THE INFLUENCE OF DISPOSITIONAL OPTIMISM-PESSIMISM ON LIFE SATISFACTION MEDIATED BY COPING STRATEGIES AMONG THAIS IN BANGKOK

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Abstract: Research has shown that optimism and productive coping strategies have a momentous positive impact on physical and psychological well-being. It has been found that optimists tend to use engaged-style coping and pessimists use disengaged-style coping. Therefore, the present study aims to investigate the direct and indirect relationship of dispositional optimism-pessimism on life satisfaction, being mediated by coping strategies among Thais in Bangkok. Two hundred and four Thai adults participated in an online survey. The research design of this study was correlational, using path analysis to test the hypotheses. Results revealed that there was no direct influence between optimism-pessimism on life satisfaction. However, there was an indirect positive relationship between optimism and life satisfaction, mediated by engaged coping. Lastly, there was no indirect relationship of pessimism on life satisfaction, mediated by disengaged coping, but disengaged coping was negatively related to life satisfaction. Some of the results in the present study diverged significantly from existing literature, future research is recommended to further investigate these discrepancies. Future studies should also continue to explore predictors to life satisfaction within the Thai population and develop culturally appropriate interventions.

Keywords: Optimism, Pessimism, Coping Strategies, Life Satisfaction.

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Introduction

Over the past few decades, research has revealed that it is not the stress by and of itself that has such a detrimental impact on well-being, in fact it is the way one manages and responds to those stressful events. Coping strategies are central to everyday functioning, as it aids people's lives in various ways. It is widely accepted that coping is a major factor in the relation between stressful events and adaptational outcomes such as depression, psychological symptoms and somatic symptoms (Folkman et al., 1986a). Therefore, researchers commonly recognize that coping is fundamental to understanding how people respond to stress.

Thus, how people manage stress can reduce or intensify the effects of adversity, not only emotional distress and short-term functioning, but also long-term, on the development of physical and mental health (Skinner, Edge, Sherwood, Altman, 2003). Undeniably, coping is a significant component to well-being. Scheier, Weintraub and Carver (1986) have suggested that a part of what makes some people more well-adjusted could be dispositional optimism and it appears that optimism may be a positive predictor of how well people respond to stress.

According to research, a large distinction between optimists and pessimists regarding the path to well-being are characterized in their different coping strategies (Scheier et al., 1986).

There is growing consensus that optimists use more engaged coping strategies and pessimists use more disengaged coping strategies when managing stressful encounters (Chang, 1998**)**.

Researchers have indicated that coping strategies mediate, at least partly, the relationship between optimism and psychological adjustment (Aspinwall & Taylor, 1992; Carver et al., 1993). Therefore, the correlation of optimism-pessimism and coping styles as mediating variables are pivotal factors to the study of well-being.

Research Objectives

Thus far, there is a lack of research in the relationship of these variables among the Thai population, as the majority of the research has been conducted within a Western framework. For this reason, the present study explored the relationship between dispositional optimism-pessimism and life satisfaction, with a mediating role of coping styles.

The model was tested with the following directional hypotheses: (1) Dispositional optimism-pessimism would directly influence life satisfaction, such that the more optimistic the participants are, higher would be their reported level of life satisfaction; (2)

There would be an indirect influence of optimism-pessimism on life satisfaction, mediated by coping styles, such that the more optimistic the participants are, the more they will employ engaged-style coping, and higher would be their life

satisfaction; (3) There would be an indirect influence of optimism-pessimism on life satisfaction, mediated by coping styles, such that the more pessimistic the participants are, the more they will employ disengaged-style coping, and lower would be their life satisfaction.

Literature Review

Optimism, Engaged Coping, and Well-Being

Research on dispositional optimism is continuously on the rise due to evidence associating an optimistic outlook to psychological and physical well-being (Scheier & Carver, 1992). Dispositional optimism is positively correlated with psychological adaptation and negatively with psychological distress (Chemers, Hu & Garcia, 2001).

It is also positively associated with positive affect and better coping with various stressful life events (Carver et al., 2010), fewer mental and physical health symptoms (Lench, 2011), increased motivation and effort, and an increase of one's goals (Segerstrom, 2006).

Optimism involves an action oriented and realistic mindset that is associated with high self-efficacy and problem-focused coping (Carver et al., 2010). Thus, optimism has been associated with more adaptive, engaged coping styles such as problem solving, cognitive restructuring and seeking social support (Chang, 1996).

Engaged coping styles have been positively linked with countless positive outcomes such as life satisfaction, increased job satisfaction, achievement/performance, increased self-determined motivation, psychological growth and positive affect (Gaudreau, Gunnell, Hoar, Thompson & Lelievre, 2015). Scheier and Carver (1985) found that optimistic individuals are more confident about achieving their goals, and therefore, more likely to continue pursuing their goal when it becomes difficult.

These people believe that good things will happen to them in the future and that their goals are achievable (Sergeant & Mongrain, 2014). Therefore, optimistic people are expected to display greater effort to reduce the discrepancy between a situation and a desired goal (Gaudreau & Blondin, 2004). Thus, dispositional optimism is an internal resource defined as the generalized expectancy that good outcomes will occur even when confronting major problems (Scheier & Carver, 1985).

Pessimism and Disengaged Coping

Pessimism is negatively correlated with engaged-style coping and positively correlated with disengagement and distraction styles of coping, which respectively hinder goal attainment (Thompson & Gaudreau, 2008; Gaudreau et al., 2015). Unlike their optimistic counterparts, who tend to be confident and persistent when confronted with life challenges, pessimists tend to be more doubtful and reluctant when in the

same position (Scheier & Carver, 1985).

Therefore, pessimism has been associated with more maladaptive, disengaged coping styles such as denial, problem avoidance and social withdrawal (Chang, 1996; Chang, 1998; Gaudreau & Blondin, 2004).

Disengaged coping styles have been positively linked with attenuating outcomes such as negative affect, increased stress in breast cancer patients, reduced mental health, burn out and reduced achievement/ performance (Gaudreau et al., 2015). Interestingly, Chang (1998) found that optimists and pessimists did not differ in their use of engaged coping, but instead differed in their use of disengaged coping strategies.

This may suggest that the difference in adjustment between optimists and pessimists may not rely on the use of more engaged-style coping, but rather the use of less disengaged coping. One explanation may be that pessimists are more doubtful in their endeavours to succeed and may try to avoid difficulty by distracting and disengaging themselves from the goal (Carver & Connor-Smith, 2010).

Moreover, there are some researches that have found that it is pessimism, not optimism that was proposed as the predictor of psychological and physical well-being (Robinson-Whelen et al., 1997).

Clearly, Optimists and pessimists have different views and ways of approaching life. Such differences are reflected in how they confront problems, they differ in how well they cope with adversity, and they also differ in their social and socio-economic resources (Carver, Scheier & Segerstrom, 2010).

This dichotomy in outlook represents relatively stable individual differences that bolsters or abates psychological and physical well-being (Scheier & Carver, 1985). Thus, optimists tend to be confident, hopeful and persistent when facing diverse life challenges, whereas pessimists, tend to be doubtful and hesitant in the same situations (Carver et al., 2010).

These divergent ways of approaching the world will have significant consequential impacts on their lives, which has been showcased through numerous empirical studies. Most likely, the contrary outcomes are partly due to the different strategies used to deal with stress and the optimists' strategies seems to be advantageous (Scheier et al., 1986).

Subjective Well-Being

Subjective well-being (SWB) is the scientific term for happiness (Diener, 2017, para. 1). Research has classified two broad aspects of SWB: an affective component, which is often divided into pleasant affect and unpleasant affect (Pavot & Diener, 1993), and a cognitive component, which is referred to as life satisfaction (Andrews & Withey, 1974).

Life satisfaction refers to a judgemental process, in which individuals assess

the quality of their lives on the basis of their own unique set of criteria (Shin & Johnson, 1978). This study will concentrate only on life satisfaction as a measure of happiness.

For the reason that people may overlook and deny negative emotions while still admitting the undesirable factors in their lives, also affective reactions are often responses to immediate circumstances and last for a short period, whereas life satisfaction often reflects a long-term stable perspective (Pavot & Diener, 1993). This is because the judgement of life satisfaction is retrieved from past pleasant and unpleasant events.

The balance in ratio of pleasant and unpleasant experiences are used as a source of information to form judgement of life satisfaction (Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002). Most importantly, evidence suggests that happy people are healthier, more sociable, more productive, and better citizens (Lyubomirsky, King & Diener, 2005).

Conceptual Framework

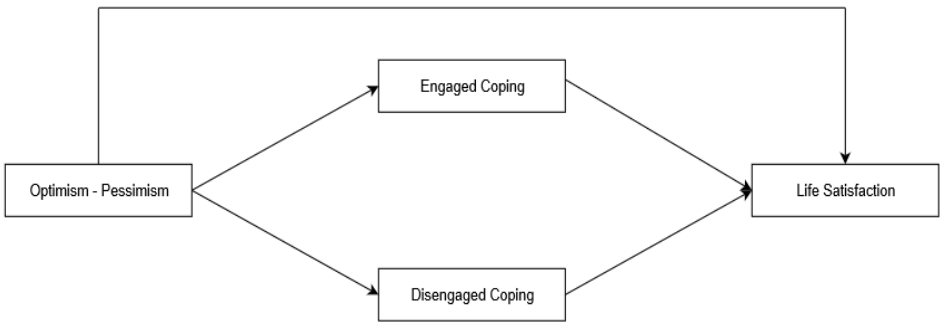

Figure 1. The hypothesized Path Model Concentrates on the Direct and Indirect Effects of Coping, Dispositional Optimism and Pessimism on Life Satisfaction among Thais in Bangkok.

Method

Participants

The sample consisted of 204 participants (82 males and 122 females), with the age range of 19-81, and a mean age of 39.7 years. The sample comprises on 82 males (40.2%) and 122 females (59.8%). Participants were recruited from Bangkok. The only inclusion criteria were that the participants had to be at least 18 years of age, as the present study was only accepting adult participants.

Materials

Dispositional Optimism-Pessimism

The revised Life Orientation Test (Lot-R; Scheier et al., 1994) is a 10 item measure used to assess individual differences in dispositional optimism-pessimism. Respondents were asked to indicate the extent of their agreement on a 5-point Likert scale (0= *strongly disagree*, 4= *strongly agree*).

There are three coded items which correspond to optimism (items 1, 4, and 10) and another three corresponds to pessimism (items 3, 7, and 9). There are also four filler items, which were not scored as part of the revised scale (items 2, 5, 6, and 8). Higher scores on the LOT-R generally reflect a greater tendency to expect more positive outcomes.

Coping

The Coping Strategies Inventory (CSI; Tobin, Holroyd, Reynolds, & Wigal, 1989) assesses coping reactions to a specific stressful encounter. The respondents were asked to recall a recent stressful event and then indicated the degree of their agreement to the particular coping strategy they used for each item in regards to the earlier described stressful encounter.

The questionnaire contains 72 items on a 5-point Likert scale ranging from (1= Not at all, 5= Very Much). The engagement coping factor includes 36 items and the disengagement coping factor also includes 36 items.

Life Satisfaction

The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) is regarded as the cognitive component of subjective well-being and considered a subjective construct. The questionnaire has 5 items on 7 point Likert type scale, ranging from (1 = Strongly, 7 = Strongly Agree). The total score is calculated as a mean of all five items.

Procedure

Participants completed the questionnaires online via a reputable survey website, SmartSurvey (www.smartsurvey.com). An inform consent was made available on the first page of the questionnaire, where the rationale and purpose of the study were explained with assurance of anonymity and confidentiality.

All study measures were back-translated into Thai language by two professional bilingual translators, which followed the standard translation procedures. The focus of the translation was on cross-cultural and conceptual, rather than linguistic/ literal equivalence.

Results

Descriptive Statistics and Correlations

Table 1: Correlations, Means and Standard Deviations for the four computed factors of Optimism- Pessimism, Engaged coping, Disengaged coping, and life satisfaction

	1	2	3	4
M	3.48	3.28	2.65	4.46
SD	0.46	0.48	0.44	1.05
Midpoint	2.50	3.00	3.00	4.00
1. OP	-	0.163*	0.6	-0.28
2. EC	0.163*	-	0.314**	0.131
3. DC	0.060	0.314**	-	-0.217**
4. LS	-0.028	0.131	-0.217**	-

Note: OP = Optimism-Pessimism, EC = Engaged Coping, DC = Disengaged Coping, LS = Life Satisfaction

*p < .05 (2-tailed). ** p < 0.1 (2-tailed).

Table 1 presents the means, standard deviations and the correlations for the four computed factors and the mid-point. Based on the mean, the participants reported scoring below the midpoint for disengaged coping and scored above the midpoint for optimism, engaged coping and life satisfaction. The results indicate that the correlation between optimism-pessimism and engaged-style coping is positive and statistically significant ($r = 0.163$, $p < 0.05$). This means that as optimism scores increases, so do their engaged coping scores.

The correlation between disengage coping and engage coping is positive and statistically significant ($r = 0.314$, $p < 0.01$). This means that as engage coping scores increases, so do their disengaged coping. The correlation between life satisfaction and disengaged coping is negative and statistically significant ($r = -0.217$, $p < 0.01$). This means that as life satisfaction scores increases, their disengaged coping scores decreases.

Path Analysis to Test the Hypothesized Model

In order to test the hypothesized direct and indirect relationships represented by the

path model (see Figure 1), path analysis via regression analysis was conducted. The analysis involved: (1) regressing the dependent variable of life satisfaction by the predictor variable of optimism-pessimism, engaged coping and disengaged coping (2) regressing the mediator variable of engaged coping by the predictor variable of optimism- pessimism, (3) regressing the mediator variable of disengaged coping by the predictor variable of optimism pessimism

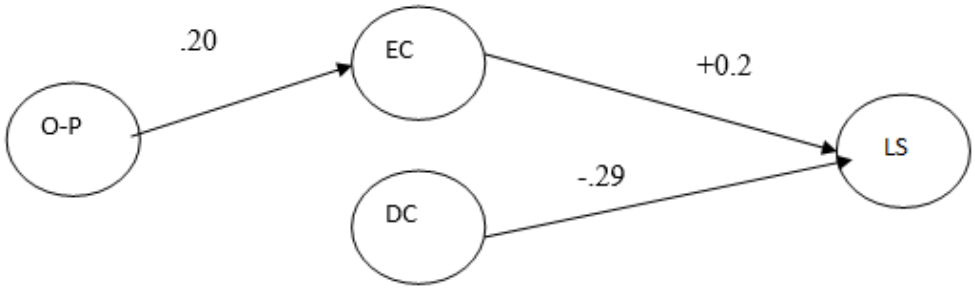

Figure 2. Path model of life satisfaction as a function of the direct and indirect influences of optimism-pessimism, being mediated by engaged coping and disengaged coping

The findings yielded no significant direct influence of optimism-pessimism on life satisfaction. (Beta=0.01;p>0.05). Therefore, hypothesis 1 was not supported. However, there was an indirect influence of optimism-pessimism on life satisfaction mediated by engaged coping (Beta=0.20; p<0.01; Beta=0.22; p<0.01). This indicates that the more optimistic the participants are higher is their tendency in employing engaged coping, the more they employ engaged coping higher is their life satisfaction. Thus, hypothesis 2 was supported. There was no indirect influence of optimism-pessimism on life satisfaction mediated disengaged coping (Beta=0.12; p>0.05; Beta=-0.29; p>0.01). Therefore, hypothesis 3 was not supported. However disengaged coping had a negative influence on life satisfaction, which again indicates that the more disengaged coping they utilized lower is their psychological well-being (Beta=-0.29; p>0.01).

Discussion

Hypothesis 1: Optimism-pessimism has a direct effect on life satisfaction

The present study's findings suggest that dispositional optimism-pessimism did not have a direct influence on life satisfaction. Therefore, Hypotheses 1 was not supported. These results are inconsistent with existing research, where optimism has been a large and direct factor on psychological and physical well-being. One potential reason could be religion; ninety-four percent of the Thai population are Buddhists (National Statistical Office, 2012). Although stress appears Universal, how people

cope with stress may not be the same in Buddhist and Western countries (Tyson and Pongruendphant, 2007). Considering the differences between Buddhist and Western cultures in cosmologies, cultures, traditions, and cognitive styles; it seems presumptive that the way stress is defined, experienced and coped may also differ in these societies (Tyson and Pongruendphant, 2007). A study by Nelson (2009) found that Buddhism plays a large role in the life of most Thais, as there's a clear correlation between affiliation to a religious group and more life satisfaction, happiness and better mental health. Therefore, Buddhism may play a larger role in predicting life satisfaction than optimism among Thais.

However, there may also be a few other explanations which stemmed from some methodological errors. Firstly, the use of convenience sampling. Convenience sampling may cause problems in terms of generalizability, representativeness and noise (Bornstein, Jager, & Putnick, 2013). This may have ramifications on the significance and strength of the relationship between the variables of the study. Secondly, due to it being an online questionnaire, there was no control over the environment which may have affected the participants answers. Literature shows that when mental tasks are performed, the primary fatigue factors include time of day, testing time, type of task, personal states such as anxiety or motivation, and external circumstances (Smith, 1989). Moreover, the questionnaire was very long and the participants may have experienced the 'fatigued effect', as the measures were extensive, tedious and uninteresting. Consideration of the order of questionnaires would also be crucial. The first instrument to be tested was the LOT-R test and the last was the SWLS scale, with 72 questions of the CSI scale in between the two measures. The participants would most likely perform differently at the end of the survey when studies last a long time, leading to participants losing interest and may rush through the answers without giving it much thought. This may have contributed to false and unreliable outcomes to the study and explain the null results.

Hypothesis 2: There is an indirect influence of optimism-pessimism on life satisfaction, mediated by engaged coping

Hypothesis 2 was supported as this study found an indirect positive relationship of optimism on life satisfaction, being mediated by engaged coping. Optimism involves an action oriented and realistic mindset that is associated with high self-efficacy and problem-focused coping (Carver et al., 2010). Thus, optimism has been positively associated with more adaptive, engaged coping styles such as problem solving, cognitive restructuring and seeking social support (Chang, 1996; Thompson & Gaudreau, 2008; Gaudreau et al., 2015; Gaudreau & Blondin, 2004, Scheier et al, 2001). Furthermore, Carver et al. (1993) also found that the effect of optimism on distress had a significant indirect impact through coping. Therefore, the results of this study concur with previous research in that, optimistic participants tended to use more

engaged coping, which indirectly led to higher life satisfaction.

Hypothesis 3: There is an indirect influence of optimism-pessimism on life satisfaction, being mediated by disengaged coping

This study did not find an indirect effect of optimism-pessimism on life satisfaction, being mediated by disengaged coping. Therefore, hypothesis 3 was not supported. One plausible explanation may again come down to religion. Yiengprugsawan et al. (2010) found high scores for the importance of religion when facing problems, as well as belief in the importance of karma among Thai cohort members. Generally, Thais accept their lot in life without resentment. There is a sense of determinism in their approach towards life, which comes from the Buddhist concept of karma. That is, one's past deeds bring repercussions, both bad and good, to one's present life. Difficulty and suffering are believed to be a result of bad karma, while prosperity and well-being results from good karma. Therefore, there is a lot of acceptance to life's adversities and even pessimists may use less disengaged coping (wishful thinking, self-criticism, and denial) when dealing with problems.

Another plausible reason could be problems in the translation process. The complications when translating study instruments from the source language into the target language could be the translator's unfamiliarity with the research area; differences in words, idioms, and colloquialisms understood in English but in another language does not make sense; the syntax used in the back translation may make the translation confusing for the monolingual target participants (Guillemin, 1995). This may be the case for the translation of the CSI, as only 16 items were retained out of 36 for the corrected item-total correlations. Participants in the study may have found it difficult to understand the question and may not have answered the questions accurately to their true feelings and attitudes.

Even though there was no indirect relationship of optimism-pessimism on life satisfaction, mediated by disengaged coping; there was a negative relationship between disengaged coping and life satisfaction.

Therefore, participants who used more disengaged coping strategies had lower levels of life satisfaction. These results concur with most research in that, the more disengaged coping was employed, lower would be their life satisfaction. Therefore, the path to well-being partly appears to lie in the differences in coping.

Limitations and Future Research

This present study was designed to explore the relationship between dispositional optimism, coping strategies and life satisfaction. However, each stressful event is unique and the coping process will also be individual and complex. This leads to the first implication, in this study, all the participants had different problems, and so coping would depend on the severity and frequency of the problem. Therefore, by

allowing the participants to choose their own stressful event removed control from the study. Future studies may want to have all participants under the same stressful situation. For example, finding a sample size in the medical setting, where participants are undergoing the same surgical procedure, or even in an academic setting during exam period.

The second limitation could be the quantity of questions that were used in the study. Participants may have become impatient and indifferent to answering the questionnaires due to the length and redundancy of some of the instruments, the CSI in particular. For this reason, future research may want to employ a shorter version for the assessment of coping strategies. For example, Brief COPE Inventory was developed to assess an extensive range of coping responses, and appropriate to differentiate effective and ineffective coping. Another assessment that may provide further insight is a religion and spirituality scale. For example, the employment of the Personal Well-being Index (PWI) instead of the Satisfaction With Life Scale (SWLS) could be considered, as the PWI assesses the level of life satisfaction and also includes a religion and spirituality domain.

The third limitation could be in the translation process. There are often many problems encountered when translating study instruments from the language of origins into the target language. Therefore, the translation in this study may not have been conveyed effectively to the monolingual participants. One possible reason could be that the study items were being translated too literal from the source language to the target language. The translation process could be improved to ensure that the study instruments are accurate, easily understood, and culturally appropriate to the target audience. Weeks, Swerissen, & Belfrage (2007) proposes that by using a combination of translation techniques (back translations, a committee of bilinguals, and a pilot test), it not only ensures the quality of the instruments but also helps to ensure the reliability and validity of the data collected by them.

Conclusion

The most significant finding of this study is the importance of employing optimal coping. This study found that coping was the biggest factor in predicting the degree of life satisfaction. Like other researches, there was an indirect effect of optimism on life satisfaction, being mediated by engaged coping. However, in contrast to past researches, this study did not find a direct influence of optimism-pessimism on life satisfaction; and there was no indirect influence of pessimism on life satisfaction, mediated by disengaged coping. Future research may want to investigate possible explanations and factors that led to the discrepancies in results. However, the results concur with existing research in that the more engaged coping was employed, higher would be the life satisfaction, and the more disengaged coping was employed, lower would be the life satisfaction. Numerous researches confirm the benefits of having a

positive outlook and the employment of productive coping. For this reason, institutions should be prompted to incorporate optimism intervention programs within their organizations. These interventions aim to provide skills that generate positive flexible thinking and the employment of engaged coping strategies. Future studies may want to develop culturally appropriate interventions for the Thai population. Attaining an optimistic outlook and utilizing healthy coping strategies are valuable skills because of its versatility, as it can be applied across multiple situations and build resilience to manage life adversities.

References

Aspinwall, L. G., & Taylor, S, E. (1992). Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, 63(6), 989-1003.

Bornstein, M.H., Jager, J., & Putnick, D.L. (2013) Sampling in developmental science: Situations, shortcomings, solutions, and standards. *Developmental Review*, 33(4), 357-370

Carver, C. S., Pozo, C., Harris, S. D., Noriega, V., Scheier, M. F., Robinson, D. S., Ketcham, A. S., Moffat, F. L., Jr., & Clark, K. C. (1993). How coping mediates the effect of optimism on distress: A study of women with early stage breast cancer. *Journal of Personality and Social Psychology*, 65(2), 375-390.

Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review*, 30(7), 879-889.

Chang, E. (1996). Cultural differences in optimism, pessimism, and coping: Predictors of subsequent adjustment in Asian American and Caucasian American college students. *Journal of Counseling Psychology*, 43(1), 113-123.

Chang, E. (1998). Dispositional optimism and primary and secondary appraisal of a stressor: Controlling for confounding influences and relations to coping and psychological and physical adjustment. *Journal of Personality and Social Psychology*, 74(4), 1109-1120.

Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Education Psychology*, 93(1), 55-64.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of personality assessment, 49(1), 71-75

Diener, E., Sapyata, J. J., & Suh, E. (1998). Subjective-welling is essential to well-being. *An International Journal for the advancement of Psychological Theory*, 9(1), 33-37.

Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986a) Appraisal, coping, health status, and psychological Symptoms. *Journal of Personality and Social Psychology*, 50(3), 571-579.

Gaudreau, P. & Blondin, J. (2004). Differential associations of dispositional optimism and pessimism with coping, goal Attainment, and emotional adjustment during sport competition. *International Journal of Stress Management,* 11(3), 245-269.

Gaudreau, P, Gunnell, K. E, Hoar, S. D., Thompson, A., Lelievre, J. (2015). Optimism, pessimism, and coping in a dual-domain model of sport and school satisfaction. *Sport, Exercise, and Performance Psychology*, 4(2), 140-152.

Guillemin, F. (1995). Cross-cultural adaptation and validation of health status measures. *Scandinavian Journal of Rheumatology*, 24(5), 61-63.

Holroyd, K. A., Tobin, D. L., Rogers, L., Hursey, K. G., Penzien, D. B., & Holm, J. E. (1983). Psychological coping strategies and recurrent tension headache. Paper presented at the meeting of the society of behavioral medicine, Baltimore.

Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping.* New York: Springer Publishing Company.

Lench, H. C. (2011). Personality and Health outcomes: Making positive expectations a reality. *Journal of Happiness Studies*, 12(3), 493-507.

Nation, T. (2016, February 27). 4,000 Thais take their own lives every year, Public Health Ministry says. Retrieved December 17, 2017, from http://www.nationmultimedia.com/national/4000-Thais-take-their-own-lives-every-year-Public--30280354.html

Nelson, J. M. (2009). *Religion, spirituality, and physical health*. *Psychology, Religion, and Spirituality*. New York: Springer.

Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment*, 5(2), 164-172.

Scheier, M. F., Carver, C. S., Bridges, M. W. (2001) Optimism, pessimism, and psychological well-being. *Optimism & Pessimism: Implications for Theory, Research, and Practice*, 189-216.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessments and implications of generalized outcomes. *Health Psychology*, 4(3), 219-247.

Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16(2), 201-228.

Scheier, M. F., Weintraub, J. K., & Carver, C. S. (1986). Coping with stress: Divergent strategies of optimists and pessimists. *Journal of Personality and Social*

Psychology, 51(6), 1257-1264.

Segerstrom, S. C. (2006). How does optimism suppress immunity? Evaluation of three affective pathways. *Health Psychology*, 25(5), 653-657.

Segovia, F., Moore, J. F., Linnville, S. E., Hoyt, R. E., & Hain, R. E. (2012). Optimism predicts resilience in repatriated prisoner of war: A 37-year longitudinal study. *Journal of Traumatic Stress*, 25(3), 330-336.

Sergeant, S., & Mongrain, M. (2014). An online optimism intervention reduces depression in pessimistic individuals. *Journal of Consulting and Clinical Psychology*, 84(2), 263-274.

Skinner, E. A., Edge, K., Altman, J., Sherwood, H. (2003). Searching for the structure of coping: a review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129(2), 216-269.

Smith, A. (1989). Diurnal variations in performance. In A. M. Colley & J. R. Beech (Eds.), Acquisition and performance of cognitive skills (pp. 301–325). New York: John Wiley & Sons.

Thompson, A., & Gaudreau, P. (2008). From optimism and pessimism to coping: The mediating role of academic motivation. *International Journal of Stress Management*, 15(3), 269-288.

Tobin, D. L. (2001). Manual for the Coping Strategies Inventory.

Tobin, D. L., Holroyd, K. A., Reynolds, R. V., Wigal, J. K. (1989) The hierarchical factor structure of the coping strategies inventory, *Cognitive Therapy and* Research,13(4), 343- 361.

Tyson, P. D. & Pongruengphant, R. (2007). Buddhist and Western perspectives on suffering, stress, and coping. *Journal of Religion and Health*, 46(3), 351-357.

Vautier, S., Raufaste, E., & Cariou, M. (2003). Dimensionality of the Revised Life Orientation Test and the status of the filler items. International Journal of Psychology, 38, 390-400.

Weeks, A., Swerissen, H., & Belfrage, J. (2007). Issues, challenges, and solutions in translating study instruments. *Evaluation Review*, 31(2), 153-165.

Yiengprugsawan, V., Suebsman, S., Khamman, S., Lim, L. L., & Sleigh, A. C. (2010b) Personal Wellbeing Index in a national cohort of 87, 134 Thai adults. Social Indicators Research, 98(2), 201-215.