#### THE EFFECT OF CHRONIC STRESS ON LEARNING ORIENTATION: A THAILAND CASE STUDY

<sup>1</sup>Vichita Vathanophas Ractham and<sup>2</sup>Adam Thompson

College of Management, Mahidol University

Correspondence:<sup>1</sup>vichita.rac@mahidol.ac.th, <sup>2</sup>CMMUAdamThompson@gmail.com

#### ABSTRACT

This study examines the effect of chronic stress on learning orientation. In particular the study focuses on employees (N=158) and university students (N=123) in the Kingdom of Thailand. Due in part to the long-lasting world-wide recession, the American Psychological Association has found that there has been a sharp spike in individual chronic stress levels over the past five years. It is well known that high stress impairs one's ability to learn, and thus reduces motivation. However, the results of this study show that Thais may be unique as chronic stress was not found to significantly impact learning orientation. Thais have previously been given the title of "the master's of relaxation" and typically adapt to change with an easy-going attitude. The findings suggest that adopting characteristics of Thai culture would help to negate the impact of stress on learning orientation.

Keywords: Learning Orientation, Chronic Stress, Organizational Climate

# 1. INTRODUCTION

Students who are motivated to learn have better outcomes; this is a well-known fact. Teachers of all types, including university professors commonly do everything within their ability to deliver lessons that capture student's interest and increase their motivation to learn. This is not to say that the students themselves might not also be intrinsically motivated to learn, i.e. learning for the sake of learning itself. These students certainly exist. However, no matter what factors drive individual university student's motivation, it may be difficult for a particular student to maintain their motivation throughout the entire course of their studies. Being motivated to learn is equally important for employees. Managers typically encourage employee growth and learning to the best of their ability. Similar to how students may experience a motivational burnout due to their studies, employees may experience motivational burnout one or more times during their career.

One reason commonly linked to motivational burnout is stress. Several studies have directly examined how stress affects one's motivation to learn (Joels, Pu, Wieger, Otiz, & Krugers, 2006; Lupien et al., 2005; Shors, 2006). For instance, people who have experienced a very stressful event often show unreliable memory for details (Christianson, 1992). Furthermore, cognitive decline has been observed in individuals that experience high levels of chronic stress (McGaugh, 2004). Cognitive resource theory (Fiedler & Garcia, 1987) and cognitive load theory (Sweller, 1988, 1994)suggest that individuals in challenging and stressful experiences divert their cognitive resources and attention away from learning-related activities. Employees and students that experience high levels of chronic stress typically focus their cognitive resources on worries over possible performance failures or evaluation anxieties. When participating in learning-related activities, these same individuals may experience cognitive overload as there are not enough cognitive resources available to focus on both anxieties and learning(Weick, Sutcliffe, & Obstfeld, 2008). It is therefore necessary to understand the magnitude to

which chronic stress effects learning orientation from both the employee and student prospective.

This study focuses on exploring the relationship between chronic stress and learning orientation in both students and employees in the Kingdom of Thailand. Hofstede(2001) defines culture as, "the interactive aggregate of common characteristics that influence a human group's response to its environment. Culture determines the uniqueness of a human group in the same way personality determines the uniqueness of the individual." Thailand is an example of a country with very unique and strong cultural traditions. It is largely a mono-cultural and mono-religious country with approximately 95% of its citizens being Buddhist (Pagram & Pagram, 2006).Hofstede (2001) indicated that Thai culture was characterized by high power distance, high uncertainty avoidance, low individualism, and low masculinity. Thai culture has several unique aspects that may uniquely insulate Thais from the effects of chronic stress. For instance, the Thai word Sanook, which can be defined as "the feeling of enjoyment, excitement or pleasure that one has taking part in work, play or any other activities" (Dakin, 1988, p. 51), is an attitude that most Thais apply to their daily life(Blandin, 2003; Tiwsakul & Hackley, 2012). Having this easy going approach towards life should reduce the likelihood of chronic stress accumulating to high levels. This easy going nature also serves as a coping mechanism for those who are in stressful situations.

Thai culture provides an interesting and unique context through which to study the relationship between stress and learning orientation. Chronic stress is commonly shown to have an adverse effect on one's motivation to learn. However, in the context of a culture that has a "mai ben rai" attitude, Thai for "nevermind", the effects of chronic stress may be mitigated to the point that it does not affect one's motivation. Furthermore, it is interesting to study the effects of stress in a highly collectivist culture. Comparing Thailand to the United States of America, Marta and Singhapakdi(2005) state, "Thailand is a more feminine culture which means they tend to prefer more nurturing over aggressive behavior, and they also strive harder to avoid situations of uncertainty." The core objective of this study is to test whether or not Thais' learning orientation is negatively impacted by chronic stress as is true for many Western cultures, or if Thais' are rather unique in their ability to cope and that their learning orientation is unaffected by chronic stress.

The remainder of this paper is organized as follows: the first section provides a review of the literature regarding the variables being studied and offers a theoretical framework for the study. The next section provides a review of the methodology used in conducting the empirical study. The penultimate section presents statistical analysis, and the final section discusses results, implications, and limitations.

# 2. LITERATURE REVIEW

# Learning Orientation

The importance of understanding and encouraging individual learning orientation should not be understated. Learning orientation is defined as the manifestation of an individual's propensity to learn and adapt (Mavondo, Chimhanzi, & Stewart, 2005). The key characteristics of learning orientation, as presented by Bennett (1998), include commitment to learning, openness to the outside world, motivation to learn, and overall commitment to knowledge. Individually, learning orientation is present in higher levels in people who place a greater value on learning new skills and increasing their competence and abilities

(DeShon & Gillespie, 2005). In challenging or difficult situations, individuals who possess a high level of learning orientation respond with adaptive and problem solving behaviors (Elliott & Dweck, 1988). Therefore, employees and students with superior learning orientation have a greater propensity to seek and discover new solutions to challenging problems and assignments.

Huber(1991) gives us a cultural perspective when he proposes that learning orientation leads to the development of new knowledge or insights that have the potential to influence behavior through values and beliefs. Learning orientation is present when students take further effective action after new knowledge has been developed (Argyris & Schon, 1978). One example would be a student who searches out further resources after they have read a chapter in their textbook. In the case of employees, it could be seeking to more deeply understand "why" a task is performed, instead of only "how".

Students that have a high level of learning orientation have the potential to use that motivation to lead to many positive learning outcomes. Possible outcomes would be a higher than average GPA, graduating with honors, being able to apply knowledge outside of its presented context, and graduating on or ahead of schedule. On the other hand, students who are not motivated to learn cannot be expected to actively share their knowledge with other students. These unmotivated students may also experience lower than average GPA, not be able to adapt knowledge for use outside of its original context, and may graduate late. Similarly, there are many potential positive outcomes for employees possessing high levels of learning orientation. Possible outcomes would be a higher than average level of productivity, are able to adapt previous work experiences to new contexts, and could be eligible for promotion ahead of average employees.

#### **Chronic Stress**

In 2012 the American Psychological Association reported that Millennials (18-33 year olds), had a higher level of stress than older generations. The report goes on to state that 52% of young adults experience lying awake at night and 44% report experiencing anger or irritability due to stress. Perhaps a bigger issue is that only 29% of Millennials, compared to 35% of Generation "X" and 37% of Baby Boomers, feel they are doing a good job managing their stress levels (American Psychological Association, 2012). This disparity between university age students and adults is staggering. It points to the need for universities to have an understanding of how stress affects academic performance.

Thoits' (1995) defines stress as "any environmental, social, or internal demands which require the individual to readjust his/her usual behavior patterns" (p. 54). The fact that one's homeostatic balance has been disrupted is the root cause of these changes in behavior. Individuals must then rebalance themselves to adapt to the changes that have occurred (Lazarus & Folkman, 1984). Anything that causes a person to adjust his/her behavior should then be considered to be a potential cause of stress. The need for adjustment can come from social, professional, or family situations. Stress is also physically and emotionally draining because of the tension caused by the need to constantly regain homeostasis in response to a changing environment(Hobfoll, 1989).

Chronic stress is defined as stress that is persistent in nature and which causes the need for many adjustments over an extended period of time (Thoits, 1995). An example of this is if an individual is over-worked for a long period of time. Also, Pearlin, Lieberman, Menaghan, &Mullan(1981)suggest that stress is present when expecting change during the enactment of social roles. Therefore, if one is consistently experiencing interpersonal

conflict in family life or within social circles chronic stress may result. Gierveld and Dykstra (1993) suggest that uncertainty about an anticipated event or role could also cause chronic stress. This is because people seem to desire that their experiences flow in a way that is understandable and predictable. Therefore, if someone experiences prolonged uncertainty about an anticipated event or role, this feeling may develop into a chronic stressor.

Chronic stress generally decreases a student or employee's motivation to learn. This is because stressors weaken the connection between effort and reward, such as the effort to study and the reward of new knowledge, thus eroding motivation to commit to the process (Dubinsky & Skinner, 1984; Walker Jr., Gilbert, Churchill, & Ford, 1977). Work related chronic stress has also been shown to negatively affect similar types of achievement based motivation in several studies(Garrett & McDaniel, 2001; Hsu, Chen, Yu, & Lou, 2010). From a student's perspective, Halbesleben and Bowler(Halbesleben & Bowler, 2007) showed that achievement motivation, such as the motivation to achieve a bachelor's degree or education related certification, is lessened when one experiences emotional exhaustion.

However, there are reasons to believe that Thais may not be affected by chronic stress in the same way as those from other cultures. For example, Tiwaskul and Hackley (2012), found that critical self-reflexivity is a cultural anomaly in Thais, meaning that they tend to accept situations as they are. This easy acceptance of a situation would cause less of a need for behavioral readjustments caused by stress, as one's homeostatic state has not been adversely affected. As Thoits' (1995) definition includes the idea that stress comes from the rebalancing of one's homeostatic state, it is reasonable that Thais in general would not be strongly impacted by chronic stress. Therefore:

**H1**: There is no relationship between Thais learning orientation and their level of chronic stress.

# 3. METHODOLOGY

# **Data Collection**

The data used to test this hypothesis was obtained from undergraduate students studying at three universities located in Bangkok, Thailand. The average age of the under-graduate students was 20 years old. Further data was collected from employees working for nine different firms throughout Bangkok, Thailand. Data was obtained through the usage of a paper questionnaire administered to students in a classroom setting. A total of 123 useable surveys were obtained from a total of 250 surveys given to students for a useable response rate of 49%. The data represents students from each of the university's majors and each stage of the degree process. A total of 158 useable responses rate of 39%. For employees, a paper-based questionnaire was handed-out during working hours. This data represents employees from a diverse array of firms and from various positions ranging from entry-level to mid-level management.

#### Measures

The scale for learning orientation was developed based uponVandeWalle's(1997) scale. This measure was deemed appropriate due to its widespread usage. A six-point Likert scale was used ranging from 1 "Strongly Disagree" to 6 "Strongly Agree". A composite score of six indicates an individual with high learning orientation, while a score of one would

indicate low learning orientation. The five measured items in the scale indicate an acceptable level of reliability ( $\alpha = .742$ ).

The measurement for chronic stress was adapted from Mathur, Moschis, & Lee (2008). This scale was chosen because the items within could apply to stress in different role settings, and for its widespread acceptance. Respondents were asked to indicate how they felt the statement applied to them during the previous twelve months. A 5-point Likert scale was used ranging from 1 "strongly disagree" to 5 "strongly agree". A higher score would indicate a high level of chronic stress, and the reverse is true for a low a score. Measurement reliability was assessed as acceptable( $\alpha = .613$ ).

#### 4. ANALYSIS AND DISCUSSION

Results were obtained by using SPSS (Statistical Package for the Social Sciences) software version 17. The distribution for all constructs was deemed normal because kurtosis and skewness were both well within the recommended ranges(Hair, Tatham, Anderson, & Black, 1998). Multiple regression was used to test the hypothesis.

	Output	
Constant	4.11	
Chronic Stress	.000(.996)	
Student	.323 (.000)**	
F	16.212	
R <sup>2</sup>	.098	
Ν	280	

Table 1 Regression results for learning orientation

Standard errors in parentheses, \*\* Significant at 5%

The results of the regression model are valid (F=16.212). Chronic stress is not a predictor of learning orientation (Sig=.996). Hypotheses 1 is confirmed as the data supports there being no relationship between learning orientation and chronic stress in Thais. These findings go against what previous stress literature has suggested the relationship between learning orientation and chronic stress are. Though this is finding is the opposite of what would be expected from a sample of students or employees from Western cultures, it is fairly unsurprising in the Thai context. This is evidence to support the claim that Thais don't experience a reduction in motivation due to stress. This could be due to Thais having a greater propensity to cope with stress than other cultures. Mulder (1978) dubbed Thai's the "masters of relaxation" (p. 103). This moniker is appropriate because typical interactions between Thaisrelaxed, pleasant, and light, yet fun and humorous in nature, and is plausibly the reason that Thais are able to remain unstressed(Komin, 1990). This "sanook" orientation, translated as fun, is deeply ingrained in Thai culture, and is passed on through socialization from generation to generation(National Identity Office, 2005).

The findings also suggest that being a university is a predictor of one's learning orientation (Sig=.000). This is a sign that under-graduate students are more motivated to learn than their employee counterparts. This may be explained by the fact that those in the role of an under-graduate student self-selected themselves to enter university, and thus most likely are persons with an inherently higher level of learning orientation. Students' learning orientation is most likely reinforced and strengthened by continual exposure to a learning environment and by a desire to connect to their peers through shared classroom experiences. Furthermore, students may experience achievement motivation within the university environment. As achievement motivation in this context is most likely related to achieving high marks from their studies, it is natural for students to associate this achievement with the learning process, thus increasing their motivation to learn.

# 5. CONCLUSION

Thais have been shown to be unique in their ability to have their motivations unaffected by chronic stress. This is intriguing as it is different from what has been found to be true in other nationalities by previous stress researchers. This research has not pinpointed what it is about Thai culture that allows Thais to escape the negative effects of chronic stress. However, it does pinpoint an area in which future research can be conducted into what possible stress coping mechanisms enable Thais' learning orientation to remain unscathed.

Numerous companies and school psychologists employ tactics to help their employees/students to deal with stressors. As previously noted, the American Psychological Association (2012) has found that the amount of stress felt by young adults is increasing rapidly. In order to combat this sharp rise in stress related health and social issues, new coping mechanisms must be sought out. Perhaps Western psychologists can learn better methods of treatment through the study of Thai "mai ben rai" and "sanook" orientations.

More research needs to be undertaken to understand the underlying reasons why Thai students and employees' motivation isn't affected by chronic stress. Future research should seek to test if this unique Thai characteristic can be adopted by students and employees from different cultural backgrounds. It is plausible that this phenomena is something that could be ingrained into those from other cultures via socialization with Thais. If so, this could be a beneficial stress coping measure, particularly for university students and employees with high amounts of stress.

# 6. **REFERENCES**

- American Psychological Association. (2012). Stress by generation 2012. Retrieved from http://www.apa.org/news/press/releases/stress/2012/generation.pdf
- Argyris, C., & Schon, D. A. (1978). Organizational learning: A theory of action *perspective*. Reading, MA: Addison-Wesley.
- Bennett, R. (1998). Charities, organizational learning, and market orientation: a suggested measure of the propensity to behave as a learning organization. *Journal ofMarketing*

Practice: Applied Marketing Science, 4(1), 5–25.Blandin, H. (2003). The culture, tradition, and beliefs of Thailand. China: Asia Books Co., Ltd.

Christianson, S. A. (1992). Emotional stress and eyewitness memory: a critical review. Psychological Bulletin, 112, 284.

- Dakin, S. (1988). Critical elements of Thai culture influencing the relations between Thais and Americans: A study of cross-cultural interaction at the Phanat Nikhom Processing *Center* (Doctoral Dissertation). School for International Training.
- DeShon, R. P., & Gillespie, J. Z. (2005). A motivated action theory account of goal orientation. Journal of Applied Psychology, 90(6), 1096.
- Dubinsky, A. J., & Skinner, S. (1984). Impact of job characteristics on retail salespeople's reactions to their jobs. *Journal of Retailing*, 60(2), 35–62.
- Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. Journal of Personality and Social Psychology, 54(1), 5.
- Fiedler, F. E., & Garcia, J. E. (1987). New approaches to effective leadership: Cognitive resources and organizational performance. John Wiley & Sons.
- Garrett, D. K., & McDaniel, A. M. (2001). A new look at nurse burnout: the effects of environmental uncertainty and social climate. *Journal of Nursing Administration*,31(2), 91–96.
- Gierveld, J., & Dykstra, P. A. (1993). Life transitions and the network of personal relationships: Theoretical and methodological issues. *Advances in Personal* Relationships, 4, 195–227.
- Hair, J. F., Tatham, R. L., Anderson, R. E., & Black, W. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Pearson.
- Halbesleben, J. R., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44(3), 513.
- Hoftsede, G. (2001). Culture's Consequences: Comparing Values, Behaviours, Institutions, and Organizations across Nations. Thousand Oaks, CA: Sage.
- Hsu, H. Y., Chen, S. H., Yu, H. Y., & Lou, J. H. (2010). Job stress, achievement motivation, and occupational burnout among male nurses. *Journal of AdvancedNursing*, 66(7), 1592–1601.
- Huber, G. P. (1991). Organizational Learning: The contributing processes and the literatures. *Organization Science*, 2(1), 88–115.
- Joels, M., Pu, Z., Wieger, O., Otiz, M. S., & Krugers, H. J. (2006). Learning under stress: how does it work? *Trends in Cognitive Sciences*, 10, 152–158.
- Komin, S. (1990). Psychology of the Thai people: Values and behavioral patterns. Bangkok, Thailand: Research Center, National Institute of DevelopmentAdministration.
- Lazarus, R., & Folkman, S. (1984). Stress appraisal and coping. New York, NY: Springer.
- Lupien, S. J., Fiocco, A., Wan, N., Maheu, F., Lord, C., Schramek, T., & Tu, M. T. (2005).
- Stress hormones and human memory function across the lifespan. *Psychoneuroendocrinology*, *30*(3), 225–242. doi:10.1016/j.psyneuen.2004.08.003
- Marta, J. K., & Singhapakdi, A. (2005). Comparing Thai and US business people: Perceived intensity of unethical marketing practices, corporate ethical values, and perceived importance of ethics. *International Marketing Review*, 22(5), 562–577.
- Mathur, A., Moschis, G. P., & Lee, E. (2008). A longitudnal study of the effects of life
- status changes on changes in consumer preferences. *Journal of the Academy of* Marketing Science, 36(2), 234–246.

- Mavondo, F. T., Chimhanzi, J., & Stewart, J. (2005). Learning orientation and market orientation: Relationship with innovation, human resource practices, and performance. *European Journal of Marketing*, *39*(11/12), 1235–1263.
- McGaugh, J. L. (2004). The amygdala modulates the consolidation of memories of emotionally arousing experiences. *Annual Review of Neuroscience*, 27, 1–28.
- Mulder, M. (1978). Mysticism and everday life in contemporary Java: Cultural persistence *and change*. Singapore: University Press.
- National Identity Office. (2005). *Thailand: Traits and treasures*. Bangkok, Thailand: Office of the Permanent Secretary, The Prime Minister's Office.
- Pagram, P., & Pagram, J. (2006). Issues in E-learning: a Thai case study. *The Electronic* Journal on Information Systems in Developing Countries, 26, 1–8.
- Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress
- Shors, T. J. (2006). Stressful experience and learning across the lifespan. *Annual Review of Psychology*, *57*(1), 55–85.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, *12*(2), 257–285.
- Sweller, J. (1994). Cognitive load theory, learning difficulty, and instructional design. Learning and Instruction, 4, 295–312.
- Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? Journal of Health and Social Behavior, 53–79.
- Tiwsakul, R., & Hackley, C. (2012). Postmodern paradoxes in Thai-Asian consumer identity. Journal of Business Research, 65, 490–496.
- VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. Educational and Psychological Measurement, 57(6), 995–1015.
- Walker Jr., O. C., Gilbert, A., Churchill, G. A., & Ford, N. M. (1977). Motivation and performance in industrial selling: Present knowledge and needed research. *Journal* of Marketing Research, 14(2), 156–168.
- Weick, K. ., Sutcliffe, K. M., & Obstfeld, D. (2008). Organizing for high reliability: Processes of collective mindfulness. *Crisis Management*, *3*, 81–123.