IMPACT OF EMOTIONAL INTELLIGENCE, DISPOSITIONAL OPTIMISM AND EMOTIONAL EXHAUSTION ON THE PSYCHOLOGICAL WELL-BEING OF POLICE OFFICERS IN IBADAN, OYO STATE, NIGERIA

Odedokun Solomon Adekunle

Department of Counselling and Human Development Studies, University of Ibadan, Ibadan, Nigeria

Copyright © 2017 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT: The purpose of this study was to investigate the impact of emotional intelligence, dispositional optimism and emotional exhaustion on the psychological well-being of police officers in Ibadan, Oyo State, Nigeria. Two hundred and seventy- six officers constituted the study's sample. Both the independent and the dependent variables were measured with relevant standardized instruments. Three research questions were answered in the study. The results showed that the independent variables both jointly and relatively contributed significantly to the prediction of psychological wellbeing of the police officers. On the strength of these findings, it was recommended that factors such as working overtime, inadequate and delay in salary, obsolete equipment, lack and delay in promotion, staff shortages, in-fighting among senior officers for promotion/ posting, inadequate basic and continuous training of police personnel, which could lead to increase in emotional exhaustion, decrease in dispositional optimism and poor emotional intelligence skills, should be targets for intervention for the police administrators

Keywords: Emotional intelligence, dispositional optimism, emotional exhaustion, psychological well-being, police officers.

INTRODUCTION

Nigeria is going through a trying period with regards to the issue of security. The nation is at a crossroads in terms of security challenges. This could be seen in the diverse manifestations of crimes and criminal acts being perpetrated virtually every day in all the nooks and crannies of the nation. The degree of these crimes and criminal acts differs from one region to another. While it is highway robbery, bank robbery, cybercrime, assassination, murder, communal and land dispute in the western part of the country, it is religious, communal and ethnicity challenges in the Middle Belt. At a time when the nation was to heave a sigh of relief from the militancy imbrogolio in the Niger Delta region, the problem metamorphosed into kidnapping and ransom demanding. While mustering the security agencies to put that under control, the Boko Haram insurgency emerged from the northern part of the country. This insurgency has led to loss of lives and property. It is currently threatening the very fabric of the coexistence of the nation.

The overall effect is that police personnel in Nigeria seem frustrated and helpless and this makes the citizens hold the police profession in very low esteem. According to [1], the image of the Nigerian police has never been so called into question as it is in recent times. [18], argues that the policing job, perhaps more than any other job not only requires absolute professionalism, but also total commitment expected to make the practitioners proactive and efficient. This becomes expedient in a multi-ethnic country like Nigeria with increase profiling of crime and peace-threatening activities, like kidnapping, ethnic crisis, armed robbery, religious crisis, political violence, and, of recent, the Boko Haram saga. All these, if not well handled, could put pressure on and unnecessarily exposes the police officers to psychological trauma and hinder them from enjoying the perfect state of psychological well-being.

Psychological well being, in simple terms, can be understood as the state of being well, happy or prosperous. Psychological well being means different things to different people. Psychological well-being is constructed out of three

IMPACT OF EMOTIONAL INTELLIGENCE, DISPOSITIONAL OPTIMISM AND EMOTIONAL EXHAUSTION ON THE PSYCHOLOGICAL WELL-BEING OF POLICE OFFICERS IN IBADAN, OYO STATE, NIGERIA

components: life-satisfaction, positive affect, low negative affect, The judgments of psychological well-being are irreducibly subjective and the meaning and content of the term fluctuate, depending on who is using it and why it is being used. [17], in their paper entitled "Who is happy?," define psychological well-being as frequent positive affect, infrequent negative affect and a global sense of satisfaction with life. Based on the foregoing discussion, an operational definition of psychological well-being may include the following: Firstly, it may be understood as a scientific-sounding term for what people usually mean by happiness. Secondly, it refers to what people think and feel about themselves, that is the cognitive and affective conclusions they reach when they evaluate their existence. Thirdly, it involves the individual's entire condition, that is social, and spiritual aspects of one's existence. Fourthly, psychological well-being is a relative state of affairs relative to the situation as well as to the values of the particular culture one belongs to.

Several studies have been carried out on the concept of psychological well-being in different professions. However, not much has been done on the police, especially in Nigeria, where researches on the police are still generally scanty. A look at the available studies shows that none has been exclusively carried out on the police officers' psychological well-being; hence, the need for this study.

[11] avers that emotional intelligence refers to the capacity for recognizing one's feelings and those of others, for motivating and for managing emotions well in oneself and in one's relationships. [29], describe emotional intelligence as the ability to use one's awareness and sensitivity to discern the feelings underlying interpersonal communication, and to resist the temptation to respond impulsively and thoughtlessly, but instead to act from receptivity, authenticity and candour.

Policing is one of the few professions that is responsible for maintenance of law and order, in an unpredictable and dynamic environment. The success of police organizations depends, to a large extent, on police personnel's emotions, characteristics and well- being. Trait emotional intelligence skills, such as being above average in communication skills, interpersonal relationship, reactions appropriate to the presenting situation, and the ability to resolve conflicts satisfactorily have been listed as desirable characteristics in police officers. [12], using a wide range of sampling technique and assessment methods, confirm that social relationships are a very important determinant of happiness and subjective well-being of employees, police officers inclusive.

[28], conducted a study on emotional intelligence training and its implications for stress on the health and performance of policemen and found that training resulted in increased emotional intelligence, improved health and psychological wellbeing. It ultimately led to improved efficiency. [20], examined the relationship between emotional intelligence, negative mood regulation, and burnout among police officers. Regression analysis supported the main hypothesis, which predicted an inverse relationship between emotional intelligence, as measured by the EQ-I, and burnout. Results further supported a positive relationship between emotional intelligence and negative mood regulation. Emotional intelligence has also been found to influence job satisfaction which directly influences psychological well-being. No doubt, emotional Intelligence has immense impact on employees; behaviour and their psychological well-being. Similarly, [20], examined the relationship between emotional intelligence and police officers. The results of the study supported a positive relationship between emotional intelligence and well being.

From the foregoing, it can be concluded that emotional intelligence plays a significant role on the psychological wellbeing of the employees especially police officers. Simply put, a psychologically well officer is an asset to a functional and ever dynamic police institution. This study therefore examined the relationship between emotional intelligence and psychological well- being of police personnel in Ibadan, Oyo State , Nigeria.

Dispositional optimism is another construct in this study. In the last few years, a significant body of research has been carried out on the effectiveness of optimism on the well-being of the individual. The psychological phenomenon of optimism can be understood in different ways. Optimism can be seen as a "disposition" or "attributional style." Dispositional optimism is a generalized personality trait present across time and situations. It influences the individual to interpret past, present, and future events of life in a positive manner [5], [6]. [19],conceptualize optimism as an "attributional style," where the individual possesses an inner strength that facilitates interpreting their failures and negative events as what will not occur again and can be overcome if it occurs.

The work of police personnel is often demanding and stressful. They have to protect lives and property and prevent crimes [21]. They are often engaged in situations involving injustice, crime, public apathy, injuries, and fatalities. [9], [15]. This exposure to adverse events can have negative impact on their physical and mental health [3]. However, they are still expected by their peers, superiors, and members of the public to approach these stressful situations in an objective and professional manner and to be effective decision- makers and problem- solvers [9], [13].

Dispositional optimism could play a significant role in adaptation to stressful conditions. This is because, when an individual is faced with challenging situations, an optimistic individual with dispositional optimistic would show adaptability skills, enduring traits and a never- give- up spirit and attitude no matter the challenges. Studies showed that there is an interactive relationship between optimism and resilience. In people who are optimistic in the face of stress, tend to use effective coping strategies, and this, in turn, leads to more resilient attitude [31], [6], which leads to desired psychological well-being. It can be deduced that dispositional optimism play a significant role on psychological wellbeing of an individual, especially the police officers, owing to the nature of the profession, that is stressful and emotionally demanding. This study, therefore, investigated the influence of dispositional optimism on the psychological well-being of police officers in Oyo State, Nigeria.

Policing is one of the few professions that is engrossed in emotional interaction with the public. This is one of the reasons the officers are greatly involved in high level of emotional exhaustion.[18]. A high level of emotional exhaustion can have significant implications for police organizational performance as well as the well-being of the officers. For example, it has been strongly linked with a number of key work-related attitudes and behaviours, including intention to leave the organizational, commitment, performance, absenteeism and resignation [2], [7].

Emotional exhaustion, an aspect of job burnout, has been defined as increase depletion of emotional resources and inability to give oneself at a psychological level. People have to last a lifetime and strenuous task, such as policing, eventually becomes too arduous and exacting. While emphasizing efficiency, the well-being of the employees should also be taken into consideration. These could then impact on productivity, efficiency and productivity.

The working conditions of the policeman in Nigeria are discouraging in many aspects. His training is deficient in equipping him to meet the challenges of his work, and public condemnation is bad enough to add insult to injury. Hee is faced with peace -threatening activities, like political and religious activities, lack of training; and organizational challenges like political interference, delay in salary, as well as in-fighting among senior officers. All these could lead to unresolved frustration and could eventually affect the psychological well-being of the officers. This study, therefore, investigated the impact of emotional intelligence, dispositional optimism and emotional exhaustion on the psychological well-being of police officers in Ibadan, Oyo State, Nigeria.

RESEARCH QUESTIONS

The research provided answers to the following questions:

- What is the relationship between the independent variables (emotional intelligence, dispositional optimism and emotional exhaustion) on the psychological well-being of police officers in Ibadan, Oyo State, Nigeria.
- What is the joint contribution of the independent variables (emotional intelligence, dispositional optimism and emotional exhaustion) on the psychological well-being of police officers in Ibadan, Oyo State, Nigeria.
- What is the relative contribution of the independent variables (emotional intelligence, dispositional optimism and emotional exhaustion) on the psychological well-being of police officers in Ibadan, Oyo State, Nigeria.

METHODOLOGY

RESEARCH DESIGN

The descriptive survey research design was adopted for the study. The researcher investigated the influence of the independent variables (emotional intelligence, dispositional optimism and emotional exhaustion) on the psychological wellbeing of police officers in Ibadan, Oyo State, Nigeria.

PURPOSE OF THE STUDY

The primary purpose of this study, was to investigate the significant impact of these three predicting variables (emotional intelligence, dispositional optimism and emotional exhaustion) on the psychological wellbeing of police officers in Ibadan, Oyo State, Nigeria.

PARTICIPANTS

The participants consisted of two hundred and seventy- six participants, comprising ninety -two females (33.3%) and one hundred and eighty -four males (66.7%). The ages of the respondents ranged from 34 years to 49 years, with mean and standard deviation of ages as 34.5 years and 4.83, respectively.

INSTRUMENTATION

PSYCHOLOGICAL WELLBEING SCALE

The psychological well-being scale constructed by [22] was adopted to measure the psychological well-being of the police officers. It is a fifteen-item items scale with responses based on four points: Strongly Agree (SA), Agree (A), Disagree and Strongly Disagree (SD). The scale has Cronbach's alpha of .82.

EMOTIONAL INTELLIGENCE SCALE

The Emotional Intelligence Scale developed by [27] was used to measure police officers' emotional intelligence. It is a thirty-three- item scale. According to Shuttle et al. (1998), the scale has the Cronbach alpha coefficient of 0.85. The responses are anchored on a four- point Likert scale: Strongly Agree (SA), Agree (A), Disagree and Strongly Disagree (SD).

DISPOSITIONAL OPTIMISM

The dispositional optimism of the officers was measured with the Revised Life Orientation Test (LOT-R) [23]. The LOT-R consists of six Likert-type items pertaining to optimism along with four filler items which are not included in scoring. Each item is scored on a scale from one to five, yielding total scores for the measure of between six and thirty. Lower total scores on the measure indicate greater optimism. The scale has demonstrated acceptable internal consistency (Cronbach's alpha = 0.78) and test-retest reliability (correlations ranging from 0.56 to 0.79). The internal consistency of the scale was established by this study and it returned a Cronbach coefficient alpha of 0.85.

EMOTIONAL EXHAUSTION

The emotional exhaustion scale was designed to measure the feelings of being emotionally overextended, exhausted and sapped by individual police officer. It was adapted from [14]. This scale has 9 items to be responded to on a 5 point scale : "never" (1), "a few times a year" (2), "a few times a month"(3), "once a week"(4), "everyday"(5). The instrument was reported to have alpha reliability co-efficient of 0.9 in the Cronbach alpha scale. The internal consistency of the scale was established by this study and it returned a Cronbach coefficient alpha of 0.87. Three of the items are: "I feel emotionally drained from my work"; "I feel frustrated by my job"; and "I feel like I am at the end of the rope".

PROCEDURE

Three hundred copies of the questionnaires were administered to the participants in their various stations following the approval of the police authorities of which two hundred and seventy –six were retrieved. The administration of the instruments took five weeks.

Data Analysis

Data were analysed using Pearson Product Moment Correlation (PPMC) and multiple regression to investigate the effects of emotional intelligence, dispositional optimism and emotional exhaustion on psychological well being among the police officers in Ibadan All analyses were determined at a significance level of 0.01

RESULTS

	Mean	S D	Ν	1	2	3	4
Psychological well-being	43.24	7.15	276	1.000			
Emotional Intelligence	85.32	7.29	276	.710 ^{**}	1.000		
Dispositional Optimism	34.22	7.19	276	.412**	.041	1.000	
Emotional Exhaustion	37.20	7.42	276	.525**	.082	.146	1.000

Table 1. The Mean, Standard Deviation and Correlation among the variables

The above table reveals that there were significant correlations between the independent variables- emotional Intelligence (r= .979, P<.05), dispositional optimism (r= .938, P<.05), emotional exhaustion (r= .936, P<.05) and the dependent variable, psychological well- being of the police officers.

Tehla 2	laint Contribution o	fthe Indonenden	+ Variables to De	wahalaniani wall h	sing of the police officers
Tuble 2.	Joint Contribution of	y the maepenaen	l vullubles to Ps	sychological well-be	eing of the police officers

R = .575						
Multiple R		.724				
Multiple R ² adjusted		.691				
Standard Error Estimate = 9.99		9.995				
Analysis of variance						
Model	Sum of squ	uare	Df	Mean square	F	Р
Regression	63923.757		3	13432.725	146.325	<.05
Residual	38348.465		272	97.875]	
Total	115678		275			

Table 2 shows that there was joint effect of emotional intelligence, dispositional optimism and emotional exhaustion on psychological wellbeing among the officers. It also shows a value of (R) = 0. 575 and R^2 = .724 and a multiple adjusted R^2 = .691. This means that 69.1% of the variance in the police officers' psychological well-being was accounted for by the predictor variables when taken together. The combination of the independent variables, which yielded an F-ratio of 146.325, (P<0.05) showed that there was joint effect of the independent variable on the police officers' psychological well-being.

Variables	Unstandardised Coefficients B	Std. Error	Standardised Coefficients (beta)	Т	Sig.
Constant	4.448	3.312		1.3741	.000
Emotional Intelligence	.432	.096	.237	2.576	.004
Dispositional Optimism	.320	.043	.341	4.326	.001
Emotional Exhaustion	.547	.061	.568	8.521	.000

Table 3. Relative Contribution	of the independent variables to Psychological well-being of the police officers
	, the macpenacity variables to i sychological tren being of the police officers

Table 3: captures the relative contribution of each of the independent variables to the psychological well-being of the police officers. In terms of the magnitude of contribution, emotional exhaustion was the most potent contributor to the officer's psychological well-being (β = .568, t= 8.521, P<.05), followed by dispositional optimism (β = -.341, t= 4.326, P<.05) and emotional intelligence (β = .237, t= , P<.05).

DISCUSSION

The contribution of emotional exhaustion, emotional intelligence and dispositional optimism to the psychological wellbeing of the police officers did not come as a surprise. This is because when an officer is exhausted emotionally, poor organisational performance, lack of organisational commitment, absenteeism, resignation, use of violence and reduction in the level of productivity, which are signals of the fact that the officers is not psychologically balanced. (psychologically wellbeing) may ensue. Optimism was found to have predicted psychological wellbeing among the officers. This assertion is corroborated by [10], [25]. They all notes that there is a positive correlation between optimism and physical/mental wellbeing, as individuals with an optimistic style will continue to pursue their valued goals and regulate themselves and their

IMPACT OF EMOTIONAL INTELLIGENCE, DISPOSITIONAL OPTIMISM AND EMOTIONAL EXHAUSTION ON THE PSYCHOLOGICAL WELL-BEING OF POLICE OFFICERS IN IBADAN, OYO STATE, NIGERIA

personal states using effective coping strategies even in the face of intimidating challenges. On the contrary, the individual with low optimism will give up when faced slightest challenges. Also, emotional intelligence was found to have predicted the psychological well-being of the officers. [28], in a study on emotional intelligence training and its implications for stress on health and performance of policemen, established the fact that emotional intelligence training resulted in increased emotional intelligence, improved health and psychological well being which ultimately led to the improved efficiency. Besides, emotional exhaustion, which is a form of job stress, was also found to have predicted the psychological well -being of the police officers. This assertion is also supported by [20], who examined the relationship between emotional intelligence, well-being and job burnout (which is the advanced stage of emotional exhaustion) among police officers. The study found a positive relationship between emotional exhaustion and the well being of an individual.

IMPLICATIONS AND RECOMMENDATIONS

The study has clearly shown that the independent variables in this study (emotional intelligence, dispositional optimism and emotional exhaustion) played significant roles on the psychological well-being of the police officers in Ibadan, Oyo state, Nigeria. The independent variables examined proved to be the facilitators of psychological wellbeing among the police officers. In view of this, it is hereby recommended that factors such as working overtime, inadequate and delay in salary, obsolete equipment, lack and delay in promotion, staff shortages, in-fighting among senior officers for promotion/ posting, inadequate basic and continuous training of police personnel, which could lead to increase in emotional exhaustion, decrease in optimistic and poor emotional intelligence skills should be targets for intervention for police administrators

Interventions like increasing awareness of emotional exhaustion and coping strategies should be introduced at all levels in order to enhance the capacity of police officers to cope with their job requirements, which, if not well handled, could lead to psychological trauma. Lastly, emotional intelligence training and dispositional optimistic training, which have proved to reduce both job and psychological stress and to enhance individual mental health and inner strength to withstand challenges of life that an individual officer could face while performing his or her constitutional role, should be designed for the officers. Policing in Nigeria can be at par with itscounterparts in the developed world if the factors militating against the profession are critically looked into and the problems identified are adequately addressed.

LIMITATIONS AND FUTURE DIRECTIONS

The study was not without its limitations. It is widely acknowledged that surveys measuring sensitive issues, such as psychological well-being, have inbuilt limitations either within the instruments used or the fact that the tools used for data collection are based on the self-report format. The human dimension and the integrity and honesty of reporting personal views are limitations. Serious efforts were made to ensure that the questionnaire items are clearly understood by the police officers under investigation. Also, the research was carried out among police officers in Ibadan; caution has to be taken while generalising the findings

REFERENCES

- [1] A.O. Aremu, "Enhancing job satisfaction of Nigeria police". *Nigeria Journal of Applied Psychology*, vol 4, pp. 44-48, 1998.
- [2] A.B. Bakker, E. Demerouti, and W.B. Schaufeli, "Dual processes at work in call centre: An application of the job demands-resources model". *European Journal of Work and Organizational Psychology*, vol. 12, pp. 393–417, 2003.
- [3] C.R. Bartol, and A.M. Bartol, *Introduction to forensic psychology* (1st ed.). Thousand Oaks, CA: SAGE. 2004.
- [4] G.A. Bonanno, "Resilience in the face of loss and potential trauma". *Current Directions in Psychological Science*, vol. 14, pp. 135-138, 2005
- [5] Carver, C. S., and Scheier, M. F. Optimism, pessimism, and self-regulation. In E. C. Chang (Eds.), Optimism and pessimism: Implications for theory, research, and practice Washington, DC: American Psychological Association. pp. 31-52. 2001
- [6] C.S. Carver, M.F Scheier, and S.C. Segerstrom, "Optimism". Clinical Psychology Review, vol. 30, pp. 879-889, 2010
- [7] R. Cropanzan, D.E. Rupp, and Z.S. Byrne, "The relationship of emotional exhaustion to job performance ratings and organizational citizenship behaviour". *Journal of Applied Psychology*, vol. 88: pp.160–169, 2003.
- [8] J. Davey, P. Obst, and M. Sheehan, "Demographic and workplace characteristics predicting stress and job satisfaction within the police workplace'. *The Journal of Police and Criminal Psychology*, 16(1): 29-36, 2001
- [9] R.M. Gibbons., and B. Gibbons, "Occupational stress in the chef professional." *International Journal of Contemporary Hospitality Management*, vol.19, pp.32-42, 2007

- [10] E.J. Giltay, F.G. Zitman, and D, Kromhout, "Dispositional optimism and the risk of depressive symptoms during 15 years of follow-up: The Zutphen Elderly Study". *Journal of Affective Disorders*, vol. 91,pp. 45-52, 2006
- [11] Goleman, Working with emotional intelligence. New York, NY: Bantam Books.1998.
- [12] J.F. Helliwell, "How's life? Combining individual and national variables to explain subjective well-being"? Economic Modelling, Vol 20, pp. 331-60, 2003
- [13] A. Malach-Pines, and G. Keinan, "Stress and burnout in Israel police officers during Palestinian uprising (Intifada)". *International Journal of Stress Management*, vol. 14, pp.160-174, 2007.
- [14] C. Maslach, and S.E. Jackson, Maslach Burnout Inventory: Manual research edition. Palo Alto, CA: University of California, Consulting Psychologists Press. 1986
- [15] W.P. McCarty, J.S. Zhao, and B.E. Garland, "Occupational stress and burnout between male and female police officers: Are there any gender differences"? *International Journal of Police Strategies Management*, vol. 30, pp. 672-691,2007
- [16] M. Morash, R. Haarr, and D. Kwak, "Multilevel influence of police stress. *Journal of Contemporary Criminal Justice*, vol. 22, pp. 26-43, 2006
- [17] D. G. Myers and E. D. Diener "Who is happy"? Psychological Science vol.6, no.1. Pg 10-19, 1995
- [18] S.A. Odedokun, "Differential Influence of Demographic Factors on Job Burnout among Police Officers in Ibadan, Oyo State". Mediterranean Journal of Social Sciences Vol 6, No 3.pp. 519-526, 2015
- [19] C. Peterson, and M.E. Seligman, "Explanatory style and illness". *Journal of Personality Assessment*, vol. 55, 237-265, 1987
- [20] S. Ricca "Emotional Intelligence, negative mood regulation expectancies, and professional burnout among police officers". Dissertation Abstracts International, 64, 09 B., (UMI No. 3106382).
- [21] Rollinson, Organizational behaviour and analysis: An integrated approach (3rd ed.). London, England: Pearson Education. 2005
- [22] C.D, Ryff, "Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Wellbeing." *Journal of Personality and Social Psychology* 57 no. 6: pp. 1069-1081, 1989
- [23] M.F. Scheier, C.S. Carver, and M.W. Bridges, "Distinguishing optimism from neuroticism (and trait anxiety, selfmastery, and self-esteem): A reevaluation of the Life Orientation Test." *Journal of Personality and Social Psychology*, vol. 67 no. 6, pp. 1063-1078,, 1994.
- [24] Scheier, M. F., Carver, C. S., and Bridges, M. W. *Optimism, pessimism, and psychological well-being.* In E. C. Chang (Ed.), Optimism and pessimism: Implications for theory, research, and practice Washington, DC: American Psychological Association. pp. 189-216, 2001.
- [25] Seligman, M. E. P. Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfilment. New York, NY: Free Press. 2002
- [26] Sharot, T. *The optimism bias: A tour of the irrationally positive brain*. New York, NY: Pantheon Books. 2011
- [27] N.S. Schutte, J.M. Malouff, L.E. Hall, D.J. Haggerty, J.T. Cooper, C,J. Golden, C.J., and L. Dornheim, "Development and validation of a measure of emotional intelligence". *Personality and Individual Differences*, vol. 25, pp. 167-177, 1998.
- [28] M. Slaski, and S. Cartwright. "Health, performance and emotional intelligence: An explanatory study of retail managers." *Stress and Health*, vol 18: pp. 63-68, 2002.
- [29] S. Wolmarans "Executive Intelligence and Emotional Competencies of the Future, "*HR Future,* Vol 1, No. 3, pp. 35-43, 2001.
- [30] T.A Wright, and R. Cropanzano, "Psychological well-being and job satisfaction as predictors of job performance". *Journal of Occupational Health Psychology*. vol. 5:pp. 84–94., 2000.
- [31] X. Yu, and J. Zhang, "Factor analysis psychometric evolution of the Conner-Davidson Resilience Scale (CD-RISC) with Chinese people". *Social Behavior and Personality*, vol. 35 no 1, pp. 19-30, 2007