

Role of Positive Psychological Strengths and Big five Personality Traits in Coping Mechanism of University Students

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Abstract. Present study aimed to explore the relationship of coping strategies with positive psychological strengths i.e., hope, optimism, self efficacy and resiliency and big-five personality factors among undergraduate university students. Data were collected from 200 students in universities of the Federal Territory Kuala Lumpur, Malaysia. Psychological Capital Questionnaire (Luthans's et al. 2007) [1], Brief Cope Scale (Carver, Scheire & Weintraub, 1989) [2], and Ten-Items Personality Inventory (Swann, Rentfrow, & Gosling, 2003) [3]. were used. Research findings revealed that Positive psychological strengths and Big five personality dimensions were found to be significantly related to coping responses except neuroticism, as persons with high neuroticism were found to be less engage in coping mechanism, while high extraversion, openness and conscientiousness individuals engaged in more problem-focused coping. The results indicate personality factors and PsyCap are emerged as important domains for coping mechanisms.

Keywords: Personality, PsyCap, Coping etc

1. Introduction

University life can be quite stressful especially fresher's or undergraduate students. For many students, they find it hard to cope with the stress and hence are lagging behind, while others see the pressure as a challenge to work harder. Utilizing effective coping strategies can help alleviate the negative effects of stress. Coping is the cognitive and behavioral efforts an individual uses to manage specific demands or stressors (Dressler, 1991) [4]. According to Folkman & Lazarus (1980) [5]., coping strategies can be viewed as what an individual actually thinks and does in a particular stressful situation. In general, coping efforts may change constantly for any one individual (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) [6]. distinguished between two types of coping strategies: problem-focused and emotion-focused. Problem-focused coping strategies tend to be employed when an individual has determined that a harmful, threatening, or challenging situation is amenable to change. Thus, the individual who is experiencing stress perceives the stressful situation to be alterable and within his or her capabilities of control (Lazarus & Folkman, 1984) [6]. As a result, these strategies centered on managing or altering the situation causing stress (Lazarus & Folkman, 1984; Snyder, 1999) [7]. In contrast, emotion-focused coping strategies focused on dealing with the negative emotions that are a product of the stressful situation (Lazarus & Folkman, 1984; Snyder, 1999) [7]. When the individual who is experiencing stress perceives the stressful situation to be outside of his or her control, emotion-focused coping strategies may be employed. In other words, these types of strategies are used when an individual has judged that nothing can be done to modify a harmful, threatening, or challenging environment (Lazarus & Folkman, 1984) [6]. Avoidance coping, on the other hand, tends to reduce stress over short periods of time as well as prevent anxiety from becoming crippling when confronting uncontrollable stressors. In addition, avoidance allows for gradual recognition of a threat.

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Increased hope and courage are possibilities when avoidance strategies are used in a partial, tentative, or minimal manner (Renk & Smith, 2007) [8].

Personality is considered an imperative part in every facet of coping process. Personalities that are more negative are traditionally associated with greater distress, while more outgoing and positive personalities generally experience positive psychological health (Vollrath & Torgersen, 2000) [9]. In the last couple of decades the Big-Five personality has become the most widely tested and well-regarded personality trait model. A great deal of research has supported this model's validity and reliability (Goldberg, 1981; John 1990; McCrae & Costa, 1987) [10, 11 & 12]. It also provides one model of personality that has been found to be particularly useful in understanding coping style. These big five personality dimensions are Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A) and Conscientiousness (C).

Positive psychological strengths or psychological capital, consists of efficacy, optimism, hope and resilience. Positive psychological strengths is a new and emerging positive psychology variable that has been shown to have impact within a variety of business organizations but limited research to date on the effects of PsyCap in the educational organization (i.e., public schools, private schools, charter schools, universities and colleges). No evidence has yet proved that the positive psychology variable of psychological strengths associated with coping strategies as a whole. With practical strategies aiming at leveraging and developing students' psychological strengths, it will eventually help students to develop coping mechanism. Therefore researchers objective is to exploring the role of positive psychological strengths and big five personality traits in coping mechanism.

2. METHOD

2.1. Sample

The sample for this study consisted of 200 full time undergraduate students (95 males & 105 females) from different universities in Kuala Lumpur. Age range was from 19 to 21 years, with a mean of 20 years old. The group included students who were studying in a wide variety of academic disciplines, achieved a normal range of grade point averages, and displayed a variety of extracurricular interests. Convenient sampling method was used in selecting respondents to participate in this study. The survey was entirely voluntary and participants were ensured anonymity in their responses.

2.2. Procedure

The self-administered questionnaires were given to students during class, and a sufficient amount of time was allotted to complete it. Confidentiality and anonymity were ensured. Respondents were asked to read the instructions carefully which is written on the top of the questionnaires and they are also instructed they should answer the questions as honestly as possibly.

3. Measures

3.1. Coping Strategies:

To assess the different ways university students respond to stress, the brief COPE scales (Carver, Scheire & Weintraub, 1989) [2] were used. This inventory consists of 28 items describing coping methods and they are rated under 4 categories of responses. Each item was rated as 1 indicate I have not been doing this at all to 4 indicate I have being doing this a lot. The 28-items scores were averaged in pairs to produce 14 domains. The 14 domains are: students self distraction, behavioral disengagement, active coping, seeking of instrumental support, seeking of emotional support, focus, positive reframing, planning, humor, acceptance, turning to religion, denial, substance abuse, and self blame. Three domains were used to assess aspects of problem-focused coping (active coping, planning seeking of instrumental support); Five domains were used to assess aspects of emotion-focused coping (seeking of emotional support, positive reframing, acceptance, venting, turning to religion); and three domains were used to measure aspects of avoidance coping (behavioral disengagement, alcohol, humor). Scores were obtained for problem-focused coping, emotion-

focused coping, and avoidance coping by finding the sum of the items for each domain and then summing the respective domains for each types of coping. According to previous research reports, each of the domains of the COPE Scales have satisfactory internal consistency as measured by Cronbach's alpha ranging from 0.62 to 0.92. (Tara & Kimberly, 2007) [8].

3.2. BIG 5 Personality Traits:

Ten-items Personality Inventory (TIPI) is a 10-items brief scale consisting of two descriptors designed to measure each pole of the Big Five Personality model; neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Swann, Rentfrow, & Gosling, 2003) [3]. Each item is preceded by the statement; see myself as statements are scored on a 7-point Likert Scale ranging from strongly disagree to strongly agree. Scores of opposite poles (e.g. extroversion and reverse scored introversion) were combined to represent a cumulative score for each component of the Big Five Model. Test-retest reliability ($r = .72$) and external correlations ($r > .90$) have been established (Gosling et al., 2003). The TIPI exhibited identical convergent and discriminant validity as the full Big Five Inventory ($r = .77$) (Gosling, Rentfrow, & Swann, 2003) [13]. With similar reliability and validity measurements as the full inventory, the TIPI was chosen as a participant-friendly instrument that would limit tediousness (Gosling, Rentfrow, & Swann, 2003) [13]. This is a short inventory developed to test big five personality dimensions in a short span and also to minimize the effort and time spend in completing the famous and most worldwide used NEO-PI-R (240-items) by Costa & McCrae's (1992) [14].

3.3. Psychological Capital Questionnaire:

PCQ-24 (Luthans et al., 2007) [1] ($\alpha = .88$), used to measure the positive psychological strengths (Hope, Optimism, Resiliency and Self- efficacy). It consists of 24 items with response choices into a 6-point Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree). The PCQ is designed to assess the four components of PsyCap: hope, self-efficacy, optimism, and resilience, with each component assessed by six items. Reliability coefficients for all the components were greater than .70, as was the overall PsyCap instrument.

4. Data Analysis:

Data were analyzed by correlational analysis using (SPSS version -17).

5. Results and Discussion

Correlation between big 5 personality traits and Coping mechanisms

As hypothesized, personality plays a significant role in coping mechanism. Our results suggested that each of the five personality dimensions were found to be significantly related to coping responses. Hooker, Frazier, & Monahan, 1994; McCrae & Costa, 1986; Watson & Hubbard, 1996) [15-17]. Other studies (Hurtz & Donovan, 2000; Grant & Langan-Fox, 2007; Heslegrave & Colvin, 1998; Penley & Tomaka, 2002; Watson, Minzenmayer, & Bowler, 2006) [18- 22] also observed that specific personality traits solicit specific behavioral responses. With respect to the relationship between the Big Five personality traits and the specific coping strategies, our findings revealed that extraversion, openness, agreeableness and conscientiousness was significantly and positively related to active coping, acceptance, planning, instrumental support, religion, venting, humor and positive reframing. Individuals who scored higher on extraversion used more of these coping strategies. Research has shown that individuals who are high in extraversion are cheerful in disposition and motivated (Watson & Clark, 1992) [23]. Consequently, past research has supported that these individuals engage in active coping and use positive reappraisal when a stressor is encountered (Hooker, Frazier, & Monahan, 1994; Watson & Hubbard , 1996; Vollrath , 2000; Velting, 1999) [15, 17,9 & 24]. Finding also shows negative correlation between extraversion and emotion-focused coping, self distraction, self blame and denial. Neuroticism was significantly and positively related to use of emotional support, self distraction, self-blame, denial, substance use and substance abuse. Individuals who scored higher on

neuroticism used more of these coping strategies. McCrae & Costa, 1986; Watson & Hubbard, 1996; Guthert et al, 1999; Haley van Berkel, 2009; Velting, 1999 [16, 17, 25, 26 & 24]., also found associations between neuroticism and emotion-focused coping. Individuals who are high in neuroticism are more susceptible to psychological distress, prone to irrational thoughts, and are less able to control their impulses (Costa & McCrae, 1992) [27]. Therefore, as in the current study, these individuals typically use more emotion-focused and avoidance coping methods (Bolger & Zuckerman, 1995; Watson & Hubbard, 1996) [28, 17].

Correlation between Psychological Strengths and Coping mechanisms

The high correlations between Problem-focused coping and all PsyCap dimensions are expected. The positive correlations supported Scheier, Weintraub and Carver (1986) [29]. established that optimistic people possess more effective coping mechanisms in mitigating the stress that can serve as barrier to successful performance. Further correlation of this study indicates that resilient person appear to be capable and effective problem-solvers. Negative correlations were found positive psychological strengths with self distraction, emotional support, self-blame, denial, behavioral disengagement and substance abuse. Findings also suggested that psychological strengths give the students skills to cope when times are tough: recognizing there is always hope and that there is a way out from the pit of despair.

6. Conclusion

Those higher on extraversion, openness, agreeableness and conscientiousness were significantly more likely to report engaging in problem-focused coping whereas neuroticism did not significantly interact with context in predicting coping. Individuals vary in their reactions to coping strategies. Our results supported the idea that individuals who are affluent, resilient, capable and optimistic are resourceful and thus are more vulnerable to cope. University students who possess the attributes of psychological strengths reported greater use of problem-focused coping strategies. The model emerged from current study also imparted insight into the method that healthy personalities can encourage adolescents' coping system, while unhealthy one like neuroticism can exclude it. With the current findings, it is therefore particularly important to offer appropriate guidance and support to those entering the university or college for the first time.

7. References

- [1] Luthans, F., Avolio, B.J., & Youseff, C. *Psychological Strengths: Developing the Human Competitive Edge*. Oxford, England: Oxford University Press. 2007.
- [2] Carver C. S, Scheier M. F. & J. K., Weintraub. *Assessing Coping Strategies: A Theoretically Based Approach*. *Journal of Personality and Social Psychology*.1989, 56: 267-283.
- [3] Swann, W. B., Jr., Rentfrow, P. J., & Gosling, S. D. The precarious couple effect: Verbally inhibited men + critical, disinhibited women = bad chemistry. *Journal of Personality and Social Psychology*. 2003, 85: 1095-1106.
- [4] Dressler, W. W. *Stress and adaptation in the context of culture: Depression in a southern black community*. Albany, NY: State University of New York Press. 1991.
- [5] Folkman, S., & Lazarus, R S. An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*. 1980, 21: 219–239.
- [6] Lazarus, R. S., & Folkman, S. *Stress, appraisal, and coping*. New York: Springer Publishing. 1984.
- [7] Snyder, C. R. (Ed.). *Coping: The psychology of what works*. New York: Oxford University Press. 1999.
- [8] Renk,K., & Smith, T. Predictors of Academic-Related Stress in College Students: An Examination of Coping, Social Support, Parenting, and Anxiety, *NASPA Journal*. 2007, 44:3, 405-431
- [9] Vollrath, M., & Torgersen, S. Personality types and coping. *Personality and Individual Differences*. 2000, 29:, 367-378.
- [10] Goldberg, L. R. Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of Personality and Social Psychology*, Vol. 2. Beverly Hills, CA: Sage. 1981.

- [11] John, O. P. The "Big Five" factor taxonomy: Dimensions of personality in the Natural language and in questionnaires. In L.A. Pervin (Ed.), *Handbook of personality: Theory and research*. 1990 (pp. 66-100). New York: Guilford.
- [12] McCrae, R.R. and Costa Jr., P.T. Validation of the Five-Factor Model of personality across instruments and observers. *Journal of Personality and Social Psychology*. 1987, 52, 81–90.
- [13] Gosling, S.D., Rentfrow, P.J., & Swann, W.B. Jr.. A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*. 2003, 37, 504–528.
- [14] Costa, P. T. Jr., & McCrae, R. R. Four ways the five factors are basic. *Personality and Individual Differences*, 1992, 13: 653–665.
- [15] Hooker, K., Frazier, I. D. & Monahan, D. J. Personality and coping among caregivers of spouses with dementia. *The Gerontologist*. 1994, 34: 386–392.
- [16] [16] McCrae R.R., and Costa P.T. Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*. 1986, 54: 385-405.
- [17] Watson, D., & Hubbard, B. Adaptational style and dispositional structure: Coping in the context of the five-factor model. *Journal of Personality*. 1996, 64: 737-774.
- [18] Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, 85: 869-879.
- [19] Grant S & Langan-Fox J. Personality and the Occupational Stressor-Strain Relationship: The Role of the Big Five. *Journal of Occupational Health Psychology*. 2007, 12: 20-33.
- [20] Heslegrave, R. & Colvin, C. The potential utility of psychophysiological measures as selection tools. *The Journal for the Society for Human Performance in Extreme Environments*. 1998, 3:(1), 121-139.
- [21] Penley, J. A. & Tomaka, J. Associations among the big five, emotional responses, and coping with acute stress. *Personality and Individual Differences*. 2002, 32:1215-1228.
- [22] Watson, W. E. Minzenmayer, T., & Bowler, M. Type a personality characteristics and the effect on individual and team academic performance. *Journal of Applied Social Psychology*. 2006, 36: (5) 1110-1128.
- [23] Watson, D., Clark, L. A., McIntyre, C. W., & Hamaker, S. Affect, personality, and social activity. *Journal of Personality and Social Psychology*. 1992, 63:1011-1025.
- [24] Velting, D.M. Suicide ideation and the five-factor model of personality. *Personality and Individual Differences*. 1999, 27: 943-952.
- [25] [25] Guthert, K. C., Cohen, L. H., & Armeli, S. Role of neuroticism in daily stress and coping. *Journal of Personality and Social Psychology*. 1999, 77: 1087–1100.
- [26] Van Berkel, Haley, Kathryn. *The Relationship Between Personality, Coping Styles and Stress, Anxiety and Depression*. Thesis for Master of Science, University of Canterbury. Psychology. 2009, 2978.
- [27] Costa, P. T. Jr., & McCrae, R. R. (1992). Four ways the five factors are basic. *Personality and Individual Differences*, 13: 653–665.
- [28] Bolger, N., & Zuckerman, A. A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*. 1995, 69: 890–902.
- [29] Scheier, M. F., Weintraub, J. K., & Carver, C. S. Coping with stress: Divergent strategies of optimists and pessimists. *Journal of Personality and Social Psychology*. 1986, 51, 1257-1264.

Table 1 : Correlations between Big 5 Personality and Coping Strategy

Coping style	Big 5 (Pearson correlation,r)				
	Extraversion	Openness	Agreeableness	Conscientiousness	Neuroticism
Active Coping	0.11	0.11	0.12	0.01	-0.18
Acceptance	0.08	0.20*	0.15	0.00	-0.02
Planning	0.03	0.05	0.06	0.02	-0.14
Instrumental Support	0.19*	0.25**	0.12	0.11	-0.06
Self Distraction	-0.18*	-0.04	-0.05	-0.14	0.16*
Emotional Support	-0.39**	-0.38**	-0.03	-0.25**	0.30**
Venting	0.09	0.30**	0.12	0.03	-0.31**
Positive Reframing	0.20**	0.13	0.05	0.01	-0.08
Humor	0.04	0.01	0.13	0.31**	-0.02
Religion	0.12	0.08	0.05	0.00	-0.01
Self Blame	-0.04	-0.22**	-0.08	-0.04	0.24**
Denial	-0.06	-0.12	-0.06	-0.11	0.03
Behavioral	-0.32	-0.04	-0.05	-0.12	0.06
Disengagement					
Substance Abuse	-0.02	-0.17*	-0.14	-0.22**	0.13

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

Table 2 Correlations between PsyCap and Coping Strategy

Coping style	Positive Psychological Strengths Dimensions				
	Hope	Optimism	Self-Efficacy	Resiliency	Total
Active Coping	0.10	0.18*	0.21**	0.08	0.48**
Planning	0.11	0.29**	0.12	0.04	0.31**
Instrumental Support	0.18*	0.25**	0.15*	0.14	0.24**
Self Distraction	-0.02	-0.03	-0.03	-0.12	-0.07
Emotional Support	-0.19*	-0.18*	-0.20	-0.01	-0.13
Acceptance	0.12*	0.18*	0.09*	0.10*	0.50**
Venting	0.07*	0.13*	0.01*	0.01*	0.07*
Positive Reframing	0.09**	0.14**	0.05**	0.08**	0.03**
Humor	0.22**	0.08	0.24**	0.24**	0.27**
Religion	0.05**	0.17*	0.19*	0.08*	0.13*
Self Blame	-0.23**	-0.02	-0.16*	-0.34**	-0.24**
Denial	-0.20**	-0.10	-0.15	-0.24**	-0.24**
Behavioral	-0.13	-0.05	-0.06	-0.06	-0.70**
Disengagement					
Substance Abuse	-0.36**	-0.06	-0.16*	-0.34**	-0.32**

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)