Validation of the Proactive Coping Scale in a Sample of Chinese Population*

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The purpose of this study was to validate the Proactive Coping Scale in a Chinese population sample. A total of 313 college students participated in Taiwan in the study. They completed the Chinese version of the Proactive Coping Scale (PCS), Self Esteem Scale (SES), Life Orientation Test-Revised (LOT-R) and depression and anxiety subscale of Symptom Checklist 90-Revised (SCL90-R). The results demonstrated that items of the PCS had good internal reliability, factorial validity and construct validity except for the second item (i.e., I try to let things work out on their own). The second item implies the meaning of "let-it-happen in a natural way", which might have a different interpretation in Western culture from the prevalent proactive coping style that was observed in

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Chinese culture. Therefore, the study suggested the second item of PCS should be deleted while measuring the Chinese proactive coping style.

Introduction

Coping is one of the most important topics in health psychology and a crucial concept in understanding adaptation when people are confronted with stressful circumstances. Coping includes all the activities that the individual undertake to master, tolerate, reduce, or minimize environmental or intrapsychic demands that are perceived to represent potential threats, existing harm, or losses (Folkman & Lazarus, 1985). It can also be seen as an effort to manage and overcome demands or critical events that pose challenges or even benefits to the person (Lazarus, 1991). Conventionally, coping research usually focus on the coping style or strategy when stressful events have occur, such as the two types of coping (problem-focused coping and emotion-focused coping) proposed by Lazarus and Folkman (1984) in their cognitive-appraisal model. In brief, problem-focused coping aims to directly change or manage threatening or harmful stressors and emotion-focused coping aims to relieve or regulate the negative feelings and emotional impact of a stressful situation. These two types of coping are usually discussed in the circumstances that an individual facing a stressful situation. However, an individual can cope with potential stressors before stressful events occur.

While considering the complexity of stressful episodes, Schwarzer (2000) recommended that coping cannot be reduced to either relaxation or fight-and-flight response. Specifically, coping depends, among others, on the time perspective of the demands and the subjective certainty of the events. Thus, Schwarzer (2000) addressed the distinction among four perspectives of coping, including reactive coping, anticipatory coping, preventive coping, and proactive coping. Such distinction is advantageous because it moves the focus away from mere responses to negative events and toward a broader range of risk and goal management that includes the active creation of opportunities and the positive experience of stress. For example, Schwarzer (2000) explicitly proposed that coping involves a proactive approach to self-imposed goals and challenges for personal growth. Folkman and Moskowitz (2004) also addressed that one of the new and important fields in coping has to do with the ways people cope in

advance to prevent or mute the impact of events that are potential stressors.

Among the four perspectives of coping proposed by Schwarzer (2000), proactive coping has the most active meaning. Aspinwall and Taylor (1997) argued that proactive coping is different form coping and anticipatory coping on three grounds.

First, proactive coping is temporally prior to coping and anticipatory coping. It involves the accumulation of resources and the acquisition of skills that are not designed to address any particular stressor but to prepare in general, given the recognition that stressors do occur and that to be forearmed is to be well prepared. Second, proactive coping requires different skills than does coping with extant stressors. For example, because the activities of proactive coping are not directed to a particular stressor, skills relating to the ability to identify potential sources of stress before they occur assume importance in the activities of proactive coping. Third, as compared with coping with extant stressors, different skills and activities are likely to be successful for proactive coping (Aspinwall & Taylor, 1997, p 417).

Folkman and Moskowitz (2004) pointed out that proactive coping is future-oriented. It is also defined as effort to build up general resources and to facilitate promotion toward challenging goals and personal growth (Schwarzer, 2000). In other words, proactive coping helps people with facing uncertain challenging goals while letting them accumulate resources and develop skills and strategies in the process. Proactive copers see risks, demands, and opportunities in the distant future, but they do not appraise these as potential threat, harm, or loss. Rather, demanding tasks are perceived as positive personal challenges. Accordingly, proactive coping is defined as a generically positive approach to stress or potential stress that leads individuals to better adjustment and mental health.

Proactive coping has received attention in Western societies (Aspinwall & Taylor, 1997; Folkman & Moskowitz, 2004; Greenglass, 2002), but it was rarely mentioned in coping studies for Chinese societies. Although there are several studies investigating coping strategies for Chinese people by different approaches, they did not mention proactive coping in their studies. For example, based on the cognitive-appraisal model (Lazarus & Folkman, 1984), Cheng (2001, 2003, 2005; Cheng, Hui, & Lam, 1999) recently investigated the concept of coping flexibility to demonstrate that people who adopt problem-focused coping in controllable situations and adopt emotion-focused coping in uncontrollable

situations will have better adjustment. This is because these people can adopt different coping strategy flexibly according to the situations they faced. The concept of coping flexibility proposed by Cheng (2001, 2003, 2005; Cheng et al., 1999) is closely related to the concept of "taking appropriate actions at appropriate time according to situations" in Chinese societies. It can be said that Cheng's (2001, 2003, 2005; Cheng et al., 1999) studies provide a good example in extending Western theories to Chinese societies. However, she did not include proactive coping in her studies.

In addition, Chan (1994) adopted another approach to investigate the ways of coping adopted by Chinese people. He analyzed the factor structure of the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1980, 1988) for Chinese respondents and found that a four-factor model is better than the original eight-factor model for Chinese people. The four factors are rational problem-solving, resigned distancing, seeking support and ventilation, and passive wishful thinking. Because of the items in the WCQ are determined, thus, Chan (1994) only can find alternative factor model for Chinese people with the original items. Hence, it is reasonable that the concept of proactive coping would not be discussed in his study. Moreover, the most direct way to figure out Chinese people's coping styles is to conduct a qualitative study to ask how Chinese people cope with stress. Siu, Spector, and Cooper (2006) recently adopted this approach to interview Chinese employees and then developed a Chinese coping strategies scale according to their interview results. They found four coping strategies, including active positive coping (e.g., "try my best to do the task"), passive adaptive coping (e.g., "let fate have its way"), social support (e.g., "discuss with my supervisor"), and hobbies/relaxation (e.g., "do physical exercises"). However, because they asked respondents to describe a stressful critical incident at work and what they do to cope with the event, the proactive coping strategy would not be mentioned in this context. Therefore, it can be seen that no matter which research approach was used, proactive coping strategy would not be found in these empirical studies for Chinese people because these studies only focus their attention on how people cope with stress when the stressful events have occurred, but proactive coping is adopted before the incidents. As a result, the concept of proactive coping was not noticed by Chinese researchers in the existing coping literature.

Therefore, the purpose of this study was to introduce the concept of

proactive coping and investigate the applicability of Proactive Coping Scale (PCS; Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999) for Chinese people. Greenglass et al. (1999) had developed the PCS to measure an individual's tendency of proactive coping. The PCS contained items relating autonomous goal setting with self-regulatory goal attainment cognitions and behaviors. In other words, people with a high PCS score could be seen as strongly believing that they have the potential to change their circumstances in order to improve themselves and their environment.

It has been shown the PCS has good reliability and validity (Greenglass et al., 1999). On reliability, the internal reliability (Cronbach's alpha) of the scale was .85 and .80 in two samples. On validity, factor analysis showed the scale has a single-factor structure, supporting its factorial validity and homogeneity. Additionally, in Greenglass et al's (1999) study, proactive coping was positively correlated with proactive attitude, self-efficacy, preventive coping, internal control, and active coping, supporting the idea that proactive coping emphasizes the individual's taking the initiative in trying to approach challenging goals. Moreover, proactive coping was negatively correlated with depression, self-blame, denial and behavioral disengagement, suggesting that people who use proactive coping do not tend to focus their attention on failure or badness but continually take challenges actively (Greenglass et al., 1999). Greenglass (2002) further found that proactive coping is positively correlated with perceived self-efficacy and negatively with job burnout in different professions. In other studies, it has also been found that proactive coping was negatively correlated with job burnout and procrastination (Schwarzer & Knoll, 2003), revealing the PCS has adequate construct validity.

However, the PCS was only developed and empirically tested in Western societies. We do not know if these measurements are relevant and construct valid for Chinese people. Accordingly, the purpose of this study was to validate the PCS for Chinese people. Reliability and validity of this scale were examined. For reliability, internal reliability was conducted with Cronbach's alpha. For construct validity, exploratory factor analysis was conducted to examine whether items of the PCS measured the same construct, and the present study also executed simple correlation analyses with two personality constructs (self-esteem and optimism) and two mental health indices (depression and anxiety) to examine whether the PCS demonstrated its theoretical relations with these related constructs.

According to the nature of proactive coping presenting the prototype of positive coping, it was expected that each item of PCS would be positively correlated with self-esteem and optimism, and negatively correlated with depression and anxiety.

Method

Subjects and procedure

A total of 313 college students (mean age = 20.35, S.D. = 1.39) in Taiwan participated in this study to gain extra credits in the course of introductory psychology. There were 108 males and 204 females. One participant didn't report his/her sex. The introduction of this study was announced in the course and students were invited to participate in this study to gain extra credits. Volunteers completed questionnaires in the classroom after the course. In the beginning, researchers give instructions to explain how to answer questions. And then, participants completed questionnaires on their own. All questionnaires can be finished in 30 minutes. After completing questionnaires, participants handed it to researchers directly.

Instrument

Proactive Coping Scale (PCS). The PCS, developed by Greenglass et al. (1999), has been examined in various samples and is available in several language (see Schwarzer & Knoll, 2003). The PCS consisted of 14 items displayed in Table 2. Respondents were asked to rate each statement on a 5-point Likert scale (1 = not at all true, 5 = completely true). Higher scores on the PCS indicated higher levels of proactive coping.

Self-Esteem Scale — Chinese version. The Chinese version of Rosenberg's 10-item self-esteem scale (see Robinson, Shaver, & Wrightsman, 1991) was used to measure participants' generalized, global feelings of self-worth. Participants respond to statements on positive and negative feelings about the self, such as "I am able to do things as well as most other people" on a Likert 5-point scale ranging from "strongly disagree" to "strongly agree". The self-esteem scale has shown good reliability and validity. On reliability, the internal reliability ranged from 0.77 to 0.88; the test — retest reliability coefficient ranged from 0.82 (2-week interval) to 0.85 (1-week interval). Regarding validity, the self-

esteem scale demonstrated adequate construct validity, convergent validity, and discriminant validity (see Robinson, Shaver, & Wrightsman, 1991). For the Chinese version of Rosenberg's 10-item self-esteem scale, a study (Wu, 2007) conducted among 123 undergraduate students at National Taiwan University showed that self-esteem was negatively related to anxious and avoidant attachment tendencies (r = -0.43, p < 0.01; r = -0.36, p < 0.01) and positively related to self-concept clarity (r = 0.59, p < 0.01). These findings replicated results obtained in previous attachment studies conducted with Western people (e.g., Bartholomew and Horowitz, 1991; Brennan, and Bosson, 1998; Brennan and Morris, 1997; Collins and Read, 1990; Griffin and Bartholomew, 1994; Roberts, Gotlib, and Kassel, 1996) and Campbell's (1990; Campbell, Trapnell, Heine, Katz, Lavallee, & Lehman, 1996) studies on the relationship between self-esteem and self-concept clarity with Western people. In addition, internal reliability (Cronbach's alpha) of the Chinese version of self-esteem scale among the 123 students was 0.93 and the value was 0.86 for the current sample. These results showed that the Chinese version of self-esteem scale is suitable for college students in Taiwan.

The Life Orientation Test-Revised. The Life Orientation Test-Revised (LOT-R, Scheier, Carver, & Bridges, 1994) was used to assess individual differences in generalized optimism versus pessimism. For the Chinese population, Lai, Cheung, Lee, and Yu (1998) reported that the LOT-R is a reliable and valid measure of dispositional optimism among Hong Kong Chinese and a confirmatory factor analysis showed that the LOT-R represents a one-factor model of optimism. In Lai and Yue's (2000) study, their results also indicated that the LOT-R exhibited convergent and discriminant validity in Hong Kong and Mainland Chinese. However, confirmatory factor analysis with the Mainland sample showed that the positively and the negatively worded items split into two factors. In the current sample, confirmatory factor analysis also supported the two factor model, indicating the scale has two wording factors, one factor consists of positively worded items (optimism factor), and the other one consists of negatively worded items (pessimism factor). Thus, in this study, the scores of optimism and pessimism were calculated separately. The internal reliabilities (Cronbach's alpha) of the two scales were 0.61 and 0.71, respectively.

Symptom Checklist 90-Revised. The Symptom Checklist-90-R (SCL-90-R, Derogatis, 1977) is a brief, multidimensional self-report inventory designed to screen for a broad range of psychological problems

and symptoms of psychopathology. It is a measure of current psychological symptom status with a time reference of "the past 7 days including today." The SCL-90-R assesses nine domains of psychiatric symptomatology, including somatization, obsessions/compulsions, interpersonal sensitivity, depression, anxiety, hostility, phobias, paranoid thinking, and psychotic thinking. Participants rated each symptom on a 5-point scale for intensity (0 = not at all, 1 = a little bit, 2 = moderately, 3 = quite a bit, 4 = extremely). The Chinese version of this scale has been widely applied in both psychiatric and non-psychiatric clinics in Taiwan (e.g., Chang & Chuang, 2000; Lin, Hsia, & Yang, 1997; Ko, Sun, Lin, Yeh, Lu, 2000; Tsai, Wen, Lin, Soong, & Chen, 1978). In this study, only depression and anxiety subscales were used and the mean scores of depression and anxiety subscale were calculated respectively. The internal reliabilities of depression and anxiety subscale were 0.89 and 0.88, respectively.

Results

Descriptive statistics

Descriptive statistics of the PCS items are presented in Table 1. Generally, items of the PCS had mean scores above the midpoint (3) on a five-point Likert scale and scores were slightly negatively skewed. However, the second item (i.e., I try to let things work out on their own) had a different distribution from the others. Its mean score was 2.29, and the skewness was 0.44. In addition, results of the corrected item-total correlation and the item-deleted Cronbach's alpha suggested respondents in this study interpreted the second item differently compared to Greenglass et al's study. In the first correlation, the item-total correlation of the second item was -0.09. In addition, the coefficient alpha of the total 14 items was 0.85. However, if the second item was deleted, the coefficient alpha was up to 0.87.

Exploratory factor analysis of PCS

According to Greenglass et al's (1999) study, exploratory principal axis factor analysis with a one-factor solution was conducted. In this study, Cattell's scree test also indicated one factor was appropriate (Figure 1). Factor loadings of each item were presented in Table 2. Except for Item 2,

Table 1. Descriptive statistics of each item in the Proactive Coping Scale

	Mean	Std.	Skew.	Kurt.	Corrected item-total	Cronbach's alpha if item deleted
					correlation	ii item deleted
Item1	3.52	0.88	-0.28	-0.43	.43	.84
Item2*	2.29	0.83	0.44	0.09	09	.87
Item3	3.56	0.98	-0.28	-0.53	.67	.82
Item4	3.38	0.92	-0.10	-0.38	.71	.82
Item5	3.79	0.88	-0.34	-0.42	.65	.83
Item6	3.50	0.86	-0.33	0.12	.52	.83
Item7	3.46	1.04	-0.28	-0.67	.54	.83
Item8	3.25	0.91	-0.07	-0.29	.63	.83
Item9*	3.33	1.04	-0.38	-0.36	.37	.84
Item10	3.64	1.01	-0.74	0.33	.33	.85
Item11	3.51	0.92	-0.27	-0.26	.58	.83
Item12	3.67	0.97	-0.34	-0.39	.44	.84
Item13	3.61	0.78	-0.13	0.08	.66	.83
Item14*	3.97	0.83	-0.75	0.77	.44	.84
Total						.85

Note: * Reverse item of PCS. Scores of reverse items have been recoded.

loadings of each item were large enough, suggesting that Item 2 would not measure the same construct as other items.

Correlation analysis between PCS items and criterion variables

In order to examine the construct validity of each PCS item, items of the PCS were correlated with self-esteem, optimism, pessimism, depression, and anxiety. Table 3 presents the results of correlation analyses. Generally, items of the PCS were positively correlated with self-esteem and optimism, and negatively correlated with pessimism, depression and anxiety. However, compared to other items, the second item (i.e., I try to let things work out on their own) indicated a different correlation pattern from other variables. This finding was consistent with the result of descriptive analysis and factor analysis, suggesting that the item "I try to let things work out on their own" was not a reverse item of proactive

Figure 1. Scree plot of Proactive Coping Scale

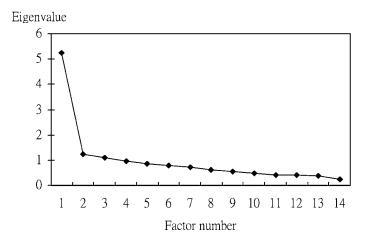


Table 2. Factor loadings of Proactive Coping Scale

		Loadings
1.	I am a "take charge" person.	.45
2.	I try to let things work out on their own.*	.01
3.	After attaining a goal, I look for another, more challenging one.	.74
4.	I like challenges and beating the odds.	.78
5.	I visualise my dreams and try to achieve them.	.71
6.	Despite numerous setbacks, I usually succeed in getting what I want.	.59
7.	I try to pinpoint what I need to succeed.	.60
8.	I always try to find a way to work around obstacles; nothing really stops me.	.71
9.	I often see myself failing so I don't get my hopes up too high.*	.39
10.	When I apply for a position, I imagine myself filling it.	.36
11.	I turn obstacles into positive experiences.	.63
12.	If someone tells me I can't do something, you can be sure I will do it.	.48
13.	When I experience a problem, I take the initiative in resolving it.	.70
14.	When I have a problem, I usually see myself in a no-win situation.*	.45

Note: * Reverse item of PCS. Scores of reverse items have been recoded.

	Self-esteem	Optimism	Pessimism	Depression	Anxiety
Item1	.22**	.11*	07	03	07
Item2*	13*	25**	.09	.21**	.17**
Item3	.36**	.36**	21**	13*	16**
Item4	.34**	.31**	16**	15**	19**
Item5	.43**	.31**	20**	12*	09
Item6	.45**	.33**	24**	19**	14**
Item7	.34**	.22**	15**	05	07
Item8	.41**	.28**	10	15*	11*
Item9*	.46**	.34**	39**	42**	36**
Item10	.26**	.33**	07	05	08
Item11	.45**	.43**	15**	16**	18**
Item12	.19**	.14*	13*	12*	08
Item13	.42**	.30**	19**	20**	17**
Item14*	.54**	.40**	45**	38**	30**

Table 3. Correlations between items of Proactive Coping Scale and criterion variables

Note: * Reverse item of PCS. Scores of reverse items have been recoded.

coping in this Chinese sample. The analytic results of the second item revealed negative correlations with self-esteem and optimism, and positive correlations with depression and anxiety. In other words, the second item seemed to not be a negative coping style; on the contrary, it might imply a positive meaning for mental health in this context.

Discussion

The purpose of this study was to introduce the concept of proactive coping and investigate the psychometric properties of the PCS in a Chinese sample. According to the results, except for the second item, each item of the PCS had good internal reliability, factorial validity, and construct validity. Therefore, the authors suggest deleting the second item when the PCS is used in Chinese population in the future.

As mentioned in the Introduction section, proactive coping style is a coping strategy that deals with potential stressor before an incident occurs. It is germane to an individual's goal management and personal growth

^{*} *p* < 0.05 ** *p* < 0.01

because people adopting proactive coping may see possible obstacles, which makes them take actions, such as improving one's ability, accumulating enough resources, or making a plan B in advance, to prevent them being in a difficult situation. This kind of positive coping style was not mentioned in Chinese studies on coping research because previous Chinese studies only focus on the coping styles when an individual have faced a stressful situation. Hence, introducing proactive coping strategy here can enrich Chinese coping studies by reminding researchers that people can take active actions when they perceive potential stressors which could cause a stressful incident, not only passively react to a event that has worsen the situation. For example, proactive coping style may be linked to the concept of coping flexibility proposed by Cheng (2001, 2003, 2005; Cheng, Hui, & Lam, 1999) to further figure out if people who tend to adopt proactive coping style would also have higher coping flexibility when they finally face a stressful situation. It is because people who adopt proactive coping style would have known which obstacles can worsen the situation, if they did not avoid the circumstances they expected and have to face a stressful situation, then, they would know which coping strategy is better for them and exhibit the flexibility in choosing coping strategies.

Moreover, introducing the concept of proactive coping style can also enrich indigenous Chinese studies in thinking style. For example, proactive coping style can be linked to Zhong-Yong thinking style proposed in Chinese societies. Zhong-Yong thinking style is defined as "considering things carefully from different aspects and conducting appropriate behaviors for taking the whole situation into account (Wu & Lin, 2005)". Although Wu and Lin (2005) did not explicitly mention the time perspective in their definition of Zhong-Yong thinking style, it is reasonable that Zhong-Yong thinking style also incorporates the same characteristic of proactive coping style in time perspective. That is, both of these two styles emphasize a prospective view of trying to figure out how things could be and then take actions accordingly. However, these two kinds of thinking styles do have differences as well. First, proactive coping style is just a coping style. It is proposed in a situation that people perceive potential stressors and would like to take actions in advance. In contrast, Zhong-Yong thinking style is assumed to be applied in more situations than proactive coping style, not only restricted to stress-related circumstances. Second, proactive coping style only concerns actions related to potential stressors, but Zhong-Yong thinking style concerns all

actions for taking the whole situation into account. Finally, the aim of proactive coping style is to beat potential stressors, but the aim of Zhong-Yong thinking style is to get all things done in a harmony way. The outcome concerns are also different between proactive coping style and Zhong-Yong thinking style. Therefore, it can be seen that proactive coping style is narrower than Zhong-Yong thinking style in applied situations, actions, and outcomes. Although this is only a brief concept analysis between proactive coping style and Zhong-Yong thinking style, it can be seen that introducing the concept of proactive coping style can also facilitate us to examine the characteristics and uniqueness of indigenous constructs proposed in Chinese societies. Hence, it is worth introducing the concept of proactive coping style into Chinese societies and in the future, the measurement of PCS can be used to empirically examine the relationship between proactive coping style and the existing coping constructs, such as coping flexibility, and the similarity and differences between proactive coping style and related indigenous Chinese constructs.

Not only does the concept of proactive coping style enrich Chinese coping studies, but also the items in the PSC provide a hint to figure out an unique coping strategy for Chinese people. That is, there is an interesting finding that the second item "I try to let things work out on their own" indicated a contrary interpretation from other items of the PCS. In Greenglass et al's (1999) study, the item was a good reversed item of proactive coping, but in the current study, the item seemed to have a dissimilar meaning from proactive coping as seen in previous studies. The authors suspect that this finding might reflect a culture difference in interpreting the meaning of "let things work out on their own".

In the Chinese population, "let-it-happen" is one of the positive coping strategies (Hwang, 1977; Yue, 2001). This coping strategy is embedded in the Toaist philosophy, which treats one's stress-inducing experiences as opportunities for harmony and self-transcendence (Yue, 2001). According to Taoism, mankind is a part of the cosmos, which has its own Tao (道) or evolution. Thus, individuals must practice "wu wei" (non-intervention), to trust and follow their density as it is embedded in the Tao (Leung & Lee, 1996). Following the Taoist perspective, the "let-it-happen" coping strategy enables a person to render a stressful encounter or demand as less threatening by submitting all matters of life to fate and the Tao (Yue, 2001). In Yue's (2001) qualitative study, it was shown that people who use a "let-it-happen" coping strategy do reduce their stress level by reframing the cognitive appraisal of its threats to

explain away the negative emotions associated with it. Thus, since the item "let things work out on their own" represents a different coping strategy in a Chinese population, it is not surprising that the item showed different psychometrics properties from other items in the PCS.

Additionally, the result also implied that proactive coping does not conflict with a "let-it-happen" coping method for Chinese people. In fact, this is seen as a natural phenomenon in Chinese culture.

By definition, proactive coping is used to facilitate promotion toward challenging goals and personal growth (Schwarzer & Knoll, 2003). It implies that individuals who think they have potential to change their circumstances would adopt proactive coping strategy. However, in most situations, individuals usually do not know whether or not the proactive actions would assure that they could actually achieve their goals. Therefore, the concept of "let-it-happen" may help them reduce the feelings of uncertainty or explain away the negative emotions associated with failure. This assertive action with preventive protection strategy is consistent with the idea of a Chinese proverb, "Try your best, then see how things go" (盡人事,聽天命). That is, in Chinese culture, proactive coping and let-it-happen coping strategies may co-operate to enhance individuals' adaptation strategies.

However, "let-it-happen" coping strategy does not necessarily co-inside with proactive coping. If individuals have already perceived that it is not easy to change their circumstance and adopting proactive coping would challenge their natural or social environment, they would use let-it-happen coping to help them accept the reality and explain away the negative emotions associated with it. In this circumstance, adopting "let-it-happen" coping strategy would help individuals avoid the conflict with their environment or the struggle of reacting or non-reacting with the demanding challenge.

Thus, the authors suggest "let-it-happen" is a coping strategy that innately exists in Chinese culture. That is, it is a coping strategy that has an indigenous cultural meaning among Chinese people, rather than functioning as the reverse side of proactive coping. Therefore, on measuring proactive coping in a Chinese population, the items that incorporate the meaning of "let-it-happen" should not be treated as reversed items of proactive coping. In other words, when measuring proactive coping with the PCS in a Chinese population, the second item that involves the meaning of "let-it-happen" should be deleted. However, the second item did provide important information for understanding the

coping styles in Chinese culture. It is worth extending the concept of "let-it-happen" based on the second item to investigate the process and consequence of that coping strategy and to figure out the relationship between proactive and let-it-happen coping strategies. Obviously, this work could contribute not only to understanding the mechanism of coping, but also to figuring out the cultural difference on coping behaviours.

Finally, several limitations should be addressed here. First, we only validate the PCS in a Taiwan student sample. It is better to validate the PCS in samples from Hong Kong and China to see if all findings in the current study can also be observed among culturally Chinese people from other areas. Second, the criterion variables used here is limited. In the future, measures of other coping styles should be included to test the discriminant validity among different coping styles. Last but not least, the research design can be improved to closely examine the meaning of proactive coping and predictive validity of PCS by providing respondents a scenario which describes a situation that they may perceive possible obstacles before a stressful incident occurs or asking respondents to recall one of similar situations they faced to see if the proactive tendency is related to the actions they take and the outcome measures in that situation. Generally, this study only introduced the construct of proactive coping and validated a measurement of it. Further studies are needed to figure out the mechanism of proactive coping style in stress coping and to discuss the similarities and differences between proactive coping style and other related indigenous constructs.

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前瞻性因應量表在華人樣本的效度檢驗

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摘要

本研究目的在於檢驗前瞻性因應量表在華人樣本的適用性。共計313位台灣大學生參與本研究。參與者填寫中文版前瞻性因應量表、自尊量表、生活傾向量表、以及精神衛生症狀自評量表中的憂鬱與焦慮症狀分量表。本研究結果顯示,中文版前瞻性因應量表除了第二題(我盡量讓事情一切順其自然)之外,其餘題目具有良好的內部一致性信度、因素效度與建構效度。第二題題目隱含了順其自然的意思,在華人文化中並不適合用於前瞻性因應的反向題目,因此本研究建議在華人樣本中使用前瞻性因應量表時,將第二題題目予以刪除。

關鍵字:前瞻性因應、中華文化、心理計量分析