

The Impact of Coping Strategies on Psychological Well-being among Students of Federal University, Lafia, Nigeria

Moses Ichongo Ukeh* and Abu Salawu Hassan

Abstract

The study examined the impact of coping strategies on students' psychological well-being in a Nigerian university. 149 students comprising 81 (54.36%) males and 68 (45.64%) females, ranging from 18 to 33 years, with a mean age of 23.16 years responded to the coping strategies inventory and scales of psychological well-being, via a cross-sectional survey design. The standard multiple regression analysis was adopted to test hypotheses using (SPSS 21 version). The results showed significant $F(8,140)=7.20$, $p<0.0005$ joint impact of coping strategies on psychological well-being, and accounted for approximately 29.2% of the variability. Independently, there were significant independent positive and negative impacts of coping strategies dimensions on psychological well-being. Based on the findings, the researcher concluded that coping strategies may enhance and/or exacerbate psychological well-being. Students are advised among others to embrace appropriate strategies to avoid negative consequences.

Keywords

Coping strategies; Coping dimensions; Psychological well-being; University students

Introduction

Studies on psychological wellness have today, shifted from emphasizing negative health indicators to developing strengths and competencies of a person, as well as on supporting well-being and reaching a high quality of a person's functioning [1,2]. A high psychological well-being is believed to serve as inoculation or immunity against stress and drastically reduce the need for negative coping strategies. Arguably, the significance of a sound physical and psychological health for students of universities cannot be overemphasized. Well-being is instrumental to the actualization of students' full potential, enhancement of academic performance and interpersonal relationships. Very often, this desirable state of well-being is disrupted by stressful circumstances emanating from personal and university environments. Some of the university induced stress

involves a wide range of issues, including test and exam burden, a demanding course, a different educational system and or relationships with faculty, roommate conflicts and thinking about future plans upon graduation [3].

Usually, when people undergo stressful situations, they react to and cope with stressors in ways that make them manageable [4]. Lazarus [5,6] earlier position concurred with this view when he noted that, how people cope with their daily hassles is believed to affect their health and well-being. That is, those who effectively cope with daily hassles are more likely to experience higher levels of well-being than those who do not. However, previous studies uphold the thesis that certain coping strategies alleviate stress and promote positive psychological outcomes, whereas others exacerbate stress and promote negative well-being [7,8]. Similarly, the World Health Organization [9-11] in separate remarks has raised concerns for youths' mental health and psychosocial development in particular, and identified poor coping

skills as one of several risk factors for ill health in adulthood and even premature death.

From the foregoing, it is reasonable to presume that students who lack coping skills are at risk of performing below standard academically and socially. As coping with stressful situations that exceed one's abilities is a great challenge, such unmitigated stressors may disrupt students' prospects of performing well in examinations, reduce chances of graduation and even when they do, limit their career success later in life. It is therefore important to study the impact of coping strategies on students' well-being in Nigerian universities. It is expected that through this study, students will gain understanding to differentiate between appropriate and effective coping strategies. This is because students experiencing stress need to develop effective coping skills to deal with such stressors to enhance their well-being.

Psychological well-being

Psychological well-being (PWB) has been defined as "engagement with existential challenges of life [12]. Huppert [13] elucidated that psychological well-being is "the combination of feeling good and functioning effectively". By definition therefore, people with high psychological well-being report feeling happy, capable, well-supported, satisfied with life, and so on. Experiencing high levels of subjective well-being, according to Diener [14], is considered to be a central criterion of positive mental health. In addition to this, well-being has been found to not only be an outcome of favourable life circumstances such as academic success and satisfying relationships, but also a predictor and partial cause of these outcomes [15]. Consequently, the well-being of students at university is important, not only for influencing students' later attitudinal and career outcomes, but also outcomes that benefit communities and society at large. Thus, universities are increasingly expected to create environments that actively promote student success and well-being.

Coping strategies

Weiten et al. [16] refer to coping strategies as those reactions or efforts made to master, reduce or tolerate the demands created

*Corresponding author: Moses Ichongo Ukeh, Department of Psychology, Nigeria Police Academy, Wudil, PMB 3474, Kano, Nigeria, Tel: (+234)8066535003; E-Mail: superlifeconsulting@gmail.com

Received: June 20, 2020 Accepted: July 02, 2020 Published: July 27, 2020

by stress. According to Lazarus et al. [7] Coping refers to cognitive and behavioural efforts to manage specific external and/or internal demands that an individual appraises as taxing or exceeding his/her resources. The extent to which a stressor affects individuals' physical, psychological and behavioural outcomes is accounted for, in part, by one's coping resources and strategies. Coping skill is necessary for students' educational, professional and personal development. The ability and skill to manage university imposed stresses (test and exam burden, a demanding course, a different educational system and or relationships with faculty, roommate conflicts and thinking about future plans upon graduation) effectively will lead to high levels of psychological well-being [7,13,17], while inability or skills deficits to manage it leads to lower levels of psychological well-being [18,19].

Theoretical background

Tobin's [20] theory of coping strategies has inspired coping research through decades. The theory suggests that coping Strategies are categorized into coping responses based on coping target and directionality of response [21]. With this system, individuals are classified using a 2×2 matrix that quantifies the degree to which each strategy is generally employed. Coping efforts are first categorized as to whether they represent an engagement strategy, involving approach- related actions that result in confronting stressors, often viewed as a crucial factor in limiting the long-term psychological and physiological abnormalities of environmental stressors, or disengagement strategy (avoidance) seeking to limit exposure to noxious stimuli, often producing desirable short-term effects, but leading to longer-term problems [22]. Within these categories, the target of the coping effort is either Problem-focused or Emotion-focused [23]. Emotion-focused coping emphasizes the regulation of one's affective response, whereas Problem-focused coping emphasizes management of the stress- producing situation. This study adopted eight primary scale coping strategies, which include problem solving, cognitive restructuring, social contact, expressed emotions, problem avoidance, wishful thinking, and social withdrawal; to explore the extent to which they impact students' psychological well-being.

The present study

The objectives of the present study were to investigate among undergraduate students of Federal University, Lafia, Nasarawa state in Nigeria: (a) How well do the eight dimensions of coping strategies jointly predict psychological well-being? (b) Which of the dimensions best predict psychological well-being? (c) Which dimensions positively predict psychological well-being? And (d) Which dimensions predict negatively psychological well-being?

Empirical review

Previous studies have shown relationship between coping strategies and psychological well-being. For example, in Carnicer et al. [24] study, the relationship between coping strategies and psychological well-being was examined in a sample of 98 undergraduates aged between 19 and 42 years. Coping strategies were evaluated by means of the Coping Resources Inventory as per CRI-A for Adults by Moos [25], while psychological well-being was assessed using the Brief Symptom

Inventory as per BSI [26]. Their results show a relationship between coping style and psychological well-being.

Figure 1: Flow chart of the three stages to achieve the scatter-free image.

Some related research literature demonstrates relationship between coping strategies of students and their psychological well-being under stress. Among such literature is Riolli et al. [27] study, in which they examined the influence of Psychological Capital (PsyCap), on the well-being of university undergraduates during an academic semester. The concept of PsyCap, initially developed by Luthans et al. [28] to study how employees cope with stressors in the workplace was extended to the academic environment a university in the Western US. They hypothesized that psychological capital empowers students with the necessary mental strengths to cope with adverse circumstances. They in turn, designed a study in which PsyCap mediated the relationship between stress and indices of psychological and physiological well-being. They found that in the case of Psychological Symptoms and Health Problems, PsyCap buffered the impact of stress so that the relationship between stress and negative outcomes was reduced.

Similarly, Yang's [29] study among American graduate students and Asian international graduate students from Taiwan, China and Korea, confirmed the thesis that higher stress levels were associated with maladaptive coping strategies, while use of more adaptive coping strategies were associated with greater psychological well-being. The sample consisted of 131 American graduate students, and 77 Taiwanese, 53 Chinese, and 50 Korean international graduate students from 90 universities in the US. Pearson correlation coefficients, factorial ANOVAs, and multiple regression analyses were conducted for investigation. Yang [29] however, suggested that although Taiwanese international graduate students tended to use maladaptive coping skills, their psychological well-being was still great. In Figley's

[30] view, Yang's above finding may be a successful approach in some critical situations. That is, the use of maladaptive coping could prove beneficial when being held hostage or the role of paramedics at the time of response to the critical incident. My argument is that, the benefits of maladaptive coping strategies are transient, but portend serious consequences in the future. For example, Baron [31] observed that substance use may be an attractive but maladaptive form of coping, which could represent an instantly satisfying short-term fix for alleviating distress. However, continued dependence on drug use can, in the long run, produce more serious negative consequences over those of the distress itself.

In another study conducted by Qiao Li and Hu [32] in which they examined the relationships between demographic characteristics, sources of nursing stress and coping strategies, and psychological well-being within graduate nurses. These researchers administered four self-report questionnaires to a sample of 96 new graduate nurses in central China. Death and dying, workload, and inadequate preparation were the most common sources of stress, while the most frequently used coping strategies were planning, acceptance, and positive reframing. The results once again were consistent with previous literature as coping strategies (planning and acceptance) and psychological well-being were found to be significantly positively correlated. In addition, there were significant negative correlations between some sources of nursing stress and psychological well-being. A significant negative correlation was also found between the coping strategies of denial and behavioural disengagement and psychological well-being.

As can be discerned from the foregoing literature, none of the studies with students used the coping strategies inventory (long or short version) as their coping instrument. However, this does not either reduce the capacity of the respective studies to explain the

relationship between other variables and coping strategies or undermined the results. Conversely, it has warranted the use of different measures to further study on the influence of positive or effective coping strategies, which has shown variation in levels of well-being among university undergraduates. This approach has the capacity to balance

the research tilt from negative psychological health experiences to positive ones [33].

Methods

Participants

A total sample of 149 students comprised of 81 (54.4%) males and 68 (45.6%) females ranging in age from 18 to 33 years and a mean-age of (M=23.16,) was drawn from the university population. 124 (83.2%) indicated being single, while 25 (16.8%) were married; 116 (77.9%) indicated their religious belonging to Christianity and Islam had 33 (21.1%). The participants reflected all the three faculties, Social Sciences faculty dominated with 97 (65.1%), followed by Arts with 34 (22.8%) and the least, Sciences with 18 (12.1%) participants. Similarly, sociology department topped the representation with 73 (49.0%), while economics, history and social work had 15 (10.1%), 14 (9.4%) and 11

(7.4%) respectively. Biochemistry and botany had 5 (3.4%) respondents

each; theatre arts had 9 (6.0%), while creative arts had 8 (5.4%) respondents. Finally, computer science and zoology had 6 (4.0%) and 3 (2.0%) participants respectively. In relation to level of study, 400 level represented the highest frequency of 77 (51.7%), followed by 300 level with 30 (20.1%), while 100 and 200 levels came least with 27 (18.1%)

and 15 (10.1%) participants respectively. Only 22 (14.8%) indicated being accommodated on campus, while 127 (85.2%) resided off campus.

Instruments

Two standardized instruments were used to collect data in this study. These include Coping Strategies Inventory-Short as per CSI-S [20] and Scales of psychological well-being as per SPW [34].

Coping Strategies Inventory: The CSI-S consists of 32 items and uses five-point Likert responses from not at all (1) to very much (5), with questions such as “I tackled the problem head on.”; “I wished that the situation would go away or somehow be over with.” It has eight primary subscales (problem solving, cognitive restructuring, express emotions, social contact, problem avoidance, wishful thinking, self-criticism, and social withdrawal); four secondary subscales (problem engagement, problem disengagement, emotion engagement, and

emotion disengagement); and two tertiary subscale items (engagement and disengagement). Cronbach’s alpha ranges from 0.70 to 0.90 for primary, secondary, and tertiary subscales. Its validity has been established over the years by several studies [35]. In the present study, the internal reliability Cronbach’s alpha for the scale’s scores was 0.84. The Cronbach’s alpha coefficients for all the subscales ranged from 0.45 to 0.68. Individually, alpha coefficient for problem solving was 0.52; both cognitive restructuring and social withdrawal had coefficients of

0.45 each; express emotion, 0.65; social contact, 0.62; while problem avoidance and wishful thinking, had coefficients of 0.57 and 0.68 respectively.

Scales of psychological well-being: The scales of psychological well-being as per SPW [34] was used to measure psychological well-being: (eighteen items; e.g., “In general, I feel I am in charge of the situation in which I live”, “For me, life has been a continuous process of learning, changing and growth”). Students were asked to rate their agreement of each item based on their well-being experiences

on a 6-point Likert scale that ranged from (1=Disagree very much; 2=Disagree moderately; 3=Disagree slightly; 4=Agree slightly; 5=Agree moderately; and 6=Agree very much). The psychological well-being score was obtained by averaging the scale’s 18 items. In the present study, the internal reliability Cronbach’s alpha for the scale’s scores was 0.71.

Procedure

Firstly, an ethics approval was sought and obtained from management of the university. Thereafter, students were encountered in their lecture rooms and with the assistance of a senior lecturer, asked to voluntarily participate in the study. They were also told that volunteering was synonymous to implied consent and assured of anonymity. Participants were then asked to indicate how they cope with their stress in school on the CSI, and also indicate their present psychological well-being state on SPWB. It took them between five to ten minutes to complete the questionnaires, which were returned to the lecturer or researcher. Only the correctly completed ones were used for analysis.

Results

Descriptive statistics

The descriptive statistics and correlation for the variables are shown in the Table 1 below.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
TPWB	75.71	11.75	-									
Problem Solving	12.18	2.74	0.292*	-								
Cognitive Restructuring	12.19	2.96	0.290*	0.419*	-							
Express Emotion	11.57	2.89	0.294*	0.329*	0.611*	-						
Social Contact	12.10	3.19	0.232*	0.261*	0.447*	0.372*	-					
Problem Avoidance	10.59	3.14	-0.037	0.156	0.485*	0.494*	0.252*	-				
Wishful Thinking	11.83	3.17	0.137	0.282*	0.559*	0.472*	0.404*	0.281*	-			
Self-Criticism	10.30	2.80	-0.047	0.271*	0.341*	0.149	0.238*	0.072	0.296*	-		
Social Withdrawal	9.76	2.93	-0.165*	-0.053	0.255*	0.255*	0.002	0.389*	0.082	-	0.123	
Age	23.16	3.89	0.106	0.214*	0.082	0.004	0.034	-0.165*	0.248*	0.138	0.041	-

Coefficients ^a					
Model		Unstandardized Coefficients	Standardized Coefficients		T
		B	Std. Error	Beta	Sig.
1	(Constant)	68.293	5.866		11.643
	Problem Solving	0.682	0.347	0.159	1.967
	Cognitive Restructuring	1.324	0.439	0.334	3.018
	Express Emotion	1.068	0.396	0.263	2.694
	Social Contact	0.386	0.305	0.105	1.266
	Problem Avoidance	-0.906	0.333	-0.242	-2.723
	Wishful Thinking	-0.368	0.334	-0.099	-1.103
	Self-Criticism	-1.052	0.333	-0.251	-3.16
	Social Withdrawal	-0.951	0.324	-0.238	-2.937

^aDependent Variable: TPWB

A standard multiple regression was performed utilizing psychological well-being as the criterion and eight dimensions of coping strategies (Problem solving, cognitive restructuring, express emotion, social contact, problem avoidance, wishful thinking, self-criticism and social withdrawal) as predictors in order to determine if students’ psychological well-being scores could be predicted as a function of coping strategies dimensions scores. The ANOVA analysis was found to be statistically significant F (8,140)=7.20, p<0.0005, indicating that coping strategies with its dimensions jointly is a good predictor of psychological well-being. This multiple

regression accounted for approximately 29.2% of the variability, as indexed by the models' adjusted R² statistics. Justifying how well the eight dimensions of coping strategies predict psychological well-being of students and providing answer to research question one (Table 2).

Independently, cognitive restructuring coping strategy made the highest significant prediction to psychological well-being ($\beta=0.33$, $t=3.02$, $p<0.003$). Followed by express emotion coping strategy dimension ($\beta=0.26$, $t=2.69$, $p<0.008$), providing answer to the second research question. For the third research question, cognitive restructuring and express emotion coping strategies significantly predicted positively psychological well-being while problem solving ($\beta=0.16$, $t=1.96$, $p>0.051$), and social contact ($\beta=0.11$, $t=1.26$, $p>0.21$), were positively related to psychological well-being but failed to predict a significant relationship to the criterion variable. Finally, problem avoidance, wishful thinking, self-criticism and social withdrawal coping strategy dimensions negatively predicted psychological well-being, with self-criticism ($\beta=-0.25$, $t=-3.16$, $p<0.002$), problem

avoidance ($\beta=-0.24$, $t=-2.72$, $p<0.007$), and social withdrawal ($\beta=-0.24$, $t=-2.93$, $p<0.004$) significantly predicting psychological well-being. Wishful thinking coping strategy was negatively associated with psychological well-being but failed to significantly predict ($\beta=0.10$, $t=1.10$, $p>0.27$) the relationship. The positive significant predictors indicate a proportionate increase in both coping strategies and psychological well-being, whereas, the negatively predicted coping strategies denote an inverse relationship. That is, the higher the use of these negative coping strategies leads to lower psychological well-being and vice versa.

Discussion and Conclusion

The study sought to find out the combined impact of coping strategies on students' psychological well-being, their independent negative and positive impacts as well as the coping strategy, which made the highest unique contribution to psychological well-being. The results show that coping strategies jointly influenced students' well-being. Cognitive restructuring was the highest coping strategy that influenced students' well-being. In addition to it was express emotion coping strategy. Problem solving and social contact associated positively at different degrees to psychological well-being but failed to significantly predict psychological well-being, while cognitive restructuring, problem avoidance, wishful thinking, self-criticism and social withdrawal correlated negatively to psychological well-being. All the negatively correlated coping strategies, except wishful thinking significantly predicted psychological well-being.

These results are consistent with earlier studies [24,29,32] that posit relationship between coping strategies and psychological well-being. Previous studies also uphold the proposition that certain coping strategies alleviate stress and promote positive psychological outcomes, whereas others exacerbate stress and promote negative well-being [7,8]. The argument here is that the low per cent (29.2%) of the total variance explained in psychological well-being reflects the combination of both effective and non-effective coping strategies. Students who use higher effective coping strategies will experience high levels of well-being, whereas higher use of non-effective coping strategies results in lower levels of well-being. Even in circumstances where the use of maladaptive or non-effective coping strategies does

not reduce well-being, as Yang [29] noted in the short run, continued use could be detrimental in the long run.

These results discuss for the first time the impact of coping strategies used by Nigerian students to enhance their well-being. From the preceding arguments, it is concluded that students use both non-effective and effective coping strategies, and as such, students are bound to experience changes in their psychological well-being. However, the use of effective coping strategies has been shown to enhance students' well-being over the non-effective ones. It has also been established through this study that university students utilize a mix of coping strategies at varying degrees to mitigate the effects of personal, academic stress and negative life events.

An incidental finding from the zero-order correlation (Table 1), reveals that age was positively related significantly to problem solving, but significantly correlated negatively to problem avoidance and wishful thinking. These results may be a pointer to the fact that age could be implicated or possibly account for use of certain coping strategies. This factor, however, was not examined in the study and could serve as a plausible suggestion for exploration in further research.

The study has a number of possible limitations. A survey study is in itself limited to the extent to which respondents give honest self-reports. A more in-depth qualitative study may serve to correct this limitation. In another dimension, the inclusion of demographic factors (such as age, gender and relationship differences) may provide greater insight into differences in use of these strategies to easily identify at risk groups. These limitations can be remedied in further studies in the area.

Although this study was conducted in one university, the results should not be limited to the university under study but generalized to other conventional universities in Nigeria. This is because coping is a natural human response to stressful situations, and these responses are geared towards reducing the effects of overtaxed situations with a view to maintain or increase well-being.

Despite the limitation, the findings of this study have the potentials to foster better understanding about the types of coping strategies students in Nigerian universities adopt in efforts to mitigate stress and enhance their well-being. Students can through this understanding learn the difference between effective and maladaptive coping strategies, and accordingly, make informed decisions. It could also serve as evidence based information for professionals to design coping awareness programmes for students in need to boost their health. University management can also leverage on this information to assess the general well-being of students.

References

1. Seligman MEP, Csikszentmihalyi M (2000) Positive psychology: An introduction. *Am Psychol* 55: 5-14.
2. Seligman MEP (2008) Positive health. *Applied Psychology: An International Review* 57: 3-18.
3. Ramli NH, Alavi M, Mehrinezhad SA, Ahmadi A (2018) Academic stress and self-regulation among university students in Malaysia: Mediator role of mindfulness. *Behav Sci* 8: 12.
4. Glanz K, Rimer BK, Lewis FM (2002) Health behavior and health education: Theory, research and practice. Wiley & Sons, San Francisco, USA.
5. Lazarus RS (1993) Coping theory and research: Past, present, and future. *Psychosom Med* 55: 234-247.
6. Lazarus RS (2000) How emotions influence performance in competitive

- sports. Sport Psychol 14: 229-252.
7. Lazarus RS, Folkman S (1984) Stress, appraisal and coping. Springer, New York, USA.
8. Smith MM, Saklofske DH, Keefer KV, Tremblay PF (2015) Coping strategies and psychological outcomes: The moderating effects of personal resiliency. J Psychol: 150: 318-332.
9. WHO (2003) Strategic directions for improving the health and development of children and adolescents.
10. WHO (2006) Prevention and care of illness.
11. WHO (2007) Adolescents, social support and help-seeking behaviour: An international literature review and programme consultation with recommendations for action.
12. Keyes CLM, Shmotkin D, Ryff CD (2002) Optimizing well-being: The empirical encounter of two traditions. J Pers Soc Psychol 82: 1007-1022.
13. Huppert FA (2009) Psychological well-being: Evidence regarding its Causes and Consequences. Appl Psychol Health Well Being 1: 137-164.
14. Diener E (1984) Subjective well-being. Psychol Bull 95: 542-575.
15. Lyubomirsky S, King L, Diener E (2005) The benefits of frequent positive affect: Does happiness lead to success? Psychol Bull 131: 803-855.
16. Weiten W, Dunn D, Hammer EY (2011) Psychology applied to modern life: Adjustment in the 21st century. Wadsworth, London, UK.
17. Clarke AT (2006) Coping with interpersonal stress and psychosocial health among children and adolescents: A meta-analysis. J Youth Adolesc 35: 11-24.
18. Hallis D, Slone M (1999) Coping strategies and locus of control as mediating variables in the relation between exposure to political life events and psychological adjustment in Israeli children. Int J Stress Manag 6: 105-123.
19. Ojala M (2012) Regulating worry, promoting hope: How do children, adolescents, and young adults cope psychologically with climate change? Int J Environ Sci Educ 7: 537-561.
20. Tobin DL (1995) Scoring information for the CSI-SF.
21. Tobin DL, Holroyd KA, Reynolds RV, Wigal JK (1989) The hierarchical factor structure of the coping strategies inventory. Cognit Ther Res 13: 343-361.
22. Suls J, Fletcher B (1985) The relative efficacy of avoidant and non- avoidant coping strategies: A meta-analysis. Health Psychol 4: 249-288.
23. Krohne HW (1993) Vigilance and cognitive avoidance as concepts in coping research. In: HW Krohne (Edr.), Attention and avoidance: Strategies in coping and aversiveness. Hogrefe & Huber, Seattle, WA, USA.
24. Carnicer JG, Calderon C (2013) Coping strategies and psychological well-being among teacher education students. European Journal of Psychology of Education 28: 1127-1140.
25. Moos RH (1993) Coping responses inventory: CRI from adults. Psychological assessment resources, Professional manual, Odessa, TX.
26. Derogatis LR, Spencer PM (1982) Brief symptom inventory: Administration, scoring, and procedure manual. Clinical psychometric research, Baltimore.
- 27.
- 28.
- 29.
- 30.
31. Riolli L, Savicki V, Richards J (2012) Psychological capital as a buffer to student stress. Scien Res 3: 1202-1207.
32. Luthans F, Youssef CM, Avolio BJ (2007) Psychological capital: Developing the human competitive edge. Oxford University Press, Oxford, UK.
33. Yang YT (2010) Stress, coping, and psychological well-being: Comparison among american and asian international graduate students from Taiwan, China, and South Korea. PhD Thesis submitted to the graduate degree program in Psychology and Research in Education and the Graduate Faculty of the University of Kansas, USA.
34. Figley CE (2008) Dissociation. Paper presented at the meeting of the 115th American Psychological Association convention. Boston, MA, USA.
35. Baron SW (2003) Self-control, social consequences, and criminal behavior: Street youth and the general theory of crime. J Res Crime Delinq 40: 403-425.
- 36.
- 37.
38. Qiao G, Li S, Hu J (2011) Stress, coping and psychological well-being among new graduate nurses in China. Home Health Care Manag Pract 23: 398-403.
39. Seligman MEP (1998) Learned optimism: How to change your mind and your life. Pocket Books, New York, USA.
40. Ryff CD, Singer B (1998) The contours of positive human health. Psychol Inq 9: 1-28.
41. Addison CC, Campbell-Jenkins BW, Sarpong DF, Kibler J, Singh M, et al. (2007) Psychometric evaluation of a coping strategies inventory short- form (CSI-SF) in the jackson heart study cohort. Int J Environ Res Public Health 4: 289-295.