus, 2011). Mechanic (1978), however, found that once the examination has started, most of the students do experience the decrease in their stress level. Thus, instead of examination, the vista of taking the examination causes stress among students. Gadzella, Masten, and Stacks (1998) also found similar results and concluded that rather than the test, nervousness related to tests, causes emotional and physiological responses leading to stress.

Students coming from diverse cultural backgrounds may experience varied stressors. According to Chwee, Jiansan, and Perez (1998), international students have reported different stressors than local students. Students who are moving away from home have to adjust in new social and cultural settings (Ross et al., 1999). These students are away from their usual family and friends support which contributes towards higher level of stress among them (Hudd et al., 2000). Lack of the necessary language skills for effective study in a language other than their own may also be one of the causes of stress for most of these students (Heikinheimo & Shute, 1986; Oropeza et al., 1991).

Ambiguity is another important stressor which can occur when there is a "what to do?" situation with unclear guidelines, performance standards or consequences. Financial constraint is also a very significant stressor. No matter how temporary this financial uncertainty is it may have negative effects on students (Schafer, 1996). According to Roberts, Lewinsohn, & Seeley (1991) financial problems and mental health are significantly related to each other. Furthermore, financial constraints may enhance the stress related with studies (Foster, 1995).

Misra et al. (2000) categorized the students' responses to stress as:

- Emotional reactions: fear, nervousness, worry, guilt, sorrow, depression.
- Cognitive reactions: assessment of stressful events and coping techniques.
- Behavioural reactions: abusing, bad temperament, crying, smoking.
- Physiological reactions: weight gain/loss, sweating, aches, trembling, stammering.

Hudd et al. (2000) found that the individuals who experience more stress are likely to show low satisfaction with respect to their health and are more likely probability to display disruptive behaviours. Mechanic (1978) found that some students suffer from eating disorders, sleeping disorders, vomiting and stomach aches under stressful circumstances. Lower academic performance (Bennett, 2003; Struthers, Perry, & Menec 2000), smoking (Naquin & Gilbert, 1996), elevated use of alcohol (Morgan, 1997), and higher suicidal tendency (Hirsch & Ellis, 1996) are the other negative responses to stress.

O'Driscoll and Cooper, (1996) refers to coping as an individual's ability to:

- decrease or eradicate environmental stressors;
- change their judgment towards probable negative effects of stressors; and/or
- reduce the stress level due to stressors.

Coping can be categorized as problem-focused coping and emotion-focused coping (Folkman, Schaefer, & Lazarus 1979; Pearlin & Schooler, 1978). Emotion-focused coping strategies may include an individual's efforts at seeking professional support (Abouserie, 1994), self-control, avoidance, positive reappraisal, accepting responsibility, (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen 1986) or attempts to change the meaning of the event (Lazarus & Folkman, 1984). On the other hand, problem-focused coping strategies may include an individual's efforts of doing something constructive regarding the perceived stressful event. Problem focused strategies may also include efforts to making changes to the environment (Lazarus & Folkman, 1984) and seeking social support (Folkman et al., 1986). Social support in the form of emotional and tangible support and information sharing can significantly facilitate the individual's ability to cope up with the stressful situation (House, 1981; Schaefer, Coyne, & Lazarus 1981). This social support is an effective tool to reduce stress (Buunk & Verhoeven, 1991). The students who perceived that their supervisors are supportive in a manner that enhances their self-reliance were found less disturbed emotionally (Constable & Russell, 1986).

Chiriboga and Bailey (1986) contended that the protective function of social support may not be gained if the supervisory support is not contributing in enhancement of self-reliance. Effective time management can help in reducing the stress level by enhancing the productivity (Lay & Schouwenburg, 1993) and improving the academic outcomes (Campbell, Svenson, & Jarvis 1992). Academicians proposed that strategic studying and effective time management are the keys to productive studying (Kirschenbaum & Perri, 1982). Effective time management includes proper scheduling of tasks, dividing big tasks into several small tasks and start working on them regularly well before due dates. Students who regularly ignore these techniques usually found themselves in stressful conditions (Brown, 1991).

Further, according to Hill (2016), there is a positive connection between stress and coping. Also, the freshmen students mainly deal with stress through the emotional-coping method. However, they can be given other support tools also to



cope with their stress such as resources and counseling centers. Although Curtis was able to find a relationship between stress and coping, he was not able to find a relationship between stress and coping and the academic performance i.e. the student's GPA.

METHODOLOGY

The aim of this study was to explore the stressors produced by academic environment, their outcomes and the stress coping strategies subsequently adopted by doctoral scholars at business school of University Kebangsaan Malaysia. To achieve these objectives, this study adopted qualitative methodology with interview technique. The advantage of such research is that a researcher can directly collect data and get realistic responses (Cresswell, 2007). Such an approach provides multiple data sources and uncovers the richness of context and a holistic view of the phenomenon. Further, it is flexible in nature and rather than proving or denying anything, it might come up with some novelty providing new directions in research.

The unit of analysis is individuals who were enrolled in Graduate School of Business, University Kebangsaan Malaysia (GSB-UKM) as doctoral level students. Data for this study was collected from semi-structured, in-depth interviews. Convenience and purposive sampling was employed to draw the sample which comprises of males, females, local and international doctoral students. This sample helped in studying the opinions of both genders and different nationalities. Further, all the interviews were tape recorded while the field notes were also taken. Tape recorded data was word by word transcribed.

Finally, as recommended by Cresswell (2012), researchers also adopted strategies like triangulation (verifying evidence from various individuals, data types and data collection methods), member checking (researcher asks a participant to check back the response accuracy), and external audit (hiring/obtaining the services from an external person) in order to ensure the reliability and validity of the research.

DATA ANALYSIS & DISCUSSION

The in-depth analysis of all cases was conducted as recommended by experts (Cresswell, 2007). Initially, responses of each case were transcribed verbatim. Then key words and themes from each question were separately identified. Researchers kept on collecting the data till the themes started becoming redundant. Analyses show that data become redundant by the sixth respondent. Two more responses were gathered to ensure the redundancy of themes. Hence, final useable data was of eight respondents.

Later, cross-case analysis has been conducted in which responses of each question by eight cases were analyzed concurrently. Finally, a table based on thematic analysis has been developed to highlight the stressors and coping strategies. Students were asked to comment on their perceived stress, stressors for

them and their usual coping strategies. They were further asked to suggest such coping strategies which they, although not using, think might help them in overcoming the stress. Findings from the interviews revealed that students, in general, are suffering from academic stress. Although they share common coping strategies but still there are differences among them on the basis of gender and nationality status.

Stressors

Higher performance expectation of self and others, delayed start of research work, and consumption of time because of lengthy coursework were found to be the significant stressor for many students especially among DBA students. For example, one student stated that "one of the problems with DBA is [its] lengthy process. You feel very far from reaching the point which is main research. It takes a lot of time if someone does it on regular basis like taking four subject in each semester ... [it] will take one and half year to find out supervisor and committee ... sometimes I feel very stressed because of this."

On the other hand PhD. students are stressed because of higher performance expectation of self and others. Students, who are doing jobs along with study, find it difficult to manage their jobs and study together and meet the performance expectation. One respondent expressed that to "... accommodate work and study at the same time is very stressful ... work itself has lot of burden and if also complement[ed] with study it becomes heavy". Many students highlighted the time constraint and their poor time management as the significant source of stress. Proper time management has been suggested by many students as an effective stress coping strategy to be adopted but interestingly none was reported to use time management as a coping strategy. A respondent shared that "one of the problems is about time that we have and they gave to us to complete the assignment"

Few students reported the infrastructural facilities and resource availability like internet speed, cafeteria and transportation facility as stressors for them. Few responses regarding this factor are as under:

"lowest speed of internet in library ... sometime I have to wait for hours but cannot download one article. Sometimes [I] have to wait [an] hour for bus. It's difficult. These things make me very stressed. "

Table 1
Cross-case Analysis

Questions	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Feeling stressed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Perceived stressors	Inability to manage information; lack of infrastructure; Time constraint; Course-work; Transition from work to study	Time constraint; Financial constraint; Problem in information management; Information ambiguity	Time constraint; Course-work; Lack of social support; Financial constraints; Lack of resources/infrastructure; Rumors; Lack of information management	Course-work; Lack of supervisor/lecturer support; Financial constraints; Lack of resources/infrastructure; Rumors; Lack of information management	Time constraint; Balance between life and study; Knowledge management	Time constraint; Balance between life and study; Lack of social support; Lack of recreational activities; Coursework	Higher expectations; Rumors; Lack of supervisor/lecturer support; Cultural difference; Difficulties in handling information	Time constraint; Higher expectations; Lack of supervisor/lecturer support; Financial constraints; Cultural difference; Lack of resources/infrastructure; Motivation; Self-dependence
Outcomes of stress	Positive	Motivation	Motivation	Motivation	Motivation	Motivation	No	Lower performance; Ambiguity regarding work progress; Depression; Increased appetite
Negative	Lower performance; Anger; Increased appetite	Lower performance; Health issues; Ambiguity regarding work progress	Lower performance; Ambiguity regarding work progress	Lower performance; Depression; Health issues	Lower performance	Lower performance; Health issues	Lower performance; Ambiguity regarding work progress; Increased appetite	Lower performance; Ambiguity regarding work progress; Depression; Health issues
Stress coping strategies	Social support, Problem avoidance, Recreational activities	Social support, Religious/spiritual support, Effective management of information	Social support, Recreational activities, Problem avoidance	Social support, Self-control, Exercise, Recreational activities, Information	Social support, Procrastination, Recreational activities, manage collected information	Social support, Recreational activities, Problem avoidance, Religious/	Social support, Religious/spiritual support, Information/knowledge	Social support, Problem avoidance



Suggested strategies	Skills through training relating to time management and Information management	Time management sessions; Recreational activities; knowledge management	Time management skill learning Social support	Time management Supervisor/ lecturer support; Information management skills	collection, Time management Supervisor/ lecturer support; Information management skills	Time management Recreational activities; Information and knowledge management skills	spiritual support, Time management Supervisor/ lecturer support; Information management	Time management Supervisor/ lecturer support; Information management	management	Time management Supervisor/ lecturer support; Information management	Time management Supervisor/ lecturer support; Resource / infrastructure facilities
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"... every day I go to the old building in PhD room [to] use internet and library, its not here, no Wi-Fi, no internet, so I am not convenient here."

This is more common among international students than local students. International students are, in general, more stressful than local students. This is basically because of cultural differences and living away from home without usual family and social support. Many students believe that a major cause of stress is that they don't have the research supervisor from the very beginning. They believe that it creates ambiguity regarding the future research direction for a long time without supervisory support. They categorize it as lack of support, unclear research direction, and uncertainty in selecting research topic which in turn creates stress for them. A student responded that "I still do not have any supervisor ... without [supervisor] support how will I refine my research ideas ... I am worried, what will gonna happen. Is my topic OK for [research] work or not?"

International students believe it would be easier for them to settle in this new culture if they were assigned with supervisors from very beginning. The aim of completing the degree in given time period and the fear of delay was also highlighted as a stressor by many students especially international students. A respondent stated "I am worried [that] my thesis write up will gonna be delay. It surely ruins my performance".

Getting admission in GSB-UKM is viewed as a stressful event by few students. Transition from work to study, lack of socialization among students, and a lack of recreational activities and opportunities were also reported as contributors towards students' stress. One example can be viewed in the following response: "the most stressful part is to get admission ... in GSB because you don't know what will they expect plus it is a new experience for me so [I] was stressed at that time".

Students, who feel more stressed in their general life interestingly, feel less stressed during their study. On the other hand, the students who feel less stressed in general life (for example: had good job, career growth opportunities) feel more stress in their academic life. Similarly, the students who believe that all the academic problems are part of PhD process are found to be less stressed than other students. Bad word of mouth by other students regarding difficulties, lack of supervisor support, and delayed completion of study objectives is also highlighted as very stressful for many students.

Financial problems are identified as the most common and most significant stressor among students. Financial constraints, although identified among both local and international students, are identified as more significant stressor among

international students than local students. A respondent pointed out that "Its expensive studying here ... I am not that much rich to sponsor my study and stay here so I have some financial problems [and I am] worried about it".

Besides these, a very interesting theme that emerged was about the lack of abilities in managing information. It is a rapid changing world which in every bit of time is throwing huge information and ultimately making it difficult to track and manage useful information. For instance, as one of the respondents narrated "Well...I am usually stressed when there is a hell of information out there and I get stuck."

Another respondent described the inability to manage information in such a manner, "OH! The thing that depresses me most is when I encounter so much information but don't know how to fix it". One more participant was recorded as saying "You know...it is a world of information and we may be engulfed by its huge Tsunami waves if we do not know how to boldly dive through this ocean of information...but AH! Unfortunately, it seems I am engulfed... as candidly speaking, I do not know that which piece of information is to be added in my jigsaw puzzle".

Outcomes of Stress

Earlier researches highlighted that stress has both positive and negative effects. If an event is perceived as challenging then it may lead towards positive impacts on students for example motivation and hard work (Schafer, 1996). In contrast, if events are perceived as threat then these may lead to negative responses such as avoidance (Shields, 2001). In this current study, it is found that students see events as both a challenge and a threat, so they are showing both motivation and avoidance behaviour. The most common positive effect highlighted was motivation. Many students reveal that stress pushes them to work hard, make an effort to learn more and adopt self-dependence. As a student stated, "Sometimes, stress lead(s) me to motivation. Motivation to work hard and improve my performance"

On the other hand majority students believe that stress puts more negative effects on them than positive effects. Most common and significant negative effect of stress identified is on students' academic performance. One respondent shares that, "I am sure it will ruin my performance"

Many students believe that they suffer from a lack of concentration because of stress which in turn affects their learning and knowledge seeking ability. Uncertainty and ambiguity towards their study objectives were also highlighted as

effects of stress. Past literature argues that a loss of appetite is an effect of stress (Adam & Epel 2007). Interestingly, this study found that many, especially female students, feel hungrier while under stress. "[when stressed] I just feel very hungry".

Ambiguity regarding work progress and doubt on quality of their own work is highlighted as a psychological effect of stressful state of mind. Depression, anger, procrastination and avoidance of the situation have also been found as behavioural effects of stress on students. Few students state that, "... my hot temper is easy to come because I am under stress ..." "I feel depressed, sometimes I cannot do anything even no feeling to go outside".

Many students express suffering from headaches, migraines, body aches, nausea, and tiredness as the physical effects of stress on them. Headaches and migraines are the most common physical effects among all.

Coping

Seeking social and especially family support is the most common and most significant stress coping mechanism for students. Majority students express it as their first choice as a coping strategy and reveal that it really helps them in overcoming their stress. When stressed, most of the female respondents approach for family support first and then go for friends and others support. One female student expresses that "[when stressed] I talk to someone. Most of the time this is my family, my father ... once I talk to him then everything seems so simple."

In contrast, male students, in majority, went for friends support initially and go for family support if stress mounts up. A male student states, "I like to speak to the others, my friends, seniors, my colleagues. I sometimes also call my family and discuss with them about the matters, about what I am feeling and ambiguity".

Ignoring the problem and diverting attention from the prevailing stressful situation are common coping strategies among students, for example, reading a novel or hanging out with friends. Many students opt to go for recreational activities as a stress diversion technique. An interesting difference among male and female students has been found in this regard. Male students, in general, went for recreational activities like travelling and watching movies at home and or at the cinema. On the other hand, female students prefer to go for shopping.

Religious beliefs are found helpful in coping stress. Believing in God and praying are found to be really helpful in dealing with stressful situations and coping with stress and its outcomes. A respondent narrated that, "Actually you really have



to believe in God, this is what I do ... if you are in the stress condition, I think the most probable thing you should do is actually to get yourself near to Allah, by reading Al-Quran and perform Solah not only the compulsory one but Sunnah one too... yah! and this is very useful".

When asked about their suggestions regarding stress coping techniques, most students pointed out that they believe that proper time management might help in handling stress effectively. Interestingly, no student has expressed that he/she is using time management as a stress coping strategy. It means that although, time management is not opted by them as coping strategy but they believe in its effectiveness. Further, students revealed that efficient collection of information and effective management of information helps them to control their stress. A student expressed that, "Whenever I start managing my data and collected information ... it feels good and relaxing". Both male and female students expressed these strategies as their mechanism of stress coping.

Finally, as recommended by Cresswell (2012), researchers adopted strategies like triangulation (verifying evidence from various individuals, data types and data collection methods), member checking (researcher asks a participant to check back the response accuracy), and external audit (hiring/obtaining the services from an external person) in order to ensure the reliability and validity of the research.

CONCLUSION

This study was conducted with the aim of exploring the doctoral students' experiences of stress and the techniques adopted or that should be adopted for coping with it. Past studies found that ambiguity regarding rules and standards is a stressor for many students (Bartone & Adler 1996; Schéle, Hedman, & Hammarström 2012). This is not the case with doctoral level students. The current study found that these students perceive ambiguity about quality of their own work as a stressor instead of ambiguity regarding rules and standards set by the university. Past studies identified that examination is the biggest source of stress for students (Abouserie 1994; Verschoor & Markus 2011) but it is not found as a stressor among doctoral students. Language constraint which was found as significant contributor towards stress in other samples (Heikinheimo & Shute, 1986; Oropeza et al., 1991) is also not found as a contributor here. Past researchers identified that meeting new people at university is a stressor for many students (Seyedfatemi, Tafreshi, & Hagani 2007) but no respondent here express this as a stressor for them. Similarly, many studies found the tendency to commit suicide as

an effect of stress upon students (Park & Kim 2014; Zhang, Wang, Xia, Liu, & Jung, 2012) but no support for this effect has been found in this research. Some of these differences are most probably because of the nature of doctoral study. Further, among other stressors, lack of abilities to manage information and information ambiguity were also described as major stressors. Besides, the current study is in conjunction with past researches conducted on students. This very fact reveals that doctoral level students are not likely to be much different from other students in respect of experiences of stress and coping with it.

This research offers insight that undertaking a doctorate is stressful for many students. With many common stressors, students on the basis of program of study, status as local or international student and from different gender may face some distinct stressors. Similarly, with many common coping strategies, students may opt in some different strategies on the basis of gender differences. It is concluded that there is not much difference found among male and female students regarding their perception about stress and stressors. The differences were found on the basis of PhD or DBA students and local or international students. Not much difference has been found among students regarding physical, psychological and behavioural effects of stress on the basis of gender, status and program of study. All the students largely share the common effects of stress on them. Headaches, migraines, body aches, nausea and tiredness were found as common physical effects of stress on students. Depression, anger, procrastination and avoidance of the situation have been found as behavioural effects of stress. Psychologically, many students express depression, uncertainty and ambiguity as effects of stress. The only difference found was regarding more food intake among female students while male students reveal normal diet while under stress.

Social support especially friends and family support is found as very important and effective means of stress coping. When stressed, students commonly seek such support as their first defense mechanism against stress and its outcomes. Problem diversion techniques like reading novels, watching television, going to cinema, hang out with friends and travelling are also common and effective stress coping techniques. Family support is preferred by female students while male students prefer friends support as coping technique. Religious beliefs played an important role in controlling and overcoming stress. Time management is believed to be an effective coping strategy but interestingly, not a single student is using it as their stress handling strategy. The study also revealed that not much difference exists between this sample of doctoral students and the other higher education



students. With minor differences, the current study is in conjunction with past researches conducted on students regarding experiences of stress and its coping.

LIMITATIONS & FUTURE RESEARCH DIRECTIONS

This study is carried out on GSB-UKM students to explore their subjective views regarding their stress, stressors and coping strategies. As this study is carried out in only one department of a large university so its results cannot be generalized and extrapolated on all students. Other than business school students, like students of physical sciences, may experience different stressors and effects. It is suggested that future studies may be carried out to explore this phenomenon in different study settings. Future researchers may also conduct research to explore the similarities and differences among full time and part time students. However, this study would be helpful in comparing the experiences of stress and coping of doctoral level business students with other study groups.

REFERENCES

- Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology*, 14(3), 323–330.
- Adam, T. C., & Epel, E. S. (2007). Stress, eating and the reward system. *Physiology & Behavior*, 91(4), 449–458.
- Aherne, D. (2002). Student suicide in Ireland. *Eisteach*, Spring, 17–22.
- Anderson, P., & Pulich, M. (2001). Managing workplace stress in a dynamic environment. *The Healthcare Manager*, 19(3), 1–10.
- Bartone, P. T., & Adler, A. B. (1996). *A model of Psychological issues in peacekeeping operations*. Walter Reed Army Institute of Research, Washington DC.
- Bennett, R. (2003). Determinants of undergraduate student dropout rates in a university business studies department. *Journal of Further and Higher Education*, 27(2), 123–141.
- Billings, A. G., & Moos, R. H. (1984). Coping stress, and social resources among adults with unipolar depression. *Journal of Personality and Social Psychology*, 46(4), 877–891.
- Brown, R. T. (1991). Helping students confront and deal with stress and procrastination. *Journal of College Student Psychotherapy*, 6 (2), 87–102.
- Brown, M., & Ralph, S. (1999). Using the DYSA programme to reduce stress and anxiety in first-year university students. *Pastoral Care*, 17(3), 8–13.



- Buunk, B. P., & Verhoeven, K. (1991). Companionship and support at work: a microanalysis of the stress-reducing features of social interaction. *Basic and Applied Social Psychology*, 12(3), 243-258.
- Campbell, R. L., Svenson, L. W., & Jarvis, G. K. (1992). Perceived level of stress among university undergraduate students in Edmonton, Canada. *Perceptual and Motor Skills*, 75(2), 552-554.
- Carveth, J.A., Gesse, T., & Moss, N., (1996). Survival strategies for nurse-midwifery studies. *Journal of Nurse-midwifery*, 41(1), 50-54.
- Chiriboga, D. A., & Bailey, J. (1986). Stress and burnout among critical care and medical surgical nurses: A comparative study. *Critical Care Nursing Quarterly*, 9(3), 84-92.
- Chwee, L. C., Jiansan, D., & Perez, M. A. (1998). Validation of the East Asian student stress inventory (EASSI). *American Journal of Health Studies*, 14(3), 153-161.
- Clark, C. M., Nguyen, D. T., & Barbosa-Leiker, C. (2014). Students' perceptions of stress, coping relationships, and academic civility: A longitudinal study. *Nurse educator*, 39(4), 170-174.
- Clark, E. L., & Rieker, P. P. (1986). Differences in relationships and stress of medical and law students. *Journal of Medical Education*, 61(1), 32-40.
- Cohen, F. (1984). *Coping, behavioral health: A handbook of health enhancement and disease prevention*. New York: Wiley.
- Cohen, S., & Williamson, G. M.(1988). Perceived stress in a probability sample of the United States. *The Social Psychology of Health*, 31-67.
- Cohen, S. (2013). *States of Denial: Knowing about atrocities and suffering*. John Wiley & Sons.
- Constable, J. F., & Russell, D. W. (1986). The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress*, 12(1), 20-26.
- Cresswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). SAGE Publications.
- Cresswell, J. W. (2012). *Educational research: planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Pearson Education Inc. Boston: USA.
- Dzieglelewski, S. F., Turnage, B., & Roest-Martl, S. (2004). Addressing stress with social work students: A controlled evaluation. *Journal of Social Work Education*, 40(1), 105-119.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R.J., (1986), Dynamics of a stressful encounter: Cognitive appraisal, coping, and



- encounter outcomes. *Journal of Personality and Social Psychology*, 50(5), 992-1003.
- Folkman, S., Schaefer, C, & Lazarus, R. S. (1979). Cognitive processes as mediators of stress and coping. In V. Hamilton & D. M. Warburton (Eds.), *Human stress and cognition: an information-processing approach* (pp. 265-298). London: John Wiley.
- Foster, D. (1995). *Report on student stress and suicide rates*. London: Liberal Democrat Party.
- Freudenberger, H. J. (1974). Staff burnout. *Journal of Social Issues*, 30(1), 159-165.
- Gadzella, B. M., Masten, W. G., & Stacks, J. (1998). Students' stress and their learning strategies, test anxiety and attributions. *College Student Journal*, 32(3), 416-423.
- Gal, R., & Lazarus, R. S. (1975). The role of activity in anticipating and confronting stressful situations. *Journal of Human Stress*, 1(4), 4-20.
- Goodman, E.D. (1993). How to handle the stress of being a student. *Imprint*, 40(2): 43-54.
- Heikinheimo, P. S., & Shute, J. C. (1986). The adaptation of foreign students: students' views and institutional implications. *Journal of College Students Personnel*, 27(5), 399-406.
- Hill, C. (2016). School stress, academic performance, and coping in college freshmen. *The Undergraduate Research Journal at the University of Northern Colorado*, 4(2), 9.
- Hirsch, J. K., & Ellis, J. B. (1996). Differences in life stress and reasons for living among college suicide ideators and non-ideators. *College Student Journal*, 30(3), 377-386.
- Houghton, J. D., Wu, J., Godwin, J. L., Neck, C. P., & Manz, C. C. (2012). Effective stress management a model of emotional intelligence, self-leadership, and student stress coping. *Journal of Management Education*, 36(2), 220-238.
- House, J. S. (1981). *Work stress and social support*. Addison-Wesley.
- Hudd, S. S., Dumlao, J., Erdmann-Sager, D., Murray, D., Phan, E., Soukas, N., & Yokozuka, N. (2000). Stress at college: Effects on health habits, health status and self-esteem. *College Student Journal*, 34(2), 217-227.
- Hughes, B. M. (2005). Study, examinations, and stress: Blood pressure assessments in college students. *Educational Review*, 57(1), 21-36.
- Jogarathnam, G., & Buchanan, P. (2004). Balancing the demands of school and work: Stress and employed hospitality students. *International Journal of Contemporary Hospitality Management*, 16(4), 237-245.



- Johns, G. (2008). Work strain, health, and absenteeism: A meta-analysis. *Journal of Occupational Health Psychology, 13*(4), 293–318.
- Kirschenbaum, D. S., & Perri, M. G. (1982). Improving academic competence in adults: A review of recent research. *Journal of Counseling Psychology, 29*(1), 76-94.
- Lay, C. H., & Schouwenburg, H. C. (1993). Trait procrastination, time management, and academic behavior. *Journal of Social Behavior & Personality, 8*(4), 647-662.
- Lazarus, R.S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lazarus, R.S. & Cohen, J.B. (1977). Environmental stress. In I. Altman and J.F. Wohlwill (Eds.), *Human Behavior and Environment* (pp. 88-127). New York: Plenum.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- LeRoy, A. (1988). How to survive a nontraditional nursing student. *Imprint, 35*(2), 73-86.
- Lo, R. (2002). A longitudinal study of perceived level of stress, coping and self-esteem of undergraduate nursing students: An Australian case study. *Journal of Advanced Nursing, 39*(2), 119–126.
- Maslach, C. (1982) Understanding burnout: Definitional issues in analyzing a complex phenomenon. In W. S. Paine (Eds.). *Job Stress and Burnout* (pp. 29-40). Beverly Hills, CA: SAGE.
- McCarthy, C. J., Moller, N. P., & Fouladi, R. T. (2001). Continued attachment to parents: Its relationship to affect regulation and perceived stress among college students. *Measurement and Evaluation in Counseling and Development, 33*(4), 198–219.
- McFarlane, A. H., Norman, G. R., Streiner, D. L., & Roy, R. G. (1983). The process of social stress: Stable, reciprocal, and mediating relationships. *Journal of Health and Social Behavior. 24*(2), 160-173.
- Mechanic, D. (1978). *Students under stress: A study in the social psychology of adaptation*. London, Madison: University of Wisconsin Press.
- Michie, F., Glachan, M., & Bray, D. (2001). An evaluation of factors influencing the academic self-concept, self-esteem and academic stress for direct and re-entry students in higher education. *Educational Psychology, 21*(4), 455–472.



- Misra, R., McKean, M., West, S., & Russo, T. (2000). Academic stress of college students: Comparison of student and faculty perceptions. *College Student Journal*, 34(2), 236–245.
- Moczko, T. R., Bugaj, T. J., Herzog, W., & Nikendei, C. (2016). Perceived stress at transition to workplace: A qualitative interview study exploring final-year medical students' needs. *Advances in medical education and practice*, 7 (15).
- Moos, R. H. (1987). *Work environment scale manual*. Palo Alto, CA: Consulting Psychologists.
- Montero-Marin, J., Prado-Abril, J., Demarzo, M. M. P., Gascon, S., & García-Campayo, J. (2014). Coping with stress and types of burnout: Explanatory power of different coping strategies. *PloS one*, 9(2).
- Morgan, S. (1997). Cheap drinks, heavy costs: Students and alcohol. *Youth and Policy*, 56, 42–54.
- Nandan, D. R., & Krishna, K. S. R. (2016). Job stress among faculty in management institutes. *Universal Journal of Industrial and Business Management*, 4(2): 37-43.
- Naquin, M. R., & Gilbert, G. G. (1996). College students' smoking behaviour, perceived stress and coping styles. *Journal of Drug Education*, 26(4), 367–376.
- O'Driscoll, M. P., & Cooper, C. L. (1996). Sources and management of excessive job stress and burnout. In P. Warr (Eds.), *Psychology at work* (pp. 188–223). London: Penguin Books Ltd.
- Oropeza, B. A., Fitzgibbon, M., & Baron, A. (1991). Managing mental health issues of foreign college students. *Journal of Counseling & Development*, 69(3), 280–284.
- Roberts, R.E., Lewinsohn, P.M., & Seeley, J.R. (1991). Screening for adolescent depression: A comparison of depression scales. *Journal of the American Academy of Child & Adolescent Psychiatry*, 30(1), 58-66.
- Robotham, D. (2008). Stress among higher education students: towards a research agenda. *Research in Higher Education*, 56(6), 735-746.
- Ross, S. E., Niebling, B. C., & Heckert, T. M. (1999). Sources of stress among students. *College Student Journal*, 33(2), 312–317.
- Schaefer, C., Coyne, J. C., & Lazarus, R. S. (1981). The health-related functions of social support. *Journal of Behavioral Medicine*, 4(4), 381-406.
- Schafer, W. (eds.). (1996). *Schools and delinquency*. Englewood Cliffs, NJ: Prentice-Hall.
- Schager, B. (2009). *Stress and human functioning*. Marine Profile Sweden AB.



- Schéle, I. A., Hedman, L. R., & Hammarström, A. (2012). A model of psychosocial work environment, stress, and satisfaction among dental students in Sweden. *Journal of Dental Education*, 76(9), 1206-1217.
- Seyedfatemi, N., Tafreshi, M., & Hagani, H. (2007). Experienced stressors and coping strategies among Iranian nursing students. *BMC Nursing*, 6(1), 11-21.
- Shields, N. (2001). Stress, active coping and academic performance among persisting and non-persisting college students. *Journal of Applied Biobehavioural Research*, 6(2), 65-81.
- Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An examination of the relationship among academic stress, coping, motivation and performance in college. *Research in Higher Education*, 41(5), 581-592.
- Park, J. Y., & Kim, J. K. (2014). The effects of life stress on university students' suicide and depression: Focusing on the mediating pathway of family and friend' support. *Korean Journal of Youth Studies*, 21(1), 167-189.
- Pearlin, L. I. and Schooler, C., (1978). The structure of coping. *Journal of Health and Social Behaviour*, 19(1), 2-21.
- Prymachuk, S., & Richards, D. A. (2007). Predicting stress in pre-registration nursing students. *British Journal of Health Psychology*, 12(1), 125-144.
- Verschoor, E., & Markus, C. R. (2011). Affective and Neuroendocrine Stress Reactivity to An Academic Examination: Influence of the 5-HTTLPR Genotype and Trait Neuroticism. *Biological Psychology*, 87(3), 439-449.
- Videmšek, M., Karpljuk, D., Roblek, V., Erenda, I., Meško, M., & Štihec, J. (2013). Relationship between stress coping strategies and absenteeism among middle-level managers. *Journal of Contemporary Management Issues*, 18(1), 45-57.
- Webb-Murphy, J. A., La Rosa, G. M., Schmitz, K. J., Vishnyak, E. J., Raducha, S. C., Roesch, S. C., & Johnston, S. L. (2015). Operational stress and correlates of mental health among joint task force Guantanamo bay military personnel. *Journal of Traumatic Stress*, 28(6), 499-504.
- Zhang, X., Wang, H., Xia, Y., Liu, X., & Jung, E. (2012). Stress, coping and suicide ideation in Chinese college students. *Journal of Adolescence*, 35(3), 683-690.