

## **The Research Synthesis of Relationships between Positive Psychological Capital, Self-Management and Family Coping in Thailand**

**Nachima Bakoh**

Graduate student, Doctoral degree in Applied Behavioral Science Research, Behavioral Science Research Institute, Srinakharinwirot University, Thailand

**Ungsinan Intarakamhang**

Associate Professor in Behavioral Science Research Institute, Srinakharinwirot University, Thailand

**Tara McLaughlin**

Lecturer in Institute of Education, Massey University, New Zealand

### **Abstract**

The primary objectives of this research synthesis were to examine the characteristics of published research studies conducted in Thailand related to positive psychological capital, self-management and family coping and to consider how positive psychological capital is related to self-management. The review consisted of 128 research studies that were accessed using online databases and were available to be downloaded in full-text versions. The information within each study was analyzed and synthesized using content analysis. Research synthesis results showed that positive psychological capital, self-management and family coping were included in dissertations for master's degrees, that the majority of research objectives were descriptive, the data was collected by questionnaire, the reliability of instruments was Cronbach's alpha coefficient and the validity of instruments was content validity. Findings from the reviewed studies supported a positive correlation between positive psychological capital and self-management.

**Keywords:** research synthesis, positive psychological capital, self-management, family coping

## **Introduction**

Self-management and family coping are very important for ensuring family balance and unity, and the self-development of each family member (Price *et al.*, 2010). Moreover, family coping can prevent stress within the family or assist in developing systems or characteristics to support strong families, and reduce or limit family pressure and hardship (McCubbin *et al.*, 1980).

Previous studies showed that positive psychological capital (PsyCap) was one of the factors that affected self-management and family coping. As in the study of Luthans *et al.* (2007b), PsyCap, which means the positive characteristics of an individual consisting of four aspects: 1) self-efficacy, 2) hope, 3) optimism, and 4) resilience (Luthans *et al.*, 2004), was found to positively relate to self-management and family coping. Examples include the correlation between individual flexibility and adaptation of the family facing problems (Boss, 2006; McCubbin *et al.*, 1998), self-efficacy which positively related to adversity quotient (Jindargul, 2000; Homklin, 2008), positive thinking which related to the ability to face problems (Glubpermpoon, 2006; Homrutaikamol, 2009; Khamnuan, 2009), and the correlation between the perception of self-ability and behavior (Sawaensuk, 2007).

However, most of the reviews of the literature in Thailand covering positive psychological capital, self-management, and family coping in the last ten years were focused on descriptive objectives and survey (TDC: Online; LPAC: Online; Thai Digital Library Researches: Online). At the same time, the studies were redundant and disrupted, and there was a lack of an overview of the research data, systematic data gathering and data synthesis. For this reason, this study will analyze and synthesise the research studies and data related to positive psychological capital, self-management, and family coping in Thailand. This study will also consider the correlation between positive psychological capital, self-management, and family coping. This study will display an overview of the variables and factors involved that will be useful for researchers and can be used in planning for human development that leads to the ability of self-management and family coping in the future.

## **The Purpose of Research**

1. To examine the characteristics of the research studies and methodology that are related to positive psychological capital, self-management and family coping.
2. To consider how positive psychological capital is related to self-management.

## Methods

1. This study examined research reports, research articles, and dissertations or theses published in 10 Thai higher educational institutions. The data were from searching online databases such as the Thai Library Integrated System's (ThaiLis) Thai Digital Collection (TDC) and 10 online libraries of universities in Thailand (Chiangmai University, Srinakharinwirot University, Burapha University, Mahidol University, Khon Kaen University, Thammasat University, Mahasarakham University, Chulalongkorn University, Prince of Songkla University and Naresuan University). The search found 285 relevant documents which consisted of positive psychological capital research (19 topics), self-management research (263 topics) and family coping research (3 topics).

2. The samples for this study were selected from the online databases were published in full-text versions. Based on this criterion, 128 research documents were chosen to be the sample for this study and consisted of positive psychological capital research (9 topics), self-management research (116 topics), and family coping research (3 topics).

3. Coding Studies. The data collection started from the reference collection of the TDC and the online university libraries in Thailand. The procedure was as follows:

### 3.1. Search strategy

Searching for the documents was related to "positive psychological capital", "self-management" and "family coping" by typing the relevant keywords into the search boxes of the online databases, the TDC which consisted of dissertations or full theses and research reports, and the online library of 10 universities in Thailand. The research documents were downloaded by typing the keywords namely "positive psychological capital", "self-management", "positive psychology", "self-efficacy", "hope", "optimism", "resilience", "solve problem" and "coping family". At this step, there were 285 research documents found which related to the search keywords.

### 3.2. Study selection

This study used the PRISMA (Moher *et al.*, 2009) analytical process as the systematic search method. The search process was as the steps set out in Table 1:

**Table 1** Process of Study Selection

Process	Details
Identification	The process of searching the research studies which had factors related to “positive psychological capital, self-management, and family coping”. The search used the TDC and the online library databases by typing the keywords “positive psychological capital”, “self-management”, “positive psychology”, “self-efficacy”, “hope”, “optimism”, “resilience”, “solve problem” and “family coping” in the TDC and in the search boxes of the online library databases. In this section, there were 285 research studies that were found.
Screening	After receiving relevant research documents from the first search process, the research contents and Abstract screening were used for a limited search with some exclusive criteria including: 1) non-research documents such as other types of publications, video recordings, and news; 2) redundancy. At this stage, 128 research documents were found to meet the criteria of this study for examining the characteristics of publication and methodology of research studies related to positive psychological capital, self-management and family coping.
Eligibility	To meet the synthesis research criteria, some inclusive criteria were used to recruit the research document. The inclusive criteria are as below: <ul style="list-style-type: none"> <li>○ Dissertation or thesis, master’s degree, and doctorate.</li> <li>○ Research report, research article, dissertation or thesis.</li> <li>○ Study of “positive psychological capital” as an independent variable.</li> <li>○ Study of “self-management” as a dependent variable.</li> <li>○ Methods used were in quantitative research.</li> </ul>
Included	After gathering the research for the research synthesis, the data were analyzed and synthesized using the content analysis to understand the association between positive psychological capital and self-management. At this stage, 9 research documents were found to meet the criteria of this study.

#### 4. Research Instruments

The research information form was developed and applied from the studies of Thepthian (2006) and Intarakamhang (2008). The form consisted of 3 parts, namely:

1. Information about the researchers' demographic such as the name of the researcher, the gender of the researcher, the title of the research, level of research, university/institute of research, major of study and academic year.

2. Information about the research such as the purpose of the research, research design, sample of research, sample procedure, research instruments, the reliability of instruments, the validity of instruments and statistics used to analyze the data.

3. Results of research including the results of the synthesized association between positive psychological capital and self-management.

### 5. Study Synthesis

The research synthesis was divided into two parts, the content analysis and the descriptive statistics which were used in each part of the study, as shown in Table 2:

**Table 2** Content of Study Synthesis

<b>Results</b>	<b>Details</b>	<b>Synthesis</b>
PART 1	1. Information about the researchers' demographic such as the gender of the researcher, the level of research, university/institute of research, major of study and academic year. 2. Information about the research design such as the purpose of the research, research design, sample of research, sample procedure, research instruments, the reliability of the instruments, the validity of the instruments and statistics used to analyze the data.	Frequencies. Percentage. Descriptive summary.
PART 2	Results of the research including the results of the synthesized association between positive psychological capital and self-management.	Descriptive summary

### Results

The results were divided into two parts, namely: 1) the analysis of the general characteristics of the research synthesis, and 2) the results of the synthesized association between positive psychological capital and self-management. The result of each part was as follows:

## **PART 1: The results of the analysis of the general characteristics of the research synthesis**

The general characteristics of the research consisted of the characteristics of the publication and the research methodology of the research studies. The characteristics of the research publication comprised the gender of the researcher, the level of research, the university/ institute of research, the major of the research study and the academic year. While the research methodology characteristics for the purpose of research comprised the research design, the sample of research, the sampling procedure, the research instruments, the reliability of the instruments, the validity of the instruments and the statistics which were used to analyze the data.

### **Characteristics of publication**

#### *Positive psychological capital*

Nine research works were synthesized by using the content analysis; most of them were the dissertations of the university students. Considering the degree of the dissertation, the majority of research was for a master's degree (44.44%), a doctorate (44.44%) and the research of other institutions or organizations (11.12%), respectively. Considering the educational institutions, Srinakharinwirot University was the highest in publishing research related to positive psychological capital (33.34%), followed by Chulalongkorn University (22.22%), and Thammasat University, Khon Kaen University, Burapha University and Sukhothai Thammathirat Open University each with an equal proportion (11.11%). The majority of the research was by females (77.78%) with males responsible for 22.22%. Considering the major of the study, it showed that educational research methodology was the highest in publishing dissertations (22.23%), followed by counseling psychology, applied behavioral science research, nursing science, industrial organizational psychology, guidance and psychological counseling, business administration and no report with the equal proportions (11.11%). Considering the academic year of the study, it showed that the academic year 2013 had the most published research studies which highlighted the topic of the positive psychological capital (55.56%), followed by the academic year 2012 (22.22%).

#### *Self-management*

One hundred and sixteen research works were synthesized using the content analysis, most of them being the dissertations of the university students. Considering the degree of the dissertation, the majority of the research was dissertations for a master's degree (92.24%), with a doctorate (6.04%), and independent studies or term papers (0.86%), respectively. Considering the educational institutions, Khon Kaen University was the highest in publishing research

related to self-management (21.56%), followed by Chulalongkorn University (18.10%) and Burapha University (8.62%), respectively. The majority of the research was by females (92.24%) with males at 7.76%. Considering the major of the study, it showed that adult nursing was the highest in publishing dissertations (41.38%), followed by nursing science (21.56%), and gerontological nursing (12.94%) respectively. Considering the academic year of the study, this showed that the academic year 2012 was the highest in publishing research studies which highlighted the topic of self-management (17.24%) and was followed by the academic year 2011 (14.66%).

#### *Family coping*

Three research works were synthesized using the content analysis, and they were the dissertations of university students. All of them were dissertations for a master's degree. Considering the educational institutions, Khon Kaen University was the highest in publishing research related to family coping (66.67%), followed by Burapha University (33.33%). All the research was by females. Considering the major of the study, sociology of development, education, and family nursing each had one publication. Considering the academic year of the study, two were in academic year 2006 and one in the academic year 2001.

#### **Characteristics of the Research Methodology**

##### *Positive psychological capital*

Categorized by the objectives of the study, it was shown that the majority of the research objectives were descriptive (23.07%), with causal relationship, comparison, and examination of the relationship of the model having equal proportions (15.39%), respectively. Categorizing by the research design showed that the majority of the research study was on causal structural relationship (44.45%), followed by research and development (22.22%), and correlation research and experimental research with equal proportions (11.11%), respectively. Categorizing by the sample of the study showed that most of the samples were staff members (22.23%), followed by nurses, nursing students, students, teachers, bachelor degree students and others with equal proportions (11.11%), respectively. Categorized by the size of the sample, it was shown that most of the studies had less than 200 people in the sample size (55.55%), followed by 200-300 people in the sample size (33.34%) and there were 500 – 600 people in the sample size (11.11%). Categorizing by the sampling procedure, it showed that the majority of the research study used multi-stage random sampling (55.56%), purposive sampling (22.22%), and stratified random sampling and no report (11.11%), respectively. Categorizing by the research instruments, it showed that most of the research studies were using a questionnaire with a 5-rating scale (71.43%), activities (14.29%), interview and

observation (7.14%), respectively. Categorizing by the quality of the research instruments, it showed that the majority of the research studies employed the reliability of the instruments by finding Cronbach's alpha coefficient (88.89%) and there was no report in 11.11% of the studies. The validity of the instruments found that the majority of research employed the content validity (50%), discriminant validity (41.67%), and there was no report in 8.33%, respectively. Categorizing by the statistics used to analyze the data, it showed that the majority of the research studies used descriptive statistics with the standard deviation and the mean (23.33%), percentage (16.67%) and frequency (10%), respectively. Moreover, most of the research used inductive statistics with the LISREL program to find the causal structural relationship confirmatory factor analysis (75%), t-test (12.5%) and multiple regression (6.5%), respectively.

#### *Self-management*

Categorizing by the objectives of the study, it showed that the research objectives were to compare (40.82%), to describe (14.29%), to examine the relation of related factor (8.16%) and to predict (4.08%), respectively. Categorizing by the research design, it showed that the research was a quasi-experimental research design (64.41%), survey research (8.47%), correlation research (5.93%) and comparative research (4.24%), respectively. Categorizing by the sample of the study, it showed that most of the samples were patients (62.80%), followed by adults (15.70%), general individuals (9.91%), and nurses and students with an equal proportion (3.31%), respectively. Categorizing by the size of the sample, it showed that most of the studies involved less than 100 people (83.62%), followed by 100 - 200 people (7.76%), and 200 – 300 people (4.32%), respectively. Categorizing by the sampling procedure, it showed that the research studies used purposive sampling (49.14%), simple random sampling (26.73%), multi-stage random sampling (5.17%) and convenience sampling (3.45%), respectively. Categorizing by the research instruments, it showed that most of the research studies used a questionnaire with 5- rating scale (42.65%), followed by activities/program/guidebooks (36.24%), self-report (10.09%), and interviews (5.05%), respectively. Categorizing by the quality of the research instruments, it showed that the research studies employed the reliability of the instruments by finding the Cronbach's alpha coefficient (64.23%), Kuder-Richardson 20 (15.45%), test-retest (4.06%) and no report (16.26%), respectively. The validity of the instruments found that the majority of research employed the content validity (82.20%), the discriminant validity (3.39%), the face validity (2.55%) and no report (11.86%), respectively. Categorizing by the statistics used to analyze the data, it showed that the research studies used descriptive statistics with frequency (23.41%),



percentages (23.25%), the means (21.07%), and the standard deviation (19.62%), respectively. Moreover, most of the research used inductive statistics with t-test (68.47%), ANOVA (9.01%), correlation (8.11%) and multiple regression (7.21%), respectively.

#### *Family Coping*

Categorizing by the objectives of the study, it showed that all the research objectives were descriptive. Categorizing by the research design, it showed that the research studies used survey research, ethnography study and descriptive qualitative research in equal proportions (33.33%). Categorizing by the sample of the study, it showed that the samples were families with a patient in the family, female youths, and patients in equal proportions (33.33%). Categorizing by the size of the sample, it showed that most of the studies had fewer than 100 people (qualitative research) (66.67%), followed by 300 – 400 people (33.34%). Categorizing by the sampling procedure, it showed that the research studies used purposive sampling (66.67%) and multi-stage random sampling (33.33%). Categorizing by the research instruments, it showed that the data was collected by an in-depth interview (40%), observation with an equal (40%), and questionnaires (20%). Categorizing by the quality of the research instruments, it showed that one research work used reliability of the instruments by finding Cronbach's alpha coefficient, one used validity of the instruments by finding the content validity, and two used triangulations. Categorizing by the statistics used to analyze the data, it showed that the research used descriptive statistics by employing the standard deviation, the mean, the percentage, and the maximum and minimum in equal proportions (20%). It also showed that one research study used inductive statistics by employing multiple regression, and two used content analysis of the qualitative research analysis.

### **PART 2: The results of the synthesized association between positive psychological capital and self-management.**

Nine research documents that were synthesized from the content analysis were aimed at examining how positive psychological capital is related to self-management. The results are as shown in Table 3.

**Table 3** The Results of the Synthesized Association between Positive Psychological Capital and Self-Management

Author	Variable 1	Variable 2	P	r
Veerakalas & Vongkumsin (2012)	Optimism	The sense of coherence	P < .01	.851
Montong (2006)	Hope	Self-care behavior	P < .001	.232
Montong (2006)	Self-efficacy	Self-care behavior	P < .00	.331
Tantiwinyupong (2000)	Expectation	Self-care ability	P < .01	.295
Jindargul (2009)	Self-efficacy	Adversity quotient	P < .01	.256
Sawaensuk (2007)	Self-efficacy	Managerial behavior	P < .05	.591
Glubpermpoon (2006)	Optimism	Adversity quotient	P < .01	.836
Homrutaikamol (2009)	Optimism	Adversity quotient	P < .01	.307
Khamnuan (2009)	Optimism	Adversity quotient	P < .01	.347
Homklin (2008)	Self-efficacy	Adversity quotient	P < .01	.528

Table 3 shows the synthesized correlation between positive psychological capital and self-management. The study found that optimism was positively related to the sense of coherence ( $r = .851$ ) with a statistically significant level at .01. Hope was positively related to self-care behavior ( $r = .232$ ) with a statistically significant level at .001. Self-efficacy was positively related to self-care behavior ( $r = .331$ ) with a statistically significant level at .00. Hope was positively related to self-care ability ( $r = .295$ ) with a statistically significant level at .01. Self-efficacy was positively related to adversity quotient ( $r = .256$ ) with a statistically significant level at .01. Self-efficacy was positively related to managerial behavior ( $r = .591$ ) with a statistically significant level at .05. Optimism was positively related to adversity quotient ( $r = .836$ ,  $r = .307$ ,  $r = .347$ ) with a statistically significant level at .01. Self-efficacy was positively related to adversity quotient ( $r = .528$ ) with a statistically significant level at .01.

The study also found that the factors such as hope, optimism and self-efficacy were the components of positive psychological capital factors. Moreover, the factors such as self-care behavior, self-care ability, adversity quotient and managerial behavior were correlated with self-management. It could therefore be concluded that positive psychological capital was related with self-management with a statistical significance.

## Summary and Discussion

This study involved the research synthesis of previous studies with titles on the relationship between positive psychological capital and self-management and family coping. This research synthesis employed the content analysis of 128 research studies to recognize the recent and upcoming condition of the factors related to positive psychological capital, self-management and family coping. The result of the study can be discussed as follows:

### 1. Result of the qualitative synthesis using the content analysis

1.1 The majority of the research studies were the master's dissertations. This was due to the nature of independent studies or term papers having fewer course credits than a dissertation or thesis in the structure of a curriculum. There was also a difference between the number of Ph.D. students and master's students, so that the research at the Ph.D. level was less than at the master's level. As can be seen from the number of students who finished their study in a postgraduate program, in the year 2011, 27,340 people were the master's degree students and 1,318 people were Ph.D. degree students (Office of the Education Council, 2015).

1.2 The major of study that published the most research related to positive psychological capital, self-management and family coping was found to be nursing science which was focused on self-management and family coping – developing individual capacity in managing and problem-solving that might be faced in a family or by themselves (Kanfer & Gaelick-Buys, 1991). The study is also relevant to the other courses of nursing science such as adult nursing, gerontological nursing, and community nurse practitioner. Those research papers were relevant to self-management and family coping because the nursing science major relates to a profession directly concerned with human life and health. Therefore, nursing science has the holistic skills and practical professionalism that services and develops the skills of individuals to be able to manage and cope with life and health problems for themselves and their family members with proper decisions and approaches.

1.3 Most of the research which related to positive psychological capital and family coping concerned the descriptive and applied research that aimed to find knowledge based on the theory or to prove and trial the concepts of the theory (Naiyapat, 2011). The research also aimed to study the results and conditions of positive psychological capital and family coping, and explain the studies of the researchers. However, this study was the basis of the development of experimental research by developing a program that will be able to strengthen the capacity of individuals in coping with their family and positive psychological capital in the future, while the self-management research was aimed at comparing the results of the quasi-experimental research, and examining the differences and changes to the result of

the experiment that would know that the research related to self-management was conducted in the experimental development. This understanding may lead to the development of innovations such as parents' guide books, activities, and guidelines for developing individuals and family members to manage themselves and coping with their families. There was also some research that used the qualitative methods to find data, and it is suggested that both qualitative and quantitative methods or mixed-methods should be used to strengthen the quality of the study, also increasing the validity and reliability of finding the data. Using only one method in conducting research might have resulted in missing some information in the study. The mixed-methods research may also help researchers to find data that one of the other methods could not (Creswell & Clark, 2011).

1.4 The majority of the samples of previous studies were related to patients or caregivers, which was in tandem with the courses of study that conducted more types of research compared to other fields of study. For positive psychological capital, the samples related to the officials because the basis of positive psychological capital science was in positive organizational behavior, as Luthans *et al.*, (2007b) have defined the PsyCap regarding self-efficacy, optimism, hope and resilience. The study also showed that the majority of the previous studies was relevant to works such as leadership perceptions (Luthans *et al.*, 2001), ethical perceptions, creative perceptions (Tierney & Farmer, 2002), a correlation of hope towards performance and satisfaction, happy work and organizational commitments (Youssef, 2004), a positive view of life affecting working (Luthans ., 2007a), and positive correlation between resilience and working performances (Luthans ., 2005; Youssef, 2004).

1.5 The study showed that the majority of research instruments were questionnaires which were commonly used by the researchers for collecting data such as personal information, facts, perceptions, values, motivations and people's experiences. The questionnaires were convenient to use because they save money and time. Moreover, the respondents were free to answer, the questionnaires were appropriate for a large sample size, and there was a need for a specialist as in the qualitative research for observation and interview. However, there were some limitations in the use of the questionnaires, such as the truthfulness of the respondents, the forms could be used only for people who could read and write, and there were incorrect answers in the case of misunderstanding by the respondents about the questions ( Choochom, 2002) . The study showed that the majority of the previous research used Cronbach's alpha coefficient for the reliability of instruments because the alpha coefficient could be used with any score answering instruments such as an answer with the number 1 if the answer is correct and with the number 0 if the answer is incorrect, or a rating scale with

five answering scores. However, the reliability depends on the characteristics and objectives of the research instruments, and the characteristics of data gathering. The synthesis of this study found that the majority of the research was using the content validity for the validity of the instruments, and most of the instruments were using the subject-matter specialists to consider the validity of the instruments (Choochom, 2002).

2. The results of synthesized association between positive psychological capital and self-management.

2.1 Analysis of the results of the association between positive psychological capital factors and self-management factors showed that positive psychological capital was related to self-management with a statistical significance. The positive psychological capital was the strange condition of an individual that develops good characteristics that lead to the behaviors that could be measured, developed and managed effectively (Luthans *et al.*, 2007b).

2.2 The synthesis showed that optimism was positively related to the sense of coherence. This was the result of a positive view of the life of the individuals on other things around them and their hope. People will evaluate problems with flexible thinking that can help people to live effectively even when they are faced with problems and cannot change them; they will adapt their life appropriately (Veerakalas & Vongkumsin, 2012).

2.3 Self-efficacy and hope were positively related to managerial behavior and self-care behavior, which is in tandem with the definition of Bandura (1986,1997) who defined self-efficacy as self-confidence about the ability to manage and behave oneself to achieve set goals; also, it is in line with the definition of Stajkovic & Luthans (1998) that defined self-efficacy as the individual's confidence about their ability in driving motivation, intellectual resources, and action for success. A person who perceives self-efficacy will be able to manage themselves while the study related to management found that optimism and positive thinking affected the experiences of self-management of the women facing a breast cancer operation (Drageset *et al.*, 2015).

2.4 Self-efficacy was positively related to the adversity quotient. This is because a person who was different in perceived self-efficacy will behave and think differently too. If a person sees high self-efficacy, they may target and challenge with high expectations and encourage themselves to achieve goals more than a person who has low self-efficacy perception; the person will be able to overcome the problems or struggles they meet (Homklin, 2008). The person who is excellent in facing or overcome problems is also perceived to have high self-control to overcome the situations or struggles that come into their life (Stolz, 1997); this was in agreement with the study of Gijkhun (2009) about the relationship between the big

five personality types, perceived self-efficacy and adversity quotient, which found that self-efficacy was positively related to the adversity quotient and optimism was also positively related to the adversity quotient.

### **Recommendations**

6.1 An assessment of the quality of the research documents was made by the decision of the only one researcher, so that the assessment criteria may be different depending on the characteristics, numbers, and experiences of other researchers. Therefore, the assessment quality needs to consider those components and related factors.

6.2 Considering the objectives and research design, it was found that the previous research about PsyCap and family coping rarely used the descriptive, experimental research and development research. Hence, development of self-management with PsyCap should be highlighted for study in the future.

6.3 The research study is also limited for cause-based single-way study. The correlation study between multi-groups of variables or causes and impact study of self-management and family coping is even more limited. Therefore, a study should be considered to reach for more answers for either cause or impact.

6.4 Considering the experimental design, the research used a primary experiment design such as the one group pretest-posttest design or one-shot case study as in the cases of the studies of Wanna (2011) and Konghan (2010). The suggestion for the next study is that there should be consideration of the true experimental design such as pretest-posttest control group design or Solomon four-group design to perceive the appropriate amount of training and the real factors that affect self-management.

6.5 This study only synthesized research in Thailand, and the majority of the research was a quantitative study; so, expanding the scope of the study to cover research in other countries should be considered. The study also needs to expand the qualitative and mixed methodology to provide a more comprehensive study on this variable and make the information more widely available.

### **Acknowledgement**

This research is funded by the Office of the Higher Education Commission (OHEC), Ministry of Education, Thailand.

### References

- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Boss, P. (2006). *Loss, Trauma, and Resilience: Therapeutic Work with Ambiguous Loss*. New York, NY: W. W. Norton and Company.
- Choochom, O. (2002). *Construction and Development of Measuring Instruments in Behavioral Science*. Bangkok: Srinakharinwirot University.
- Creswell, J. W. & Clark, V. L. P. (2011). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: SAGE Publications.
- Drageset, S., Lindstrom, T. C., & Underlid, K. (2015). "I just have to move on": Women's coping experiences and reflections following their first year after primary breast cancer surgery. *European Journal of Oncology Nursing*, 21:205-211.
- Gijkhun, R. (2009). *Relationship between Big Five Personality Types, Perceived Self-Efficacy and Adversity Quotient: A Case Study of a Motor Company in Bangkok*. Thesis for Master degree of Arts in Industrial and Organizational Psychology, Thammasat Postgraduate School, Bangkok, Thailand.
- Glubpermpoon, A. (2006). *Optimism, the Big Five Personality Types, and Adversity Quotient: A Case Study of a Government Organization*. Thesis for Master degree of Arts in Industrial and Organizational Psychology, Thammasat Postgraduate School, Bangkok, Thailand.
- Homklin, T. (2008). *Relationship of locus of control, adversity quotient and stress coping behavior; the moderating effects of self-efficacy on the relation between adversity quotient and stress coping behavior: a case study of the Metropolitan Electricity Authority of Min Buri and Lat Krabang District*. Thesis for Master degree of Arts in Industrial and Organizational Psychology, Thammasat University, Thailand.
- Homrutaikamol, P. (2009). *The Relationship between Optimism, Adversity Quotient and Perceived Career Success: A Case Study of Nursing Career in Chaophaya Abhaibhubejhr Hospital, Prachinburi Province*. Thesis for Master degree of Arts in Industrial and Organizational Psychology, Thammasat Postgraduate School, Bangkok, Thailand.

- Intarakamhang, U. (2008). Research synthesis concerning the stress and coping of Thai people. *Journal of Behavioral Science, 14*(1):135-150.
- Jindargul, K. (2000). *The Relationships between Self-Efficacy, Adversity Quotient and Self-Development: A Case Study of TT&T Public Company Limited*. Thesis for Master degree of Arts in Industrial and Organizational Psychology, Thammasat University, Thailand.
- Kanfer, H.F. & Gaelick-Buys, L. (1991). Self-Management Methods. In H. F. Kanfer & A. P. Goldstein (Eds). *Helping People Change: A Textbook of Methods*. Elmsford, NY: Pergamon Press.
- Khamnuan, S. (2009). *The Relationship between Optimism, Adversity Quotient and Happiness: A Case Study of a Private Company*. Thesis for Master degree of Arts in Industrial and Organizational Psychology, Thammasat Postgraduate School, Bangkok, Thailand.
- Konghan, S. (2010). *The Effects of Self-Management Program and Ram Mai Plong Exercise on HbA1C and Quality of Life in Older Persons with Type 2 Diabetes Mellitus*. Thesis for Master degree of Nursing Science in Nursing Science, Chulalongkorn Postgraduate School, Bangkok, Thailand.
- Luthans, F., Luthans, K., Hodgetts, R., & Luthans, B. (2001). Positive approach to leadership (PAL): Implications for today's organizations. *Journal of Leadership Studies, 8*(2): 3-20.
- Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: beyond human and social capital. *Business Horizons, 47*(1):45-50.
- Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review, 1*:247-269.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007a). Positive Psychological capital: Measurement and Relationship with Performance and Satisfaction. *Personal Psychology, 60*(3):541-572.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007b). *Psychological Capital Developing the Human Competitive Edge*. New York: Oxford University Press.
- McCubbin, H. I., Joy, C. B., Cauble, A. E., Comeau, J. K., Patterson, J. M., & Needle, R. H. (1980). Family stress and coping: a decade review. *Journal of Marriage and the Family, 42*:855-871.



- McCubbin, H. I., Futrell, J. A., Thompson, E. A., & Thompson, A. I. (1998). Resilient families in an ethnic and cultural context. In H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Fromer (Eds). *Resiliency in African-American Families* (pp. 329-351). Thousand Oaks, CA: SAGE Publications.
- Moher D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Journal of Clinical Epidemiology*, 62: 1,006-1,012.