



Emotional intelligence and neuroticism: implications for psychological well-being and individual experience

Victoria Wilkinson

Supervised by Fay Julal

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### ABSTRACT

This study employed a mixed-methods design to address two aims. The quantitative component examined the association between neuroticism, EI and Psychological Well-Being (PWB) to determine whether EI demonstrated the potential to reduce or control the negative influence of neuroticism on PWB. It was hypothesised that 1. Neuroticism would be significantly negatively related to PWB, 2. EI would be significantly positively related to PWB and 3. EI would moderate the relationship between neuroticism and PWB. The qualitative component explored individuals' experiences of PWB in relation to neuroticism and EI. 101 participants completed three questionnaires to measure EI, PWB and neuroticism. The data was analysed using a hierarchical multiple regression. Hypotheses 1 and 2 were supported, 3 was not. It was also found that EI significantly predicted PWB whereas neuroticism did not. A sample of 4 participants with opposing PWB completed a semi-structured interview composed around three PWB facets. Transcripts were analysed using thematic analysis. Three themes (including sub-themes) were developed. These described relational contexts, 'openness' and 'change'. Aspects of EI and neuroticism were somewhat apparent within participants' experience, the findings conflicting with yet also complementing the quantitative findings. The theoretical implications of this study are considered in light of these findings.

KEY WORDS:	NEUROTICISM	EMOTIONAL INTELLIGENCE	PSYCHOLOGICAL WELL-BEING	INDIVIDUAL EXPERIENCE	MIXED METHODS
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## **Introduction**

The notion of well-being embodies a vital characterization of the human condition and alone represents the positive features of mental functioning. Well-being is defined as 'optimal psychological functioning and experience' (Ryan & Deci, 2001), however, in contrast to the wealth of research and literature regarding psychological dysfunction, enquiry regarding this key concept is persistently lacking (Ryff, 1995). The study of well-being therefore represents a necessary advance from the preceding focus on abnormality and dysfunction and challenges the widely established view that this is signified by the absence of disorder (Ryff & Singer, 1996). This belief fails to capture the core notion of wellness and to acknowledge the prominence of positive rather than adequate functioning. Well-being is not merely the absence of mental-illness but optimal psychological experience across a range of facets; and as such represents a distinct, multifaceted field, much interlinked with that of positive Psychology (Ryan & Deci, 2001). This study therefore considers the negative influence of neuroticism on well-being and the potential of EI to reduce or control this; alongside the meaning and experience of well-being on an individual level.

Personality is one-of the most consistent and relevant predictors of well-being (Keyes, Ryff, & Shmotkin, 2002) and is consistently established to be highly stable over the life-span (McCrae & Costa, 1994). When considering its stability alongside its indisputable influence across all domains of experience, it is clearly apparent why personality is a key consideration concerning well-being. Five super-ordinate personality traits or 'domains' have been identified, each demonstrating different characterizations and associations; these are defined as 'multifaceted collections of specific behavioral, cognitive and affective tendencies' (Costa & McCrae, 1995, p.163). The trait of neuroticism is centered upon emotional stability and includes the 'basic tendency' to experience dysphoric affect such as guilt, hopelessness and anxiety. This is accompanied by 'characteristic adaptations' such as low self-esteem and pessimism (McCrae & Costa, 2008). Research demonstrates that of the five personality domains neuroticism displays the proportionately greatest influence on well-being and is the only negatively related trait (Keyes, Ryff, & Shmotkin, 2002). High levels indicate a greater presence of its less functional aspects such as self-consciousness and angry-hostility; clarifying its negative association. Consequently, were its opposing pole - emotional stability - assessed, a positive relationship would be expected. Of the five personality traits neuroticism appears to warrant the greatest concern regarding well-being due to its inherent association with negative affective tendencies and experience.

Contrastingly, Emotional intelligence (EI) represents a relatively new construct which has stimulated much controversy regarding its value and nature; primarily due to its entitlement as an 'intelligence'. EI is broadly defined as 'a set of competencies for identifying, processing, and managing emotion' (Zeidner, Roberts & Matthews, 2008, p.64) and developed from

Thorndike's (1920) notion of 'social intelligence'. This concerns the ability to understand and manage others, thus acting 'wisely' in relational contexts. Gardner (1999) contributed further to its conceptualization through his explicit distinction between inter- and intra- personal intelligences; each constituting distinct aspects of EI. Inter-personal EI embodies the capacity to perceive and understand the motivations, desires and intentions of others and consequently to facilitate effective social interactions. Alternately, the intra-personal aspect denotes the capacity for self-awareness and understanding. This involves maintaining an effective working-model of the self, including capabilities, desires and shortcomings; using such knowledge efficiently to regulate one's own life (Pérez, Petrides & Furnham, 2003). When considering the implications of EI in regards to the self and others, parallels and overlaps become apparent with neuroticism and its inherent characteristics. Each is accompanied by specific tendencies regarding the management and stability of emotion, accompanied by consequentially effective or ineffective management of relational-contexts and the self. In this sense they also conceptually relate to well-being.

When reviewing research within the field of well-being the fundamental distinction between two underlying paradigms must first be acknowledged: hedonism and eudaimonism. The hedonic approach embodies 'happiness', defining well-being in terms of subjective pleasure. The eudaimonic approach however, distinguishes well-being from happiness as although hedonic choices produce pleasure their outcomes may not promote wellness. Consequently the eudaimonic approach defines well-being via the degree to which a person is fully functioning (Ryan & Deci, 2001). These two domains have produced a divergence - particularly in terms of measurement - between Subjective (SWB) and Psychological well-being (PWB); distinct and overlapping constructs (Huta & Ryan, 2009). SWB represents the hedonic perspective and consists of three core components: life satisfaction, the presence of positive-affect and the absence of negative-affect. Together these indicate 'happiness' levels, which are highly transient (Ryan & Deci, 2001). PWB however is represented by eudaimonism, concerned with deeper level constructs regarding self-actualization, such as personal growth and thriving via life's challenges. This is reflected by Ryff & Singer's (2000) lifespan conceptualization of human flourishing, which denotes well-being not simply as the attainment of pleasure, but as "the striving for perfection that represents the realization of one's true potential" (Ryff 1995, p. 100). Thus, PWB is related to aspects of mental health and the conceptualization of being 'Psychologically healthy' (Keyes, Ryff, & Shmotkin, 2002).

A multi-dimensional model of PWB was implemented by Ryff (1989) based on research across Developmental, Humanistic, and Clinical Psychology (Gallager, Lopez & Preacher, 2009) due to the lack of a valid and reliable measure. This model is composed of six 'psychological dimensions of challenged thriving' -distinct facets of self-actualization- including 'Self-acceptance' and 'Autonomy'. Keyes, Ryff and Shmotkin (2002) support the distinctness but interconnectedness of PWB and SWB and show

neuroticism to be a highly significant predictor of each; being the most dominant trait in explaining variance in well-being. Neuroticism thus demonstrates strong associations with both subjective happiness and psychological health and functioning. Findings further suggest that individuals with low WB have the highest mean neuroticism (Keyes, Ryff & Shmotkin, 2002), a viable concept when considering its six facets: anxiety, anger, depression, self-consciousness, immoderation and vulnerability. Neuroticism is additionally characterized by the tendency to respond negatively to challenges to a disproportionate degree (McCrae & Costa, 2003) and to be exceedingly self-critical. This is accompanied by sensitivity to criticism from others, due to often feeling personally inadequate (Watson, Clark, & Harkness, 1994). As theoretically implied, research supports neuroticism to be correlated with a variety of psychological, physiological and behavioral phenomena, including less proficient coping styles (Matthews, et al., 2006), greater exposure to, and more negative reactions to, distress in daily life (Bolger & Schilling, 1991), and self-reported anxiety and depression (Sutton, et al., 2011). Neuroticism is associated with a wider range of mental and physical health problems than any other trait (Shipley, Weiss, Der, Taylor, & Deary, 2007), also predicting longevity. This demonstrates the need for a greater understanding but more prominently for improved strategies of control and prevention (Lahey, 2009).

Similarly to well-being EI has been divided into two distinct categories partly based upon measurement; self-report measures assess 'trait' EI whereas maximum-performance tests assess 'ability' EI. Ability EI indicates competency to "perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others" (Petrides, 2011, p. 657); demonstrating a skill-based emphasis. However, its operationalization is problematic due the subjective nature of emotional experience, which inherently undermines 'maximum-performance' testing (Brody, 2004). Contrastingly, trait EI - also termed emotional self-efficacy - is "a constellation of emotion-related self-perceptions and dispositions" (Furnham & Christoforou, 2007, p. 440) pertaining toward the realm of personality. This compliments operationalization through self-report measures; encompassing self-perceptions which correspond with the subjective nature of emotions (Petrides, Pita & Kokkinak, 2007). This suggests a more valid measurement and establishment of this construct. Trait EI accompanies distinct inter- and intra- personal aptitudes, such as greater accuracy in identifying expressions, sensitivity to mood-induction, and increased accuracy of emotion perception (Petrides & Furnham, 2003). It's suggested that these factors underlie the significant associations between EI and well-being (Palmer, Donaldson, Stough, 2002), as EI promotes factors linked to positive life-outcomes in terms of optimal functioning and positive-affect. This is illustrated through the beneficial manifestations of the intra-and inter-personal characteristics of EI, such as increased quality of relationships, stress-management (Brackett, Warner & Bosco, 2005), adaptive processing-styles (Schutte, et al., 2010) and negative correlations with depressive thoughts (Mavroveli, Petrides, Rieffe & Bakker, 2007).

Although the primary focus of trait EI is self-perception and 'trait' pertains towards personality these constructs are supported as interconnected but distinct (Furnham & Petrides, 2003). EI demonstrates incremental validity beyond the 'Big Five' personality dimensions, particularly across distinct criteria such as life-satisfaction, rumination, and coping-styles (Petrides, Pita & Kokkinaki, 2007). The prominent theoretical association between EI and personality appears to be neuroticism, which contrasts features of EI due to its characterization as 'emotional instability' and association with negative affect. Additionally, these constructs demonstrate opposing influences regarding well-being. EI is theoretically related to increased well-being as individuals with high EI are more competent in maintaining positive mental states for longer and more often (Augusto-Landa, Pulido-Martos, & Lopez-Zafra, 2011). Research supports this; EI exhibiting positive associations with PWB and physical health, and negative associations with depression (Mayer, Roberts & Barsade, 2008). It has further been suggested that EI is crucial to provide a sense of 'healthy well-being' through the management of emotion-laden experiences and encounters - those which are categorically more challenging for neurotic individuals - and to be a mediating factor in psychological health (Zeidner, Matthews & Roberts, 2011). The relationship between these variables appears complex yet potentially beneficial, as EI is implicated as having a prospective role in the limitation of neuroticism's negative effects upon PWB. EI has direct implications for the management of emotion, contrasting the emotional instability upon which neuroticism is centered.

Within current research there are few studies which focus explicitly on these three variables. Salami (2011) discusses the lack of research exploring the moderating role of trait or ability EI on personality and the facets of PWB. Additionally he acknowledges the inequality between research including PWB rather than SWB regarding personality; irrespective of the arguable prominence of psychological-health. A sample of 400 adolescents was used to examine the relationship between the 'Big Five' personality traits, PWB and trait EI. Both variables separately, and the interaction between trait EI and neuroticism, significantly contributed to the prediction of PWB. Additionally, EI significantly moderated the relationship between neuroticism, extraversion and PWB. It is suggested that this may be due to characteristics of EI limiting the negative manifestations of neuroticism, alongside enhancing the beneficial influences of extraversion, which has been consistently positively associated with WB and physiological health (DeNeve & Cooper, 1998). This study demonstrates the prominence of the interaction between EI and personality in predicting PWB, and supports the inferred moderational role of EI.

These findings are supported within different samples, such as a population of Spanish undergraduate students (Landa, Martos & López-Zafra, 2010), which found neuroticism to be negatively, and trait EI to be positively, related to every dimension of PWB. Both demonstrated significantly high predictive ability and the predictive ability of EI remained whilst personality was controlled; further supporting its distinctness. Specifically, 'Emotional

clarity' - a facet of EI - was negatively related to neuroticism, however positively correlated to all dimensions of PWB. This is consistent with the theoretical construction of neuroticism and highlights one specific way in which EI and neuroticism may relate. The benefits of EI in terms of enhancing emotional clarity and understanding may somewhat control or reduce the negative influence of neuroticism on PWB. Interestingly a particularly significant negative relationship was found between the PWB facet of 'positive relations' and neuroticism. The inter-personal skills enhanced by EI are likely to be beneficial in reducing this negative relationship through increasing competence and efficiency in interpersonal relationships. EI appears to demonstrate both inter and intra- personal benefits regarding its relation to the characteristics of neuroticism, and consequently to exhibit the potential to influence PWB. These findings demonstrate specific means through which the components of trait EI and neuroticism may interact within a moderated relationship.

Matthews et al., (2006) conducted a study using a sample of 200 University students to examine ability EI and personality in relation to task-induced stress and coping. Neuroticism was demonstrated to be the major predictor of both distress and worry, pre- and post-task, as well as significantly higher changes in affect due to the task itself. Neurotic individuals demonstrated greater distress, were more vulnerable to induced emotional changes, and used emotion-focused coping methods. This accurately represents the lower emotional-stability which is the defining characteristic of neuroticism, alongside habitually heightened experiences of anxiety and negative affect to a disproportionate degree. However, EI significantly predicted a reduction in the use of emotion-focused coping, instead promoting avoidance based coping styles, and was associated with lower pre- and post-task anxiety and distress. These findings were maintained when the influence of personality was controlled, demonstrating that EI is beneficial specifically in terms of promoting adaptive coping behavior, but further to this, can reduce the use of less adaptive coping styles associated with neuroticism. These findings appear consistent with the theoretical underpinnings of these constructs and again highlight specific links between EI and neuroticism; EI promoting more beneficial coping-strategies and decreased negative-affective-states.

The rationale of this study stems from the relative absence of a direct examination of the relationships between PWB, trait EI, and neuroticism. Although previous research has addressed these constructs it often considers their alternate forms, such as SWB, ability EI and 'the big five'. As discussed, of the five personality domains neuroticism elicits the greatest concern regarding psychological health and well-being. Consequently to address this trait individually may be highly beneficial; previous research demonstrating its unique predictive ability when other traits are controlled. As EI is a relatively new construct its implications have yet to be fully explored, thus further research may expand current knowledge and indicate its potential for wider benefit. This study is highly relevant regarding practical applications such as therapies and interventions concerning WB and quality-of-life. This has implications for specific populations subject to

low WB and mental-health but also the population as a whole, as WB is a fundamental aspect of life and experiencing. The qualitative exploration of individual's experiences of their own PWB adds value, as the meaning of being psychologically 'well' and the reflection of underlying neuroticism and EI levels can be explored. This pertains to the considerably individualistic notions of PWB, such as the importance of meaning, individual purpose and self-actualization. The benefits of qualitative research are expressed by Salami (2011) and Landa et al., (2010) who highlight the need for interviews to obtain a 'clearer picture' of these variables from an individual perspective.

This study aims to "Examine the relationship between Neuroticism, Emotional Intelligence and Psychological Well-being", through three hypotheses. Firstly, Neuroticism is predicted to be significantly negatively related to PWB. Secondly, EI will be significantly positively related to PWB; and thirdly, EI will moderate the relationship between neuroticism and PWB. Semi-structured interviews will be based on "Exploring individuals' experiences of their own Psychological well-being, in relation to Neuroticism and Emotional-intelligence" to allow for an insight which these quantitative measures cannot achieve.



## Methodology - Quantitative

### **Design:**

The study used a mixed-methods design, including both surveys and semi-structured interviews for data collection. The quantitative survey component was a within-participants design as all participants completed the same three questionnaires. The two predictor variables were Neuroticism and Trait Emotional Intelligence. The criterion variable was Psychological Well-being.

### **Participants:**

Participants were a self-selected opportunity sample of Psychology Undergraduate students recruited from the participant-pool via electronic advert (Appendix A) and poster (Appendix B). A sample size of 90 was estimated (Soper, 2012) and a total of 101 participants were recruited. Three participant data-sets were outliers and therefore were deleted, leaving 98. The participant age range was 18-42 years, the mean 21.20 and the standard deviation 4.99. 86 were Female and 15 Male. An incentive of 45 minutes participation time was offered.

### **Materials:**

Scales from the 'Personality Item Interpol' measured neuroticism (Appendix C). These are adapted from the Revised NEO-Personality-Inventory (NEO-PI-R); demonstrating high convergent-validity with this (Goldberg et al., 2006). Participants rated the accuracy of 60 statements (*I feel that I'm unable to deal with things*) on a Likert scale from 1 (Very Inaccurate) to 5 (Very Accurate). 10 questions related to each of the six facets. 27 items were reverse-scored; scores of '3' remained unchanged. High scores indicated high neuroticism. Use of the NEO-PI-R was impractical due to cost and availability and demonstrates little variance from these scales.

The Emotional Intelligence Questionnaire short-form (TEIQue-SF) (Petrides & Furnham, 2003) measured trait EI (Appendix D). Participants rated their agreement with 30 statements (*I find it difficult to see things from another person's viewpoint*) on a Likert-scale from 1 (Completely Disagree) to 7 (Completely Agree). Two questions reflect each of the 15 facets. 15 items were reverse scored; scores of '4' remained unchanged. High scores indicated high trait EI. High discriminative (Cooper & Petrides, 2010) predictive ability (Perez, Petrides & Furnham, 2005), and alpha-reliability (0.85) are supported (Furnham & Christoforou, 2007). TEIQue-SF is freely available and practical in terms of length and ease of understanding.

Ryff's scales of PWB-42' (Appendix E) (Ryff, 1989) are composed of 42 items reflecting the six PWB facets. Participants rated their agreement with statements (*People see me as loving and affectionate*) on a Likert-scale from 1 (Strongly Disagree) to 6 (Strongly Agree). 20 items were reverse-coded; no scores remained unchanged. Its construct (Ryff & Singer, 2006) and convergent validity with measures of positive-functioning (0.73) (Abbott et al., 2006) are supported and its alpha (0.86) and test-retest (0.83) coefficients demonstrate high internal consistency (Ryff, 1989). Its use is

justified by its significant psychometric properties and development specifically for PWB research.

***Procedure:***

Participants who completed the questionnaires in person were met at the University SJM building and sat in an individual-cubicle. Participants signed the information sheet (Appendix F) - providing consent - and were verbally briefed (Appendix G). The same standardized statements were sent via email, maintaining reliability (Appendix G). To control for order-effects 6 alternatively ordered 'questionnaire-packs' (A-F) were created, systematically assigned and recorded. Once the questionnaire-pack was complete participants were given the debrief (Appendix H), verbally debriefed (Appendix I) and could ask questions. Participants who did not send back the questionnaire-pack were sent a reminder email (Appendix J) and the debriefing documentation was sent when the participant withdrew or data-collection was complete.

***Ethical Considerations:***

Ethical Approval was granted by the ethics committee (Appendix K). All participants were a minimum of 18 years with no known cognitive impairments, ensuring informed consent. No deception was involved. The information sheet indicated the potential sensitivity of some topics, that participants did not have to answer all questions and were able to withdraw at any time without consequence. All participants were debriefed. Contact details for sources of support were provided via the debrief alongside a reference for background information. Confidentiality and anonymity were assured, partially through the assignment of 'participant numbers'. Participants were informed that they may be emailed regarding an interview but assured of its voluntary nature. No additional ethical issues were noted.

## Results - Quantitative

### 3.1. Data Preparation

Once all raw data had been input into SPSS (v. 20) mean imputation was conducted. This involved identifying cases with missing data, calculating the sample averages for missed questions and inputting these into the missing values. However, to ensure the raw data was not significantly altered it was checked that no participants missed more than two responses to one questionnaire, or more than 5% of the data-set was missing (Tabachnick & Fidell, 2013). Of the 101 data-sets five presented one or two missing values meaning no data was deleted. Mean imputation was employed to retain as much data and as high a number of participants as possible (Field, 2009). The necessary questions on each measure were then reverse scored and the required scores compiled, creating a 'sum-total' variable for each measure. The data was then checked for outliers. The use of transformation or alteration would have been a further modification, however allowing these to remain may significantly distort the results of the analysis (Tabachnick & Fidell, 2013). Thus, three data sets were deleted due to univariate outliers on PWB; two low and one high.

Regarding the assumption of normality histograms and P-P plots are provided in appendix L. These indicate EI to be the variable with the most normally distributed residuals due to their fit to the line of normality. This is supported by its skewness which is between +/-2 suggesting the assumption of normality was not violated. However PWB demonstrates skewness closer to 0 signifying it to be more normally distributed, although this is not as apparent from its visual characteristics. Neuroticism appears the least normally distributed and its skewness value is below -2, although not to a considerable degree. The negative skew of the three variables suggests a slight buildup of high scores; particularly for neuroticism. The scatterplot indicates that the assumptions of linearity and homoscedasticity were met. The model appears generalizable to the population and accurate for the sample, as although neuroticism was not as normally distributed this was not to a concerning degree (Field, 2009).

Table 1 demonstrates participant means and standard deviations for scores of neuroticism, EI and PWB.

**Table 1**

**Means and standard deviations of participant's Neuroticism, EI and PWB scores and the alpha reliability of each measure.**

Variable	Mean	Standard Deviation	$\alpha$
Neuroticism	171.58	31.74	.943
Emotional Intelligence	146.13	19.81	.885
Psychological Well-being	183.87	21.43	.906

### $\alpha$ = Alpha reliability

As illustrated in Table 1 a Cronbach's Alpha test was carried out to explore the measures reliability and internal consistency. The alpha value of the TEIQue-SF demonstrates strong reliability (Cronbach, 1951) with the majority of items demonstrating corrected item-total correlations above .3 suggesting acceptable internal consistency (Field, 2009), (Davies, Clarke, & Rendell, 2010). The Neuroticism measure demonstrated high reliability, and the alpha-reliability values across the six subscales ranged from  $\alpha=.855$  to  $\alpha=.723$ , all showing acceptable internal consistency (Gliem & Gliem, 2003). 'Immoderation' however demonstrates potential issues. Ryff's PWB measure demonstrated high reliability, as did five of the six subscales; ranging from  $\alpha=.847$  to  $\alpha=.700$ . However, potential issues with 'Environmental mastery' were highlighted due to low reliability ( $\alpha=.325$ ) and problematic internal consistency. Additional information regarding the reliability of these measures and their subscales is provided in appendix M.

### 3.2 Regression Analysis

A hierarchical multiple regression was conducted. All raw SPSS output can be found in appendix N. The regression was multiple as there were two predictor variables and hierarchal as previous research indicated the direction of the relationships. The three sum-total variables were centered by subtracting the mean from the total score (Field, 2009); its accuracy was checked by ensuring that the means were 0 and the standard deviations remained unchanged. The variables were centered due to potential issues of multicollinearity between continuous predictor variables and the interaction variable; if the IV's were not centered they may each be highly correlated with the interaction term (Tabachnick & Fidell, 2013). Additionally, this was beneficial due to the hypothesized moderation of EI on Neuroticism; centering variables aids the interpretability of an interaction (Preacher, 2012). Finally, by multiplying centered Neuroticism and EI an interaction variable -  $N \times EI$  - was created. The levels at which the variables were entered into the regression were as follows:

- 1: Age, Gender & Questionnaire Pack
- 2: Neuroticism & EI
- 3:  $N \times EI$  Interaction

The covariates 'Age', 'Gender' and 'Questionnaire pack' were entered at the first stage to control for the possible effects of demographics and questionnaire order.

A significant negative correlation of  $r(98) = -.59$  ( $p < .001$ ) was demonstrated between neuroticism and PWB supporting Hypothesis 1; neuroticism will be significantly negatively related to PWB. A significant positive correlation of  $r(98) = .81$  ( $p < .001$ ) was evident between EI and PWB supporting Hypothesis 2; EI will be significantly positively related to PWB. The .81 correlation between EI and PWB indicates a considerably large association. A significant negative relationship of  $r(98) = -.77$  ( $p < .001$ ) was evident between the predictor variables - EI and neuroticism - illustrating that as one significantly increased the other significantly decreased. Neither

predictor variable nor the criterion variable - PWB - was significantly correlated with the interaction term.

A multicollinearity diagnostic test for highly significant correlations between the variables was conducted. The co-linearity statistics indicate that there were no issues of multicollinearity as no tolerance values were below or close to 0.2, no VIF values were greater than 10 and the average VIF was not substantially greater than 1. The -0.77 correlation between the predictor variables is relatively high and suggests a potential issue (Davies, Clarke & Rendell, 2010), however as this is not greater than .9 these are somewhat distinct constructs. The assumption of no multicollinearity was supported (Field, 2009).

Level one of the regression analysis was not significant,  $F(3,94) = 1.61$ ,  $P = 0.19$  indicating that age, gender and questionnaire-pack did not explain a significant degree of variance in PWB. However, level two of the regression analysis was significant,  $F(5,92) = 36.65$   $p < .001$ ; with the addition of EI and neuroticism 66.6% of variance in participants PWB was accounted for. As presented in Table 2 the change in  $(\Delta)R^2$  for this level was significant ( $p < .001$ ) indicating that when the minor influence of demographics and order-effects were controlled neuroticism and EI alone accounted for a significant degree of variation.

The final level of the regression analysis including the interaction term was significant  $F(6,91) = 31.16$ ,  $p < .001$  illustrating that together the predictor and interaction variables accounted for 67.3% of variation in participants PWB. However, as illustrated by Table 2 the change in  $R^2$  (.01) for this level was not significant, thus the interaction term did not significantly explain an additional amount of variance beyond that previously accounted for by EI and neuroticism. The significance of this stage is due to the inclusion of the predictor variables and the interaction term did not significantly improve the prediction of PWB. The similarity of the  $R^2$  and Adjusted  $R^2$  values across each regression level indicates that the generalizability of the results is good.

Table 2 illustrates that the significance of the second level of the regression model and the ability of the predictor variables to account for a significant degree of variation in PWB is due to the contribution of EI ( $t(6,91) = 8.73$ ,  $p < .001$ ). As demonstrated by the  $B$  and  $\beta$  values EI had a significant positive relationship with outcome and was alone a significant predictor of PWB. Neuroticism had a non-significant positive relationship with outcome and the interaction had a non-significant negative relationship with outcome. Neither were significant predictors of PWB, nor contributed significantly to the regression model. As the interaction was non-significant it was neither necessary nor advantageous to perform post-hoc testing to explore the relationship between these variables

Table 2

Unstandardized and standardized regression coefficients for the covariates across the three stages of the regression and the change in  $R^2$  at each.

	B	SE B	$\beta$	$\Delta R^2$
<i>Step 1</i>				.05
Age	-0.49	0.43	-0.12	
Gender	5.34	5.98	0.09	
Questionnaire pack	-2.18	1.27	-0.17	
<i>Step 2</i>				.62*
Age	0.35	0.28	0.08	
Gender	4.88	3.67	0.08	
Questionnaire pack	-0.53	0.77	-0.04	
EI	0.96*	0.12	0.89	
N	0.07	0.07	0.10	
<i>Step 3</i>				.01
Age	0.39	0.28	0.09	
Gender	5.16	3.66	0.09	
Questionnaire pack	-0.31	0.78	-0.03	
EI	0.99*	0.11	0.91	
N	0.09	0.07	0.13	
EI x N	-0.00	0.00	-0.09	

\*=  $P < .001$ .  $\Delta$  = 'Change in'.

## Methodology – Qualitative

### **Design:**

This research explored participants' experiences of their own PWB, thus a qualitative methodology was employed to provide rich, detailed data. A semi-structured interview was used to allow flexibility but also direction; enabling a highly individual focus. Individuals with opposing PWB were selected to explore contrasting levels and enable comparison. Interviews took place at the University to ensure a familiar setting with minimal distractions; these were recorded and transcribed verbatim. Only the researcher and participant were present, facilitating the exploration of personal information and maintaining anonymity and confidentiality. The inclusion of this qualitative component enhanced the study as the individual meanings and influences of PWB could be explored; providing rich data regarding participant's experiences and how these may differ.

### **Participants:**

A selection sample of four participants was recruited from the original 101, based on PWB scores; split between the highest and lowest quartiles. The range of PWB scores was 95.00, the standard deviation 21.43. The age range was 19-23 years. 10 participants declined interviews. One hour's participation time was an incentive. The two interviewees - 8, 19 - with high PWB were Female and Male aged 20 and 23. The two - 9, 13 - with low PWB were both Female aged 19 and 20. Participant 13 was an outlier yet was still interviewed to explore this significant difference. Table 3 demonstrates the considerable differences between EI and neuroticism levels accompanying participants contrasting PWB.

**Table 3**  
**Neuroticism, EI and PWB scores of the four interviewees.**

Participant Number	PWB	EI	Neuroticism
87	230	178	143
19	210	145	190
9	141	96	229
13	127	94	239

### **Materials:**

The semi-structured interview (Appendix O) was developed by the researcher and composed of five questions divided across three PWB facets: *Personal Growth*, *Self acceptance*, and *Purpose in life*. Sub-questions and prompts were included to enable direction. The questions required participants to consider their personal opinions and reflect upon related experiences. These three facets were selected due to being accessible for developing open-ended, comprehensive questions with minimum sensitivity. To inform question development definitions were consulted (Appendix P) alongside relevant questionnaire items. To ensure understanding, standardized definitions of 'Life Purpose' and 'Personal

Growth' were read aloud prior to the questions. A Dictaphone was used to record the interviews for accurate transcription.

***Procedure:***

Selected participants were contacted via standardized email (Appendix Q). If they declined or failed to respond within one week an alternative was contacted. A time to meet at the University (SJM) was arranged where the interview was conducted in a 'cubicle-room'. No one else was present. The researcher introduced themselves and switched on the dictaphone before reading the verbal briefing-statement (Appendix R) and presenting the brief (Appendix S). Once participants provided consent the interview questions (Appendix O) were asked, alongside follow-up questions regarding key points to elicit greater depth. Once the interview was complete the debrief (Appendix T) and verbal debrief (Appendix U) were presented; participants had any questions answered. To maintain reliability all contact and instructions were standardized. Recordings were transcribed verbatim.

***Ethical Considerations:***

Participants were previously informed that they may be contacted regarding an interview and assured of its voluntary nature. The briefing documentation stated that topics were potentially sensitive and required self-reflection. Participants were informed that they did not have to answer all questions, could stop the interview at any time, and were advised against disclosing information regarding criminal activity. The researcher remained attentive to signs of discomfort to ensure that the interview could be stopped. The use of standardized definitions ensured understanding and provided an opportunity to indicate discomfort. Definitions were neutral to minimize social-desirability. The question order buffered the most potentially sensitive facet – self-acceptance, which included the least questions. The interview began with the most abstract, neutral concept to allow participants to become comfortable discussing their opinions; the final question relocated the focus onto 'others'. The debrief (Appendix U) provided contact details for support services alongside an article-reference for background information. The verbal debrief reiterated confidentiality and anonymity such as the removal of identifying-characteristics and security of the recordings.



### **Analysis – Qualitative**

A thematic analysis was performed on the four interview transcripts (Appendix V). Thematic analysis describes an approach to dealing with qualitative data involving the creation and application of themes which emerge as important in the description of a phenomenon (Boyatzis, 1998). This involves identifying and grouping instances which present connected meanings and thus may be considered as pattern recognition; themes becoming categories for analysis (Fereday, 2006). This method enables themes to be considered in relation to the research question and comparisons to be made between groups. The data was coded and analyzed without a pre-existing framework, thus an inductive thematic analysis was conducted. However, the researcher embodies an active role in the development of themes and must acknowledge their theoretical commitments or preconceptions (Braun and Clarke, 2006). This research explores experiences of PWB but considers the relation of neuroticism and EI; thus a somewhat ‘analyst-driven’ analysis occurred through the anticipated involvement of specific concepts.

The guidelines provided by Braun and Clarke (2006) were followed for the recursive performance of thematic analysis. Firstly through transcription followed by an active re-reading of the transcripts the researcher immersed herself within the data. Identifying characteristics were removed. Secondly, initial codes were generated, these were both semantic and latent as explicit and interpretive underlying meanings were noted. This was a systematic process of selecting data which appeared meaningful and manually writing notes to signpost key patterns. As the transcripts involved three topics -facets of PWB- codes were generated for each. Thirdly, once a list of codes had been developed these were presented in a table (Appendix W). These were reconsidered and often merged, being sorted into potential themes through their connections such as underlying meaning (Appendix W). Thematic maps (Appendix X) were developed as visual representations. Some themes were discarded whereas others combined; this process continued until the themes were finalised. The final themes were reviewed through reappraisal against the data. This checked the validity of the themes by ensuring that they accurately represented the data and formed a coherent pattern. Where aspects of neuroticism and EI emerged or were implied this was noted. The final themes and their corresponding sub-themes are presented in Table 4.

**Table 4**

**Final themes and Sub-Themes produced by the Thematic Analysis.**

Theme	Sub-Themes
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Self vs. Others	Maturity Clarity Realness Misunderstanding
Openness	Experience Others Balance
Change	Extremity Choice vs. Forced Motivation Awareness

\* *P: Participant number, L: line numbers (on transcripts)*

The researcher intended to separately analyze the two groups, however the same concepts were evident across the codes from each. Consequently, themes were developed across the four transcripts; however contrasts emerged regarding the ways that these were perceived and discussed. Each theme will be described and group differences addressed, alongside instances where aspects of neuroticism or EI arose.

### **Self vs. Others**

This theme addresses the participant's persistency in distinguishing between others and themselves, and the apparent importance of this divide regarding 'self-image'. This was further illustrated through direct and inferred comparisons, demonstrating that 'the self' was considered in relation to and in separation from, others:

*'I do compare myself quite a lot' ... 'I do look at them and see how well they're doing and how much more grown up they are compared to me'. (P-9, L: 68, 74)*

This suggests that relational and individual contexts are important to participant's experiences of PWB; however a distinction emerged in perceptions of these. Participants with low PWB (LPWB-P) expressed the 'self-other' divide as a negative eventuality which indicated an inherent 'difference':

*'I feel a bit boring compared to other people... like necessarily I don't have things to talk to them about... I don't really fit in.'* (P-13, L: 136-138)

This negatively informed their self-image, such as being 'anxious' 'insecure' and 'resentful' of others and the self. Contrastingly, participants with high PWB (HPWB-P) acknowledged a divide but appeared less concerned;

fixating upon the 'self' aspect. They expressed positive opinions, emphasizing equal distribution of 'strengths' and 'weakness':

*'I don't want to change much more... I like who I am now... I may come across as short but I don't mean to be.'* (P-19, L: 167-169)

*'I'm not clever in the same areas as he is... but then I am in other areas.'* (P-19, L: 139-140)

Four sub-themes relating to aspects of the self and others became apparent:

#### **a) Maturity**

Maturity relates to participant's self-image, often regarding a contrast of who they 'were' and had 'become'. All participants' remarked that they had increased independence, confidence and judgment and attributed this to separation from others. Separation was thought to cause outcomes including increased assertiveness and self-belief:

*'Being independent. Having to decide everything and not having someone there to ask what to do.'* (P-9, L: 43-44)

*'It was confidence... the way I carried myself... knowing when to reach and when not too.'* (P-19, L: 44-47)

However for LPWB-P maturity was considered to have incurred a cost, such as negative changes in the self. Additionally, separation was perceived as 'aliveness':

*'I am a bit more, cautious about, um like, I have to look after myself more, a lot more..', 'I guess I've calmed down but I'm not sort of really as outgoing, which might seem like a bit of a negative now.'* (P-13, L: 104-109)

*'Meeting new people and being away from family members... I was very much on my own.'* (P-9, L: 39-41)

Contrastingly, HPWB-P considered this change as profoundly positive; conceptualizing separation as enabling:

*'Well I've grown up emotionally, physically, mentally... yeah it's definitely a necessity in life.. a lot of personal growth does come from like, moving away from home.'* (P-87, L: 23-27)

*'When I was on my own it kind of, allowed me to be a better version of myself.'* (L: 63-64)

The awareness of a sense of growth and transformation appears key to the experience of PWB, alongside contributing to self-image. However, the positivity of this change and the perception of separation is a distinguishing factor between groups.

#### **b) Clarity**

This sub-theme developed from a latent-level interpretation, specifically due to a contrast between the groups. Participant's self-descriptions appeared to indicate the clarity of their self-image, suggesting a key contrast between

experiences of high and low PWB to be clarity of self-perception. LPWB-P were disordered and uncertain:

*'I think I've got two different sides. Like I can, like, people do see me, as like, shy, like quite quiet, miserable, at times cus like, I don't put myself out there that much, but then, some other days I'd say people would say I'm like, cheery and happy... outgoing and loud... so I really wouldn't know, which one to pick, it's just like, different days.'* (P-9, L: 94-98)

Contrastingly, HPWB-P presented self-descriptions with clarity and continuity:

*'I'd describe myself as quite a nice girl ...I know that I have my own moments where I can be ... a horrible person but... I'd say that I was nice... I'm outgoing, I mean I know I am shy in certain situations but I know in my friendships and my family groups I am quite an outgoing person'.* (P-87, L: 120-127)

This infers that HPWB-P demonstrate greater congruence and clarity in their self-image; being sure of their identity in separation. Alternately, LPWB-P experience a more contradictory self-concept, inferring less clarity of the 'self' in separation from others.

### **c) Realness**

'Realness' captured a significant aspect of experience of the self in relation to others. This was apparent firstly through being 'true to the self', and secondly through portraying the 'genuine self' to others. LPWB-P seemed less likely to demonstrate either, feeling that they should conform to or prioritize others perceptions:

*'I can be quite depressive and quite like, low self-esteem but I try not to show that as much when I'm with my friends'* (P-13, L: 186-188)

*'I get really concerned that I'll like say something like a bit weird and they'll be like 'oh you know we're not too keen on you' and then... you don't really talk to them again'.* (P-13, L: 205-207)

These extracts also illustrate anxiety, 'depressiveness' and self-consciousness; neuroticism facets. 'Realness' theoretically links to 'clarity', as being less clear of the 'real self' makes it harder to present or follow. Alternately, HPWB-P demonstrated greater concern regarding genuineness toward the self:

*'I think that I portray myself to them as what I am if you know what I mean, I'm not into that whole false profile kind of person, I am what you get and that's it really'.* (P-87, L: 129-131)

*'If I start trying to change that, does that mean I'm not being who I want to be anymore?'* (P-19, L: 169-170)

This implies that a fundamental aspect of participant's experiences of PWB is the genuineness with which they represent their 'true self' and its visibility to others. HPWB-P experienced greater congruence between their 'true' self, self-image, and its presentation. This may indicate greater self-

acceptance – a facet of PWB, as well as greater management of the self and others – EI.

#### **d) Misunderstanding**

Misunderstanding encompasses participants perceptions of the accuracy of others interpretations and their sense of understanding and congruence with others. This was most visible through LPWB-P, representing their experience of themselves as reflected by others within social interactions. They expressed vivid and varied examples of feeling persistently misjudged, which may reflect aspects of low EI:

*'I'm listening and I'm like really conscious of being quiet and I think some people can... take that in the wrong way'... 'I'm very honest and some people can mistake that for aggression'. (P-13, L: 156-160)*

*'I've been told by some people that I'm quite hard to like approach when you don't know me, which is quite different to how I would, describe myself, like I think of myself as quite quiet, and gentle... I'm more scared of people than they are of me but they seem to think that I'm quite terrifying when they meet me... I think I'm the complete opposite'. (L: 160-165)*

This seemed to indicate inherent differences and to be experienced as a barrier between the self and others, further associated with fear and anxiety – facets of neuroticism:

*'I do sort of think that there are obvious differences... like we're so different... I feel like I can't even approach them because we're so different.' (P-13, L: 141-145)*

*'I get sort of more anxious and worried about making friends, and that I'll be taken the wrong way'... 'People don't mean to but I guess people do judge by like first impressions and sometimes is quite hard to overcome that.' (L: 194-204)*

However, HPWB-P expressed little concern regarding this, stating:

*'I guess on reflection most descriptions are quite right'... 'I would say they're accurate in their first impressions, but again I think that the judgment of why I do that may be wrong'. (P-19, L: -170-174)*

*'I try to be the best person I can be so hopefully that that reflects to them'... 'I think it's probably similar to how most people would describe me'. (P- 87, L: 113-127)*

HPWB-P experienced a sense of continuity and understanding with others; voicing little concern with their perceptions and perceiving accurate communication. LPWB-P experienced 'misinterpretation' assumed to indicate differences. This manifested as a barrier to comfort in social interactions and may reflect the 'self-consciousness' facet of neuroticism.

#### **Openness**

The concept and attitude of openness appeared fundamental to participants' interpretations of situations, additionally representing a desirable attribute. Interestingly, this theme may echo 'openness' – the

personality trait, associated with positive PWB (Ryff & Singer, 1996) and SWB (Steel, Schmidt & Shultz, 2008). Despite being the least conflicting theme amongst participants, contrasts emerged within sub-themes:

### **a) Experience**

This represents the participants' belief in the importance of being 'open to experience'. This was discussed in relation to 'quantity' - it being highly desirable to experience 'as much as possible'; requiring openness. For certain elements of life having much experience was considered a necessity:

*'You should try to do as much as you can but there's always going to be more that you can do.'* (P-87, L: 234-235)

*'If they've seen all the options that they could have and experienced them... then they've decided... then I respect that. But people who without experiencing anything just decide... I think that... they need to experience a lot of things first.'* (P-9, L: 163-168)

Consequently, to not adhere to this attitude was deemed 'closed-minded':

*'I think they'd be a little closed minded... if they had experienced a lot of things ... then I respect that'*. (P-9, L: 163-168), *'People can be really sort of closed minded... but actually if they kind of opened up a bit then maybe they'd be more insightful'*. (P-13, L: 385-387)

This negative judgement resulted from the concept that not experiencing a 'lot' meant 'missing out'; an ill-conceived decision:

*'People should be open to experiences and I think there are people who can get so wrapped up in like a mission for themselves that they like turn other things down... then it becomes like 20 years down the line and they're like well actually I wish I did this'*. (P-13, L: 373-377)

Not only did this indicate missed opportunities for experience, but also the benefits assumed to be a consequence of this:

*'Maybe once you've kind of had an education or had several life experiences that have changed you then maybe you might feel that you have a purpose'*. (P-19, L: 211-212)

*'Your experiences make who you are... I think that's a really good thing'* (P-13, L: 252-253)

The participants appeared to consider openness to experience a logical choice; maximising opportunities for benefit. Thus, due to its direct nature and perceived desirability the lack of a clear group distinction is reasonable. PWB appears to be experienced partly through self-perceived open-mindedness due to the quantity of experiences and benefits which this grants.

### **b) Others**

This sub-theme describes participant's openness towards others. It represents attitudes towards others differences and opinions, and consequently willingness to 'know' and accept them. This may relate

theoretically to the 'trait-empathy' EI facet. LPWB-P expressed willingness to accept others views, being open regardless of differences:

*'I'm quite open to how they feel... I don't think that's a bad thing that they feel that... it's just that I don't.'* (P-9, L: 156-157)

*'I'm open to anyone or anything... I really love talking to people and just hearing different... points of views and like, I like anyone... I really like people even though I'm... shy and a bit socially weird... I'll like anyone no matter what they're in to'* (P-13, L: 180-186)

This was seemingly regardless of feeling themselves misunderstood; however, this may have motivated openness and understanding. Contrastingly, HPWB-P expressed frustration rather than openness, accompanied by a closed-off uninterested stance:

*'I suppose I shouldn't be frustrated about it, but it does like really grind me... a lot of people don't actually know what they want to do... I guess it's... sad in a way cus like, I know what I want to do and that's given me some goals... but a lot of people don't have that. And I don't, I don't understand why.'* (P-87, L: 206-209)

*'I don't bother, very much until I know someone, I know it sounds terrible but I guess I come across quite cold hearted. Once someone gets to know me I am very open, but again it's only to certain people... I don't understand the idea of being open to everybody.'* (P-19, L: 154)

LPWB-P experienced a sense of openness and acceptance towards others, possibly suggesting greater trait-empathy. However, HPWB-P demonstrated a more internally-focused experience, consequently gaining little from openness. This may indicate a fundamental inter-personal variance and perception of the self-other context.

### **c) Balance**

'Balance' encompasses the underlying desire of the participants for consistency and equilibrium; regardless of their degree of openness:

*'Yeah I definitely think the balance is what's important.'* (P-9, L: 177)

Balance was a highly valued concept, appearing to represent a desired ideal and to be a foundational structure for judgment. Theoretically, balance contrasts the 'immoderation' neuroticism facet and the consensus of the participants regarding its desirability suggests this is not a differentiating feature:

*'I think anything is good like with moderation ... you need that in life... obviously like... there's always things where there will be one extreme or the other... but I think it's really important to not close yourself off... and yeah so I think a balance is like maybe the best thing.'* (P-13, L: 391-396)

This was particularly evident regarding 'life-purpose'. Participants expressed that a lack of this may manifest through the absence of ambition and commitment, but that a strong sense may be restricting:

*'I think you can be too direct... you can have too much and then you could probably oversee what your purpose is... think you know exactly what it is but ... going to the extreme... you could oversee... and miss the idea... of what your goals actually are.'* (P-87, L: 242-250)

Irrespective of PWB participants upheld the perceived value of 'balance', suggesting it to be a key underlying structure when evaluating the potential benefit of experiences. Thus, participants experienced PWB through a foundation of striving to achieve equilibrium.

### **Change**

This theme describes 'moving' from something known to something new. This represents participant's experiences of change alongside its status as a multi-faceted concept. Four sub-themes emerged, symbolizing alternate perceptions and conditions from which experiences of change were judged:

#### **a) Extremity**

A fundamental characteristic of change was its extremity. This denoted a significant consideration when judging experiences of change, accompanied by underlying assumptions which shaped perceptions. LPWB-P discussed experiences characterized by extreme change and associated this with 'challenge':

*'It's just like that's, such an extreme situation where I was literally taken completely out of my comfort zone so I kind of had to change to adapt to it 'cus if I hadn't I probably would have ended up being really unhappy.'* (P-13, L: 46-48)

*'I guess that was like the most challenging, different...'* (L: 87)

This appeared to contrast the 'familiar' which represented comfort:

*'I do like the familiar... I don't like to do exciting new things... you find where you're comfortable and kinda stay at that.'* (P-9, L: 24-29)

HPWB-P also discussed these but did not acknowledge the opposing-familiarity. Extremity was viewed more objectively and less in terms of preference:

*'Going from having a very simple life of getting up in the morning, going to school to going out into the real world'... 'I think that maybe just being out of my depth.'* (P-19, L: 35-36, 69)

*'It was a very large challenge... it was something I wasn't very used too... therefore a very large challenge to have to rise to...I guess it's, yeah, because of how different it was.'* (L: 52)

Regardless of PWB, extremity was a condition for the characterization and judgment of change, associated with the assumption that extreme change indicates a greater challenge. LPWB-P may therefore exhibit preference towards the known and 'comfortable' as their self-perceptions – such as coping ability – may differ from HPWB-P.

#### **b) Choice vs. forced**



A further circumstance which influenced perceptions were the conditions under which change occurred; due to personal choice or 'forced'. This was not discussed in depth but nonetheless represents a significant feature to be addressed:

*'I've been forced into situations, like university, where you don't know anyone'* (P-13, L: 201)

*'I think that... being out of my depth, and you had no choice but to try and change, and try'... 'it was a forced change'.* (P- 19, L: 69, 74)

The forced nature of this change appeared to shape participants judgements of the experience. LPWB-P expressed a negative attitude which manifested as resentment and as a lack of respect towards personal belief unless this was a choice:

*'I guess I get a bit resentful, that um, I... had to, move out and do things when I was younger'.* (P-13, L: 132)

*'I think it depends on how the person thinks they've discovered it, and whether you've kind of been pushed into believing you have it.'* (L: 226)

Alternately, HPWB-P discussed this as precipitating growth:

*'It makes you grow because you've got to be, you've got to learn... if you don't... it's very very difficult.'* (P- 19, L: 41)

Participants' judgements appear influenced by contexts deemed important; these appear similar despite PWB, however, specific discrepancies are present. 'Choice' may relate to the 'environmental mastery' facet of PWB: an individual's sense of mastery over their situation and control of external events, implicating the 'control' aspect of choice to be central.

### **c) Motivation**

Participants' related motivation and change in two ways: firstly that change could provide a sense of motivation, and secondly, that motivation was a highly positive attribute driving an individual to make changes. Participant's attitudes were harmonious and consistently positive:

*'I think it's really great to have a motivation and like the desire to do something 'cus there's nothing worse than... being bored in what you're doing and feeling like you're going nowhere'.* (P-13, 231-234)

*'Aspirations and... my relationships with my family and stuff like that... seem to be going better and everything... my personal life... my moods... they've all been like really positively affected by this kind of new motivation.'* (L: 343-348)

Additionally, to lack motivation was specifically judged in a highly negative light:

*'You can just look at people who don't... know what they want to do and they're not motivated people... but I don't know why they don't have the motivation... I thought that's what we were here for'.* (L: 216-219)

*'I think if you're unmotivated and...you're... lazy... with that kind of attitude I don't think that's a very good thing... like people who don't want to work and they...do nothing with their lives... it's really quite sad, especially when [they] show promise before... and they've given it up because they can't be bothered'. (P-13, L: 359)*

The only divergence between the groups was that LPWB-P considered themselves to have currently, or previously, lacked motivation:

*'I know I should be more like... driven... than being more laid back'. (P-9, L: 148)*

*'I'm really dedicated to it... I struggle with motivation, and I feel really, really good about this, and I haven't really felt like that towards anything for quite a while'. (P-13, L: 298)*

Underpinning a positive perception of change appears to assumptions that it may both result in, and be a consequence of motivation. This infers that regardless of PWB a similar desire for 'drive' and inferred consequential benefits is experienced; however, participants differed in their self-attributions.

#### **d) Awareness**

This sub-theme represents a unique notion regarding self-image in relation to change, despite its lower prevalence. This encompasses participants' sense of awareness concerning themselves and current or previous experiences of change:

*'You are constantly changing, you may not recognise it' (P-19, L: 21)*

*'That's when I first saw change in myself... that's where I saw the biggest change'. (L: 70)*

To demonstrate an awareness of change within the self appeared to be valued by participants, contributing positively to self-image:

*'Well I'm um more aware of a lot of things whereas before I didn't really care.' (P-87, L: 91)*

*'I think it was the largest change in my life that I can recognise. Again, as you, when you are a lot younger, in my opinion you don't always recognise change because you, don't want to see the consequence.' (P-19, L: 83-85)*

Although there is comparatively less semantic content this sub-theme captures a unique and potentially significant aspect of participants' experience of PWB. Participants seemingly uphold the underlying assumption that self-awareness regarding change is a valuable attribute, signifying development or growth.

## **Discussion**

### **Quantitative**

The quantitative component of this study explored the relationship between PWB, trait EI and neuroticism. The objective was to examine whether trait EI could moderate the negative effect of neuroticism on PWB; establishing a clearer understanding of the relationship between these variables and the potential to control or reduce the negative influence of this trait. Three hypotheses were set out to test this; firstly that neuroticism would be significantly negatively related to PWB, a finding well-established within previous research. This was supported to a high degree of significance; as one of these variables increased the other decreased to a significant degree. This is likely to be due to the tendency of neurotic individuals to experience negative-affective-states (McCrae & Costa, 2008) alongside associated mental-health issues (Shipley et al., 2007). It was secondly hypothesized that EI would be significantly positively related to PWB. This was supported and a notably high positive association obtained, suggesting that PWB increased alongside trait EI. This high positive association compliments the theoretical underpinnings of EI, involving greater understanding and management of others and the self; consequently facilitating both inter-and intra-personal gains (Pérez, Petrides & Furnham, 2003). This finding supports previous research (Mayer et al., 2008) additionally demonstrating the magnitude of the association between EI and PWB.

It was thirdly hypothesized that EI would moderate the relationship between neuroticism and PWB. This was not supported as there was no significant interaction. This may be because neuroticism was not a significant predictor of PWB, contrasting EI which was a consistently highly significant predictor. The failure of neuroticism to predict PWB could be due to a variety of factors but the possibility that these constructs were simply not related must be acknowledged. This conflicts with much previous research, such as that of Landa et al. (2010), in which a significant directional relationship is established. However, this research was conducted upon a Spanish sample, thus its generalizability may be questionable. Alternately neuroticism may only predict the outcome of PWB under specific conditions, such as certain levels of EI. A further consideration was the highly significant correlation between EI and neuroticism. Multicollinearity was not an issue however the inclusion of two variables with a bivariate correlation greater than .70 within the same analysis should be carefully considered (Tabachnick & Fidell, 2013). The removal of either would have been detrimental to the purpose and theoretical foundations of this study, thus an alternative for future research may be the use of 'ability EI'. This does not relate to personality (Petrides, 2011), thus is less likely to be highly correlated.

An additional consideration is that neuroticism was measured singularly, rather than in conjunction with the 'Big 5'. The majority of studies measure these together as they exhibit mild correlations (Costa & McCrae, 1995), allowing individual contributions to be assessed. The rationale for neuroticism to be measured alone stemmed from research demonstrating its unique predictive ability (Keyes, Ryff, & Shmotkin, 2002), however were

the influences of other traits present on the predictor or criterion variables these could not be controlled or assessed. This is a limitation of the quantitative component of this study and future research may benefit from measurement of the 'big 5' to more precisely examine the contribution of neuroticism and EI when these are controlled.

### **Qualitative**

The qualitative component used a semi-structured interview to gain insight into individuals' experiences of their own PWB. This has yet to be explored via qualitative methodology thus this research addresses a considerable gap within the literature. The use of a purposive sample enabled direct comparison between high and low PWB individuals' regarding whether these were experienced differently. Additionally the themes emergent from the thematic analysis were considered in relation to neuroticism and EI to observe whether aspects of these were apparent. Contrasting the researchers' intention to separately analyze the groups the themes were developed across both. This suggests that regardless of significant PWB differences participants experiencing involves similar wider constructs and utilization of evaluative-frameworks; however, there were a number of substantial discrepancies within these. The theme of 'self vs. others' represents a core context concerning participant's relation to others and the 'self' in isolation. 'Openness' represents a desirable attribute which excluding 'others' was non-conflicting. 'Change' represents a key experience accompanied by evaluative conditions; each differentially influencing participant's experiences of their PWB.

Specifically, relational contexts were highly important to participant's experience of their PWB and additionally influenced self-image. This influence differed dependent upon participant's perceptions which varied between the groups. Low PWB participants perceived the 'self-others' divide to indicate inherent differences; this belief manifested as fear, anxiety and a barrier impeding comfort within social interactions. This may reflect social anxiety which is highly associated with neuroticism (Norton, Cox, Hewitt, & McLeod, 1997). Additionally this belief negatively influenced participant's self-image; this became most apparent through consistent comparisons in which others were persistently considered favorably. This infers that low PWB participants tended to elicit negative self-attributions suggesting lower self-esteem or 'self-consciousness'; a facet of neuroticism which is also correlated with social anxiety (Darvill, Johnson & Danko, 1992). Interestingly, low self-esteem demonstrates a negative association with the 'self-acceptance' facet of PWB (Ryff, 1989) and although this was not explicitly discussed due to its sensitivity it was the second facet around which questions were developed. Some implications of the qualitative analysis regarding this theme appear to compliment quantitative research and aspects of neuroticism and associated constructs are seemingly apparent.

Additionally, features of EI appeared to be evident. 'Misunderstanding' theoretically links to low inter-personal EI whereas 'clarity' represents low

intra-personal EI; each was more evident within experiences of low PWB. The notion of 'openness' was highly valued, representing a desirable trait associated with potential benefits, however this was somewhat overreached by the desire for balance. Interestingly this echoes research within positive Psychology suggesting that well-being requires the cultivation of 'mental balance' across varied domains (Shapiro & Wallace, 2006). Lastly, the experience of 'change' was fundamental to participants' experience and judged via conditions including 'extremity' and 'choice'. This infers the presence of underlying values which influenced perceptions of change and consequently experiences of this and PWB. Regarding evaluative conditions and the desire for attributes such as motivation participants demonstrated a consensus; inferring less internally focused aspects were less conflicting. Additionally, change was associated with 'challenge'. This mirrors the core theoretical notion of PWB as signified by 'thriving via life's challenges' (Ryan & Deci, 2001). However this concept was perceived differently by the groups; low PWB participant's perceived challenge more negatively. The importance of change and its association with challenge compliments the theoretical conceptualization of PWB.

### **Discussion**

The purpose of this study was to examine whether EI could moderate the negative influence of neuroticism on PWB and to explore the experience and meaning of PWB at an individual level. The mixed-methods design was highly beneficial for achieving these aims and producing coherent and mutually-informative findings. The quantitative component explored the complex relationship between these variables; also providing a sample for the qualitative. The qualitative component developed and enriched these findings by exploring the meaning and experience of PWB via a purposefully selected sample with highly contrasting PWB. Additionally the findings of the quantitative element enabled consideration of participants known underlying EI and neuroticism levels. Thus the quantitative and qualitative elements comprising this study are both independently and mutually beneficial; establishing findings within an area lacking current research and advancing this in terms of both quantifiable relationships and detailed data regarding individual experience.

The finding that neuroticism did not predict a significant degree of PWB somewhat supports research conducted by Furnham and Petrides (2003) regarding trait EI, personality and 'happiness'. Similarly to the current study, this research demonstrated that EI explained over 50% total happiness variance and the positive association between EI and happiness persisted alongside personality; however personality alone did not account for a significant amount. This also demonstrates the prominence of EI, however, the inclusion of the 'big 5' and SWB are contrasting. Overall this quantitative finding appears somewhat conflicting with the qualitative in which aspects of neuroticism were seemingly evident. However, complimenting the quantitative findings that EI was a significantly high predictor, aspects of this were evident within participant's experiences; further highlighted through

sub-themes. A prominent example is that a core aspect of participants experiencing was the relational context of the self and others. EI is fundamentally centred upon the understanding and management of emotion in regards to others and the self (Zeidner, Roberts & Matthews, 2008); thus focusing solely upon individual and relational contexts. More specifically the sub-themes of 'clarity', 'realness' and 'misunderstanding' each denote inter- or intra-personal EI or encompass both; describing degrees of understanding and accurate self-presentation. Thus regarding EI, qualitative and quantitative findings may appear complementary.

Additionally, the high association between EI and neuroticism conflicts somewhat with previous research demonstrating these to be associated but categorically distinct (Petrides, Pita & Kokkinaki, 2007). The theoretical implications of this might be that aspects of neuroticism and EI are inter-related or overlap. The qualitative component of this study might inform this, suggesting a possible relation to be self-esteem. As previously discussed, self-efficacy or self-consciousness was a distinguishing aspect of low PWB participants experiencing; indicated through comparisons and persistently negative self-evaluations. Trait EI is also termed 'emotional self-efficacy' due to measuring self-perceived EI ability (Furnham & Christoforou, 2007), thus representing self-evaluation. Neuroticism is further characterised by self-consciousness and self-criticism. Although this suggestion is highly speculative and influenced by qualitative interpretation it complements the underlying theoretical structures of these constructs and is somewhat reinforced by research demonstrating a direct association between neuroticism and self-esteem (Mathes & Kahn, 1975). Consequently as previously suggested future research may benefit from the measurement of ability EI; this is not trait-based and thus less likely to share inter-related aspects. Such research might more clearly demonstrate the association between EI and neuroticism in relation to PWB.

The finding of no significant interaction between EI and neuroticism regarding PWB does not contradict a wealth of previous research, due to the currently limited amount. However, a small number of studies have reported a moderation effect of EI on neuroticism, such as that conducted by Salami (2011) whose findings are opposed by this study. However, the significantly different methodological aspects of this research must be acknowledged. Firstly the sample was composed of 400 south-western Nigerian adolescents within secondary-school education and an average age of 15.4 years. This significantly reduces generalizability of the findings to the current sample, composed of Western students at an Undergraduate degree education level with an average age of 21.2. Additionally this study measured the 'big 5' and thus assessed and controlled the contribution of each trait. Furthermore a less 'trait-based' EI measure was utilized, attempting to incorporate aspects of 'ability'. These methodological differences may somewhat account for the contradictory findings, however also suggest this study to be beneficial in increasing research regarding the relationship between trait EI, neuroticism and PWB; specifically within a previously un-researched population.

Additionally the mixed-methods nature of this study was greatly beneficial, as highlighted by the theme of 'openness', which through qualitative exploration emerged as highly prominent to participants experiencing. This somewhat reflects the big 5 trait -'openness to experience', most specifically in terms of intra-personal openness (McCrae & Sutin, 2009) reflected by the 'experience' sub-theme. This personality trait is highly associated with positive affect, 'quality-of-life' and SWB (Steel, Schmidt & Shultz, 2008) but research has yet to measure its association with PWB. Interestingly, however Ryff (1989) conceptually linked openness to experience with PWB claiming this to be a core feature of the personal growth facet. Openness to experience is seen to be a key characteristic of the 'fully-functioning person' as it allows the individual to be continually developing rather than reaching a fixed state wherein problems are solved. The theoretical implications of these considerations are that openness may be strongly linked to PWB; demonstrated both through qualitative findings and its theoretical foundations. Additionally the sub-theme of 'others' denotes an inter-personal aspect of openness which as previously discussed may reflect features of EI. As aforementioned, openness was a key theme within individual's experiences of PWB and as an overreaching notion this did not appear to differ widely between the groups. However, as this trait was not assessed participants' levels of openness and any potential role of this trait are unknown. This suggests that a quantitative exploration of the association between 'openness to experience' and PWB may be beneficial in clarifying the relationship between these constructs; furthermore it supports that were this study to be replicated, measurement of the 'big 5' is advisable.

One potential limitation of this study which must be acknowledged is researcher bias. As the researcher analysed the qualitative component of this study with prior knowledge of the participant's neuroticism, EI and PWB it may be that aspects of these were perceived as highly evident; alongside potential prior expectations. Due to the nature and composure of this study this was somewhat unavoidable; however, an effort to increase the validity of the findings was the highly data-driven nature of the analysis and inclusion of semantic codes. Additionally the purposeful selection of participants with highly opposing PWB may further account for the perceived visibility of neuroticism and EI, as these were greatly above or below average. Consequently for individuals with differing EI and neuroticism the qualitative analysis may not be representative of their experiencing. An additional limitation is that although the quantitative component assessed all six PWB facets the qualitative interviews were based upon three. Thus the themes may be somewhat specific to or representative of the participants experience and perceptions of these facets rather than PWB as a whole. Due to ethical constraints regarding sensitivity this was obligatory, however future research could address this limitation through the development of additional interview questions which equally address the six facets.

A final limitation of this study is the female dominated nature of the sample; including 85% Female and 15% Male participants. This reduces its representativeness but is specifically a limitation due to consistent findings that neuroticism demonstrates significant gender differences, regardless of culture or age (Costa, Terracciano & McCrae, 2001). Females demonstrate greater neuroticism scores as a whole and specifically regarding anxiety, depressiveness and self-consciousness. Interestingly these three concepts were discussed within the qualitative analysis which predominantly included female participants; the only Male demonstrated high PWB and low neuroticism. This characteristic of the sample may somewhat account for the slightly negative skew of neuroticism indicating a build-up of high scores. Additionally, the study conducted by Salami et al. (2011) which demonstrates a moderational effect of EI on neuroticism included a sample with a slight Male gender bias of 55%. Due to these limitations a suggestion for future research may be the inclusion of a sample composed of equally distributed gender characteristics.

In terms of practical implications for therapies and interventions the notion that the improvement of EI may control or reduce the influence of neuroticism on PWB was not supported, due to the lack of a significant interaction. However, as EI was a highly significant predictor of PWB its potential to alone influence this cannot be ruled out. Thus, research regarding the nature of trait EI in separation from personality and the ways in which this may influence PWB are required prior to any such practical developments. Additionally, ability EI may demonstrate greater practical implications than self-perceived EI for the reasons previously discussed. A final strength of this study regarding future research is its mixed-methods design. Each element may be replicated and improved separately, producing further mutually-informative findings; or as mixed-methods research, directly integrating these. Irrespective of this, the quantitative and qualitative findings of this study aid progression towards a multi-faceted and detailed understanding of PWB and associated variables.

In conclusion, research regarding PWB is invaluable regarding psychological health; a currently under-researched but vital state of mental functioning. Thus both quantitative and qualitative exploration is highly valuable, providing a clearer understanding of its relation to other constructs and individual-level meaning and experience. This study demonstrates that EI and neuroticism did not interact; contradicting the hypothesised moderational effect of EI. A measure of neuroticism appeared redundant alongside one of trait EI which contributed most prominently to the prediction of PWB, suggesting EI to be highly significant regarding PWB. This is somewhat reflected through individual experience both inter- and intra-personally and is prominent within themes and sub-themes. Aspects of neuroticism and EI seemed apparent within the qualitative exploration and at times to contrast between high and low PWB. Constructs such as self-esteem, social-anxiety and mental balance may also be implicated within individual experience. Thus this research has a number of theoretical



implications alongside potential methodological improvements for future studies regarding EI, neuroticism and their relation to PWB.

## References

Abbott, R. A., Ploubidis, G. B., Huppert, F. A., Kuh, D., Wadsworth, M. E. J., & Croudace, J. T. (2006). Psychometric evaluation and predictive validity of Ryff's psychological well-being items in a UK birth cohort sample of women. *Health and Quality of Life Outcomes, 4*, 76.

Augusto-Landa, J. M., Pulido-Martos, M., & Lopez-Zafra, E. (2011). Does Perceived Emotional Intelligence and Optimism/pessimism Predict Psychological Well-being? *Journal of Happiness Studies, 12*, 463–474.

Bolger, N., & Schilling, E. A. (1991). Personality and the Problems of Everyday Life: The Role of Neuroticism in Exposure and Reactivity to Daily Stressors. *Journal of Personality 59*, 355-386.

Boyatzis, R. E. (1998). Transforming qualitative information: Thematic Analysis and Code Development. USA: California: Sage Publications.

Brackett, M. A., Warner, R. M., & Bosco, J. S. (2005). Emotional intelligence and relationship quality among couples. *Personal Relationships, 12*, 197–212.

Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology, 3*, 77-101.

Brody, N. (2004). What cognitive intelligence is and what emotional intelligence is not. *Psychological Inquiry, 15*, 234–238.

Cooper, A., & Petrides, K. V. (2010). A Psychometric Analysis of the Trait

Emotional Intelligence Questionnaire–Short Form (TEIQue–SF) Using Item Response Theory. *Journal of Personality Assessment*, 92, 449–457.

Costa, P. T., & McCrae, R. R. (1995). Domains and Facets: Hierarchical Personality Assessment Using the Revised NEO Personality Inventory. *Journal of Personality Assessment*, 64, 21-50.

Costa, P. T. J., Terracciano, A., & McCrae, R. R. (2001). Gender Differences in Personality Traits Across Cultures: Robust and Surprising Findings. *Journal of Personality and Social Psychology*, 81, 322-331.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.

Darvill, J. T., Johnson, R. C., & Danko, G. P. (1992). Personality correlates of public and private self-consciousness. *Personality and Individual Differences*, 13, 383–384.

Davies, R., Clarke, D., & Rendell, N. (2010). *Using Research Methods, Statistics, and SPSS in Psychology*. Harlow: Pearson Custom Publishing.

DeNeve, K. M., & Copper, H. (1998). The Happy Personality: A Meta-Analysis of 137 Personality Traits and Subjective Well-Being. *Psychological Bulletin*, 124, 197-229.

Fereday, J. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 5, 80-92.

Field, A. P. (2009). *Discovering Statistics using SPSS (3<sup>rd</sup> Edition)*. London: Sage.

Furnham, A., & Christoforou, I. (2007). Personality Traits, Emotional Intelligence, and Multiple Happiness. *North American Journal of Psychology, 9*, 439-462.

Furnham, A., & Petrides, K. V., (2003). Trait Emotional Intelligence and Happiness. *Social Behavior and Personality, 31*, 815-824.

Gallagher, M. W., Lopez, S. J., & Preacher, K. J. (2009). The Hierarchical Structure of Well-Being. *Journal of Personality, 77*, 1025-50.

Gardner, H. (1999). *Intelligence reframed: Multiple Intelligence for the 21st Century*. New York: Basic Books.

Gliem, J. A., & Gliem, R. R. (2003, October). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the Future of Public-domain Personality Measures. *Journal of Research in Personality, 40*, 84-96. From [www.ipip.org](http://www.ipip.org).

Huta, V., & Ryan, R. M. (2009). Pursuing Pleasure or Virtue: The

Differential and Overlapping Well-Being Benefits of Hedonic and Eudaimonic Motives. *Journal of Happiness Studies*, 11, 735–762.

Keyes, C. L. M., Ryff, C. D., & Shmotkin, D. (2002). Optimizing Well-Being: The Empirical Encounter of Two Traditions. *Journal of Personality and Social Psychology*, 82, 1007–1022.

Lahey, B. B. (2009). Public Health Significance of Neuroticism. *The American Psychologist*, 64, 241–256.

Landa, J. M. A., Martos, M. P., & López-Zafra, E. (2010). Emotional Intelligence and Personality traits as predictors of Psychological Well-being in Spanish Undergraduates. *Social Behaviour and Personality*, 38, 783-794.

Mathes, E. W, & Kahn, A. (1975). Physical attractiveness, happiness, neuroticism, and self-esteem. *Journal of Psychology*, 90, 27-30.

Matthews, G., Emo, A. K., Funke, G., Zeidner, M., Roberts, R. D., Costa, P. T. J., & Schulze, R. (2006). Emotional Intelligence, Personality, and Task-Induced Stress. *Journal of Experimental Psychology*, 12, 96–107.

Mavroveli, S., Petrides, K. V., Rieffe, C., & Bakker, F. (2007). Trait Emotional Intelligence, Psychological Well-being and peer-rated social competence in adolescence. *British Journal of Developmental Psychology*, 25, 263–275.

Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human Abilities: Emotional Intelligence. *Annual Review of Psychology*, 59, 507–36.

McCrae, R. R., & Costa, P. T. (1994). The Stability of Personality: Observations and Evaluations. *Current Directions in Psychological Science*, 6, 173-175.

McCrae, R. R., & Costa, P. T. (2003) *Personality in adulthood: A five-factor Theory Perspective*. New York: The Guilford Press.

McCrae, R. R., & Costa, P. P. (2008). The Five-Factor Theory of Personality. In John, O. P., Robins, R. W., & Pervin, L. A. (Eds.), *Handbook of Personality, Third Edition: Theory and Research*, (pp. 159-181). UK: Guilford Press.

Norton, G., R., Cox, J. B., Hewitt, L. P., & McLeod, L. (1997). Personality factors associated with generalized and non-generalized social anxiety. *Personality and Individual Differences*, 22, 655–660.

Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and Individual Differences*, 33, 1091–1100.

Perez, J. C., Petrides, K. V., & Furnham, A. (2005). Measuring Trait Emotional Intelligence. In R. Schulze & R. Roberts (Eds.), *International Handbook of Emotional Intelligence* (pp. 124-143). Cambridge, MA: Hogrefe & Huber

Petrides, K. V. (2011). Ability and Trait Emotional Intelligence. In T. Chamorro-Premuzic, S. Von Stumm & A. Furnham (Eds.), *The Wiley-Blackwell Handbook of Individual Differences, 1<sup>st</sup> Edition*, (pp. 656-678).

Oxford: Blackwell Publishing Ltd.

Petrides, K. V., & Furnham, A. (2003). Trait Emotional Intelligence: Behavioural Validation in Two Studies of Emotion Recognition and Reactivity to Mood Induction. *European Journal of Personality, 17*, 39–57.

Petrides, K. V., Pita, R., & Kokkinak, F. (2007). The location of trait emotional Intelligence in personality factor space. *British Journal of Psychology, 98*, 273–289.

Preacher, K. J. (2012). *A primer on interaction effects in multiple linear regression*. Retrieved 9<sup>th</sup> January 2013, from:  
[www.quantpsy.org/interact/interactions.htm](http://www.quantpsy.org/interact/interactions.htm).

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology, 52*, 141–66.

Ryff, C. D. (1989). Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being. *Journal of Personality and Social Psychology, 57*, 1069-1081.

Ryff, C. D. (1995). Psychological Well-Being in Adult Life. *Current Directions in Psychological Science, 4*, 99-104.

Ryff, C. D., & Keyes, C. L. M. (1995). The Structure of Psychological Well-Being Revisited. *Journal of Personality and Social Psychology, 69*, 719-727.

Ryff, C. D., & Singer, B. H. (1996). Psychological Well-Being: Meaning, Measurement, and Implications for Psychotherapy Research. *Psychotherapy and Psychosomatics*, 65, 14-23.

Ryff, C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. *Social Science Research*, 35, 1103–1119

Ryff, C. D., & Singer, B. H. (2000). Interpersonal Flourishing: A Positive Health Agenda for the New Millennium. *Personality and Social Psychology Review*, 1, 30-44.

Salami, S. O. (2011). Personality and Psychological Well-being of Adolescents: the moderating role of Emotional Intelligence. *Social Behaviour and Personality*, 39, 785-794.

Schutte, N. S., Thorsteinsson, E. B., Hine, D. W., Foster, R., Cauchi, A., & Binns, C. (2010). Experiential and Rational Processing Styles, Emotional Intelligence and Well-being. *Australian Journal of Psychology*, 62, 14–19.

Shapiro, S. L., & Wallace, A. B. (2006). Mental Balance and Well-Being: Building Bridges between Buddhism and Western Psychology. *American Psychologist*, 61, 690–701.

Shiple, B. A., Weiss, A., Der, G., Taylor, M. D., & Dearey, I. J. (2007). Neuroticism, Extraversion, and Mortality in the UK Health and Lifestyle Survey: A 21-Year Prospective Cohort Study. *Psychosomatic Medicine*, 69, 923–931.



Soper, D.S. (2012) A-priori Sample Size Calculator for Multiple Regression (Online Software). Retrieved 7<sup>th</sup> November, 2012, from: [www.danielsoper.com/statcalc3](http://www.danielsoper.com/statcalc3).

Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the Relationship between Personality and Subjective Well-Being. *Psychological Bulletin*, 134, 138–16.

Sutton, J. M., Mineka, S., Zinbarg, R. E., Craske, M. G., Griffith, J. W., Rose, R. D., Waters, A. M., Nazarian, M., & Mor, N. (2011). The Relationships of Personality and Cognitive Styles with Self-Reported Symptoms of Depression and Anxiety. *Cognitive Theory Research*, 35, 381–393.

Tabachnick, B. G., & Fidell, L. S. (2013). Using Multivariate Statistics (6<sup>th</sup> Edition). Boston, Mass.; London: Pearson.

Thorndike, E. L. (1920). Intelligence and its Uses. *Harper's Magazine*, 140, 227-235.

Watson, D., Clark, L. A., & Harkness, A. R. (1994). Structures of Personality and their relevance to Psychopathology. *Journal of Abnormal Psychology*, 103, 18-31.

Zeidner, M., Roberts, R. D., & Matthews, G. (2008). The Science of Emotional Intelligence: Current Consensus and Controversies. *European Psychologist*, 13, 64–78.

Zeidner, M., Matthews, G., & Roberts, R. D. (2011). The Emotional Intelligence, Health, and Well-Being Nexus: What Have We Learned and What Have We Missed? *Applied Psychology: Health and Well-being*, 4, 1–30.

