Extraversion, Self-Esteem and Life-Satisfaction as Predictors of General Well-Being among Academic College Residents at a Higher Learning Institution

NOR BA'YAH ABDUL KADIR ASMAWATIDESA NORAINI ABDUL RAOP ANGELA CHAN NGUK FONG

ABSTRACT

This initial study was conducted from September to February 2009 to examine predictors of general well-being among academic college residents at a higher learning institution. A set of questions was sent to 150 students who identified themselves as residents of the academic college, Universiti Kebangsaan Malaysia. The Eysenck Personality Questionnaire — short version was used to measure personality traits. The Rosenberg Self-esteem Questionnairewas used to measure self-esteem and Satisfaction with Life Scale to measure life-satisfaction. The general well-being scale was used to measure general well-being. Inter-correlation analysis has shown that extraversion was significantly correlated to self-esteem, life-satisfaction and general well-being whilst life-satisfaction was significantly correlated to general well-being. Multiple regression analysis showed that three factors significantly contributed to general well-being with a 24% explained variance. No significant differences were found between gender and general well-being.

INTRODUCTION

General well-being has become increasingly prominent as anissuefor serious research investigation in positive psychology, social psychology, social psychology, economy, industrial psychology, organizational behaviour, and health and social care. General well-being consists of multidimensional constructs of both cognition, "from the head" and affect, "from the heart" (Librán, 2006; Andrews & McKennell, 1979). Bradburn (1969) defined general well-being in terms of the presence of positive affect and as opposed to negative affect. Therefore, those individuals who scored higher in positive affect than in negative affect would have high scores on psychological well-being and vice versa. Positive affect and negative affect alone does not reflect general well-being because affect balance influences the global index of well-being (Costa & McCrae, 1980). Therefore, life-satisfaction was added as a complementofa cognitive part of general well-being (Andrews & Withey, 1976). In other words, to signify a person with complete general well-being, one must have a positive affect, the absence of negative affect and life-satisfaction.

Reports on general well-being have shown that various factors have been consistently recognized as predictors of general well-being. These factors includenational economy status, income, socio-demographics, jobsatisfaction, health and so forth. There is evidence that socio-demographics had modest correlations on general wellbeing (Diener, 1984). It is also clear that personality influences general well-being (Lucas, 2008) although there are differences in personality across region (Plaut et al., 2002; Rentfrow et al., 2008). Extraversion for instance was a stronger predictor of general well-being (Hotard, Robert, McFatter, McWhirter, & Stegall, 1989) than other types of personality. Research on personality and well-being suggested that general well-being associates with a stability of extraversion (Francis, 1999). However, there is a debate concerning the issue of personality and general well-being, in that extraversion has a tendency to be highly correlated to affective components (Schimmack, Diener, & Oishi, 2002; Schimmack et al., 2002). Extraversion is also seen to be highly associated with positive social interactions that may contribute to general well-being (Argyle & Lu, 1990; Hills, Argyle, & Reeves, 2000). Further examination suggested that extraversion traits are likely to be in the same factor with a positive affect (Steel, Schmit, & Shultz, 2008). This is also evidence that affectivity is significantly associated with extraversion (Watson, Clark, & Tellegen, 1988). Thus, general well-beingcan be achieved through personality (Costa & McCrae, 1988). On this basis, a person is more cheerful and prosperous than the others because he or she is extravert (Hayes & Joseph, 2003).In line with other findings, Fulmer and colleagues (2010) confirmed that extraversion was strongly associated with general well-being. In addition, they suggested that extraversion and general well-being is strengthened when other people in the culture are highly extraverted. Thus, it is predicted that extraversion can be a good indicator of general wellbeing of individuals 20 years later (Librán, 2006). In addition, there is also evidence that extraversion can be a predictor of different measures of well-being (Garcia, 2011).

Not many studies have reported on the relationships between self-esteem and general well-being. Only one study verified that explicit self-esteem is the strongest predictor (Bosson et al., 2000; Schimmack & Diener, 2003) of general well-being after other factors have been taken into account. Self-esteem evaluations were based on two distinct concepts. Self-worth is based on cognition and self-regard on affective. These two concepts reflect on one's competencies, talents, and attributes while the other refers toone's feelings about oneself. In social strands, social investigators study the importance of self-esteem in respect of negative peer influences (Donnellan, Trzesniewski, Robins, Moffits, &Caspi, 2005), cultural differences and personality (Fulmer et al., 2010; Cai, Brown, Deng, & Oakes, 2007), emotional well-being (Ciarrochi, Heaven, & Davies, 2007), and social problems (Owens, 1994). Meanwhile other clinical and medical researchers found that self-esteem is also likely to be associated with mental disorders (Michalak, Teismann, Heidenreich, Ströhle, &Vocks, 2011) or other types of medical problems. Relating the previous findings on self-esteem in relation to general well-being, we postulate that a high level of self-esteem will contribute to the general well-being. This is in line with cognitive theories that suggest that self-esteem is an absolute prerequisite for healthy functioning (op cit). The most crucial for self-esteem is the relationship the individual has towards his or her current thought, not the cognition contents (Michalak et al., 2011). The positive thought he or she has would lead to the increasing positive affective state of feeling good.

Relating to life-satisfaction issues, some social indicatorresearchers suggested that both life-satisfaction and general well-being shared a similar construct. Using a life-satisfaction scale and well-being scale, vast research has shown different patterns of life-satisfaction and general well-beingrelationships, suggesting that these two measures tap different components of people's attitudes about their own general well-being (Andrews & McKennell, 1980). This has led to the conclusion that evaluation of life-satisfaction is based on the quality of life based on personal criteria, and, to some extent, also reflects general well-being. The standard of living was previously reported to have had no effect on general well-being (Duncan, 1975). Michalos (1979), for instance, studied a group of university staff and concluded that family life factors were strongly related to life-satisfaction. However, Tatarkiewicz (1976) and Diener (1985) argued that general well-being or happiness requires total satisfaction, which is an overall life-satisfaction. This overall life-satisfaction is consistent across time and situation (Fijuta & Diener, 2005) but has greater changes over time as individuals' position and status in lives are likely to change (Diener, in press). Therefore, we predict that life-satisfaction will likely have a modest correlation to general well-being.

RESEARCH OBJECTIVES

This research has three objectives as follows:

- 1. To assess extraversion, self-esteem, life-satisfaction and general well-being among student residents at a higher learning institution.
- 2. To determine if the studied variables are independent and not overlapping.
- 3. To examine predictors of general well-being among academic college residents at a higher learning institution.

METHOD

PARTICIPANTS

This initial study measures the extraversion, self-esteem, life-satisfaction and general well-being among students who identified themselves asacademic collegeresidents. A set of questionswasrandomly distributed to 200 participants from September 2009 and February 2010. They were asked to fill out the questionnaires within one to two weeks and return them to the researchers. As a result, a total of 150 students completed the questionnaires. The participants were encouraged to contact the researchers via telephone or email if they had any questions. The participants were asked to circle any questions that they felt were very difficult to understand, vague or unclear. At the end of the questionnaire, the participants were asked to provide their views about the questions. However, no response was received concerning this section.

MEASURES OF THIS STUDY

The Eysenck Personality Questionnaire-Short version (Eysenck, Eysenck, & Barrett, 1985)consists offour scales of 12 items:extraversion, neuroticism, psychoticism, and social desirability. The generability of the dimensions of this questionnaire was found to be good except for psychoticism. The response to each item is Yes/No. The published reliability coefficients range between .76 and .90. The scale was translated from English to Malay by the authors and then back-translated by an English speaking individual for the assessment of the cultural equivalence.

The Rosenberg Self-esteem Questionnaire (Rosenberg, 1965) is aglobal measure of self-esteem. This scale consists of 10 items about the overall feeling of individual self-acceptance. Each item is measured based on the score of four points from strongly disagree to strongly agree. After reversing the scoring for five negatively worded items, a total score was found by totalling the 10 responses. The scores rangedbetween 10 and 40. Individuals who scored 30 were considered to have high self-esteem.

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)was used to measure life-satisfaction. In the early stages of construction of this scale, 48 items were formed, which included questions on the individual's life-satisfaction. Factor analysis extracted three factors – positive affect, negative affect and life-satisfaction. All items on affect that were less than .60were removed, as were items on life-satisfaction. Finally, 10 items were left as life-satisfaction. Because of the high semantic similarity of several of those items, five items were dropped, resulting in a five-item scale (see Diener et al., 1985). Using a 5-point Likert scale from strongly agree to strongly disagree, five questions relating to life were included –ideal life, living conditions, satisfaction with life, reluctant to change, and important things in life. Research has established acceptable psychometric properties for this scale. In this study, the life-satisfaction scale was slightly skewed towards the right, meaning that most participants were relatively happy (cf Diener & Diener, 1996; Myers & Diener, 1995).

The General well-being scale (National Centre for Health Statistics, GWBS) is a set of questions that measures the general well-being of individuals. This scale consists of 18 items on a 5-point Likert scale ranging from strongly agree to strongly disagree. This scale measures an individual's feelings in general: anxious, depression or no motivation, satisfaction or happiness.

RESULTS

Demographics

In terms of gender distribution, 52.7% (n = 79) males and 47.3% (n = 71) females. In terms of religion, 73.3% (n = 110) identified themselves as Muslim and 26.7% (n = 40) non-Muslim. Most of the students are in their first year (35.3%) and 34.7% in final year. These students were from Social Sciences and Humanities (20.7%), Science and Technology (20.7%) and Islamic Studies (18%).

ITEMS RELIABILITY CHECK

The Cronbach's alpha values for extraversionwere.62, self-esteem .60, life-satisfaction .80 and .72 well-being. Although the Cronbach's alpha value for these items, particularly extraversion personality and self-esteem, are low when compared to life-satisfaction and general well-being, these two questions were retained. Because of cultural factors, Asians have a tendency to evaluate themselves at a moderate value.

INTER-CORRELATIONS

Inter-correlation analysis was used to examine whether the variables were independent and not overlapping. The study found that the correlations range between .25 and .51 (p <.05). This indicates that inter-correlations of the variables were moderate and moderately high (Table 1). The average correlation value of high and medium means that the variables are independent and did not relate to each other. For the relationship between the studied variables and general well-being, two factors were positively correlated to extraversion personality and life satisfaction.

Table 1: Inter-correlation analysis of subjective well-being

		1	2	3	4	5	6	7	8	9
1.	Value and	-								
2	norms Societal value	s 144**	_							
3.		.116**		-						
4.	Life evaluation	n053	281**	043	-					
5.	Life- satisfaction	.104**	.074*	.160**	114**	-				
6.	Negative affect	et.062	.047	.182**	206**	035	-			
7.	Positive affect	001	.276**	.145**	198**	.200**	.263**	-		
8.	Academic satisfaction	.043	.049	.179**	024	.433**	104**	.198**	-	
9.	The self	.219**	.526**	.379**	286**	.175**	.209**	.311**	.102**	-

^{**} p< 0.01; * p< 0.05(2-tailed)

MULTIPLE REGRESSION ANALYSIS

Further analysis was carried out to examine the potential predictors of general well-being. The multiple regression model with all five predictors produced $R^2 = .34$, F(5, 144) = 16:15, p < .001. The extraversion personality and life-satisfaction had significant positive regression weights, indicating that students with higher scores on these scales were expected to experience general well-being, after controlling for the other variables in the model (e.g., religion and gender). Religion, gender and self-esteem did not contribute to the multiple regression model (Table 2).

Table 2: Multiple regression (enter) predictors of general well-being

Predictors	β	t
Extraversion	.47	6.53
Life-satisfaction	.28	3.97
Religion	.16	2.36
Self-esteem	.01	.96
Gender	.03	.49

T-Test analysis

To examine whether the well-being differed by gender, the t-test was used to analyse the differences. The results showed that the level of general well-being between males and females was similar (t = .79, p > .05). The means for gender indicate that males and females did not differ from one another (table 3).

Table 3: Ttest to measure gender differences in general well-being

Gender	Min	Standard Deviation	Variance	
Males	48.37	6.29	39.65	t=.79, p>.05
Females	47.53	6.62	43.85	_

DISCUSSION

The three objectives of this study were to 1) examine the relationship between extraversion, self-esteem, and life-satisfaction on general well-being, 2) examine whether the studied variables are independent and not related, and 3) determine predictors of general well-being. The results showed that studied variables were independent and not overlapping. The r-value obtained for extraversion, life-satisfaction and general well-being was moderate and moderately high. Only the extraversion and life satisfaction were significantly and positively related to general well-being. Extraversion and life-satisfaction were the strongest predictors of general well-being.

Consistent with previous studies, the study revealed that extraversion correlates to general well-being. The results of this study demonstrated that the positive relationship between extraversion and general well-being was in line with other studies conducted by DeNeve and Cooper (1998), and Librán (2006). Extraversion appears to contribute a larger variance than life-satisfaction to general well-being. The results of this study indicated that extraversion influenced positive feelings. The correlation in this study was quite strong (e.g., around .50). Therefore, we suggest that extraversion is very important to increase general well-being. In agreement with other social investigators, we outlined three possible explanations: 1) indirect association of personality and situations preference or the experience of life events through general well-being (McCrae & Costa, 1991), 2) motivational systems that regulate positive reactions to life events (Elliot & Thrash, 2002), and 3) extravert individuals are more sensitive in positive affect (Larsen & Baird, 2004); thus, the correlations of these variables are significantly high. However, it is too early for this study to conclude that extraversion is the strongest predictor of general well-being because we did not examine extraversion with other personality traits along with positive affect and negative affect.

Life-satisfaction is often associated with feelings of general well-being as a result of harmony (Beiser, 1974). Life-satisfaction is calculated over a relatively long period of time and it is filled with the feelings of being cheerful and enjoyment. Therefore, the individuals who study and work full of dedication and commitment will feel full of passion and happiness with their academic performance throughout the year. Satisfaction with their duties and responsibilities as astudent would bring about a feeling of happiness. This is particularly true when the individuals have a positive experience of the past general well-being, such as got all 'As' in all subjects or a dean's list, and make decisions about future career. To illustrate this point, we use the example of a written exam. In reality, a written exam can be quite stressful for some students/individuals, conflictual or even anxiety at times. When asking the students how they felt during the exam, the answer is most likely to be negative, as written exams are remembered as difficult, tense, and stressful. In contrast, a well-prepared student will feel happy and describe the written exam as easy and be confident that he or she will be doing well in the next semester. Therefore, satisfaction emerges when the individuals react to his or her life circumstance.

There are two important predictors of general well-being: extraversion and life-satisfaction. Although genetic factors were not assessed in this study, it gives the impression that personality traits play an important role in contributing to general well-being. As expected, life-satisfaction can be achieved when all expectations and achievements of life are met. Life-satisfaction can be seen through facial expression or speech, feeling happy and excitement.

This study revealed that there is no significant relationship between self-esteem and general well-being. This indicates that self-esteem does not influence the individual's general well-being, therefore no self-evaluation of his or life will be made to enhance general well-being. This is in contrast with some previous studies conducted by Bosson and colleagues (2000), and Schimmack and Diener (2003),who found that self-esteem, which reflects generally positive views about the self and the world, were strongly correlated to general well-being. We conclude that self-esteem probably has better correlation with psychological well-being or social well-being rather than our general well-being. As such, it may be a good predictor of self-esteem to social well-being and psychological well-being. Relating to the East Asian culture, Asian people describe themselves less positively than western people (Cai et al., 2007), this could explain why the scores on self-esteem against general well-being are not significant.

This study has several limitations, namely: 1) generalization is not permissible, 2) only extraversion was examined, therefore it is suggested that other personality traits should be included in the future, 3) this study focused on self-esteem, therefore, it is suggested that other researchers inclusively study self-implicit and self-explicit for future investigation, and 4) this study is a cross-sectional design, so cause-effect inferences cannot be ruled out.

CONCLUSION

In conclusion, this article supports some previous studies that stated thatextraversion is the strongest predictor of well-being, followed by life-satisfaction. This indicates that personality traits are stable. While the cognitive components of life-satisfaction were seen to contribute to general well-being, it is good to fully understand the contribution of other psychological components on general well-being as well. Therefore, social researchers were asked to consider more factors or predictors of general well-being, such as the self-implicit and self-explicit, positive affect and negative affect, genetic factors, and cultural factors.

REFERENCES

- Andrews, F.M., &McKennell, A.C. (1980). Measures of self-reported well-being: Their affective, cognitive, and other components. *Social Indicators Research*, 8, 127-155.
- Argyle, M., & Lu, L. (1990). The happiness of extraverts. Personality and Individual Differences, 11, 1011-1017.
- Beiser, M. (1974). Components and correlates of mental well-being. *Journal of Health and Social Behavior*, 15, 4, 320-327.
- Bosson, J.K., Swann, W.B., &Pennebaker, J.W. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited. *Journal of Personality and Social Psychology*, 79, 631-643.
- Cai, H., Brown, J.D., Deng, C., & Oakes, M.A. (2007). Self-esteem and culture: Differences in cognitive self-evaluations or affective self-regard? *Asian Journal of Social Psychology*, 10, 162-170.
- Ciarrochi, J., Heaven, P.C.L., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality*, 41, 1161-1178.
- Costa, P.T., & McCrae, R.R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO personality inventory. *Journal of Personality and Social Psychology*, *54*, 853-863.
- DeNeve, K.M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197-229.
- Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95, 3, 542-575.
- Diener, E., & Diener, C. (1996). Most people are happy. Psychological Science, 7, 181-185.
- Diener, E., Suh, E.M., Lucas, R.E., & Smith, H.L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 2, 276-302.
- Diener, E., Emmons, R. A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 1, 71-75.
- Diener, E. (in press). Theory and validity of life satisfaction scales. Social Indicators Research.doi: 10.1007/s11205-012-0076-y
- Donnellan, M.B., Trzesniewski, K.H., Robins, R.W., Moffit, T.E., &Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological Science*, *16*, 4, 328-335.
- Duncan, O.D. (1975). Does money buy satisfaction? Social Indicators Research, 2, 267-274.
- Elliot, A.J., & Thrash, T.M. (2002). Approach-avoidance motivation personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82, 804-818.
- Fulmer, C.A., Gelfand, M.J., Kruglanski, A.W., Kim-Prieto, C., Diener, E., Pierro, A., & Higgins, E.T. (2010). On "feeling right" in cultural contexts: How person-culture match affects self-esteem and subjective well-being. *Psychological Science*, *21*, 11, 1563-1569.
- Francis, L.J. (1999). Happiness is a thing called stable extraversion: A further examination of the relationship between the Oxford Happiness Inventory and Eysenck's dimensional model of personality and gender. *Personality and Individual Differences*, 26, 5-11.
- Fujita, F., &Diener, E. (2005). Life-satisfaction set point: Stability and change. *Journal of Personality and Social Psychology*, 88, 158-164.
- Garcia, D. (2011). Two models of personality and well-being among adolescents. *Personality and Individual Differences*, 50, 1208-1212.
- Hills, P., Argyle, M., & Reeves, R. (2000). Individual differences in leisure satisfaction: An investigation of four theories of leisure motivation. *Personality and Individual Differences*, 28, 763-779.

- Hotard, S.R., McFatter, R.M., McWhirter, R.M., &Stegail, M.E. (1989). Interactive effects of extraversion, neuroticism, and social relationships on subjective well-being. *Journal of Personality and Social Psychology*, 57, 2, 321-331.
- Joshanloo, M., & Afshari, S. (2011). Big five personality traits and self-esteem as predictors of life satisfaction in Iranian Muslim university, *Journal of Happiness Studies*, 12, 105-113.
- Kahneman, D., & Riis, J. (2005). Living, and thinking about it: Two perspectives on life. In F.A. Huppert, N. Baylis& B. Keverne (Eds.), *The science of well-being* (pp. 285-304). Oxford: Oxford University Press.
- Lucas, R.E., & Baird, B.M. (2004). Extraversion and emotional reactivity. *Journal of Personality and Social Psychology*, 84, 473-485.
- Lucas, R.E., &Diener, E. (2008). Personality and well-being. In John, O.P., Robins, R.W., & Person, L.A. (Eds.), Handbook of personality: Theory and research, (pp. 795-814), London: Guilford Press.
- Librán, E.C. (2006). Personality dimensions and subjective well-being. *The Spanish Journal of Psychology*, 9, 1, 38-44.
- McCrae, R.R., & Costa, P.T. Jr., (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253.
- Michalak, J., Teisman, T., Heidenreich, T., Ströhl, G., Vocks, S. (2011). Buffering low self-esteem: The effect of mindful acceptance on the relationship between self-esteem and depression. *Personality and Individual Differences*, 50, 751-754.
- Myers, D.G., &Diener, E. (1995). Who is happy? Psychological Science, 6, 10-19.
- Neff, K.D. (2011). Self-compassion, self-esteem, and well-being. *Social and Personality Psychology Compass*, 5/1, 1-12 Doi 10.1111/j.1751-9004.2010.00330.
- Owens, T.J. (1994). Two dimensions of self-esteem: Reciprocal effects of positive self-worth and self-depreciation on adolescent problems. *American Sociological Review*, *59*, 391-407.
- Schimmack, U., Radhakrishnan, P., Oishi, S., Dzokoto, V., &Ahadi, S. (2002). Culture, personality, and subjective well-being: Integrating process models of life satisfaction. *Journal of Personality and Social Psychology*, 82, 4, 582-593.
- Schimmack, U., & Diener, E. (2003). Predictive validity of explicit and implicit self-esteem for subjective well-being. *Journal of Research in Personality*, 37, 100-106.
- Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, *134*, 1, 138-161.
- Tatarkiewicz, W. (1975). Analysis of happiness. The Hague, Netherlands: MartinusNijhoff.
- Watson, D., Clark, L.A., &Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070.