# Author's personal copy

Personality and Individual Differences 50 (2011) 1180-1185



Contents lists available at ScienceDirect

# Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid



# Importance, pressure, and success: Dimensions of values and their links to personality

Stephanie Veage, Joseph Ciarrochi, Patrick C.L. Heaven\*

University of Wollongong, Wollongong, NSW 2522, Australia

#### ARTICLE INFO

Article history:
Received 1 September 2010
Received in revised form 16 January 2011
Accepted 21 January 2011
Available online 2 March 2011

Keywords: Values Goals Personality Big Five Psychoticism

#### ABSTRACT

A total of 246 students (mean age = 18 years) completed measures assessing the Big-Five personality domains, psychoticism, and three dimensions of values (importance, pressure, and success). Results showed that participants high in neuroticism did not differ in *what* they valued, but felt more value pressure and less value success. Extraverts valued sensation-seeking, but did not necessarily value other people, and generally felt more successful than others at their values. People high in conscientiousness, agreeableness, and low in psychoticism were similar in endorsing pro-social values, but differed in their perceived success at those values. The results are discussed with reference to knowledge about these personality dimensions and their implications for different dimensions of values.

© 2011 Elsevier Ltd. All rights reserved.

# 1. Introduction

Human behaviour is shaped in multiple ways. One way is through the values we hold. Values act as frames of reference and are linked to one's sense of self and thereby shape our behaviours in predictable ways (Eccles & Wigfield, 2002). Values are linked to the sorts of goals we set, how attractive or not we find those goals, and how we go about achieving them (Feather, 1988). Another way that behaviour is shaped is through our personality dispositions. Personality is known to have multiple consequential outcomes and these have been well documented (Ozer & Benet-Martinez, 2006).

This paper focuses on the links between personality and different dimensions of values. The associations between personality dimensions and values have been well articulated in research (e.g., Parks & Guay, 2009; Roccas, Sagiv, Schwartz, & Knafo, 2002). However, far less research has examined the personality correlates of the different dimensions of values. For instance, are the personality factors that underpin ratings of the *importance* of values, the bulk of research thus far, the same as those that drive our perceived *success* at achieving those values? And, are these factors the same as those that drive our perceived *pressure* to adopt certain values?

We use the term values as a shorthand to refer to both terminal values (things done for their own sake) and abstract goals (things done in the service of values). Values research typically focuses on one rating dimension, namely, importance. However, this is not the only dimension that is of practical relevance. Personal strivings research suggests that other relevant dimensions include the extent a value is felt as externally controlled (what we term "pressure"), and the extent that one is successful at living according to values (Emmons, 1986; Romero, Villar, Luengo, & Gómez-Fraguela, 2009; Sheldon & Elliot, 1998). Personal strivings research takes an idiographic approach (people generate their own values or strivings), whereas values research takes more of a "universalist approach", requiring people to assess the importance of value items that cover a wide variety of "universal" domains. The present study utilized the values approach, but expanded the ratings of those values beyond importance to include ratings of pressure and success.

The major personality dimensions (notably the Big Five as well as Eysenck's psychoticism dimension) have been found to be significantly associated with value importance ratings. For instance, extraversion is positively associated with stimulation, hedonism and achievement values, intellect/openness with universalism and self direction values, conscientiousness with achievement and conformity values, agreeableness with benevolence and tradition values (Haslam, Whelan, & Bastian, 2009; Parks & Guay, 2009; Roccas et al., 2002), and neuroticism with tradition (Haslam et al., 2009) and security values (Luk & Bond, 1993). Psychoticism has been negatively associated with prioritising

<sup>\*</sup> Corresponding author. Tel.: +61 2 42214070. E-mail address: pheaven@uow.edu.au (P.C.L. Heaven).

satisfying relationships, personal growth and religiosity (e.g. Heaven, 1993).

#### 1.1. The present study

This study extends previous research by examining the personality correlates of value pressure and success. In addition to importance, we argue that the extent an individual feels pressured to hold a value and the extent of success at living according to those values (Emmons, 1986) will assist in distinguishing between different types of personality.

Given the emotional instability of neurotics (Eysenck & Eysenck, 1968) and the association between neuroticism and avoidance goals which, in turn, are linked to a higher perceived pressure to hold a value (Elliot & Sheldon, 1998), we expected neuroticism to be associated with more pressure to hold values. Conversely, those high on intellect/openness tend to be non-conventional (Costa & McCrae, 1985) and are therefore less likely to be influenced by external pressure from others. Given that high O individuals also have a tendency to prioritise self-direction and autonomy values (Haslam et al., 2009), we expected this personality variable to be negatively related to pressure to hold values.

Extraversion has been linked to positive affect (PA) whereas negative affect (NA) comprises the core of neuroticism (Steel, Schmidt, & Schultz, 2008). PA has been linked to greater motivation and goal success, whilst NA has been associated with less goal success and lower goal setting (Emmons, 1986; Little, Lecci, & Watkinson, 1992). Thus, we expected that extraverts would be more successful and neurotics less successful at living according to their values, since goals are often the physical realization of values. Although we expected high neurotics to report less success than low neurotics, we did not expect neurotics to differ in what they believe to be important values, in keeping with past literature (e.g., Roccas et al., 2002).

# 2. Method

#### 2.1. Participants

Participants were 246 students (137 females, 106 males, 3 unidentified) from five high schools in a Catholic Diocese of New South Wales, Australia. The mean age of the sample was 18 years. (range = 17-18).

# 2.2. Measures

The following measures form the basis of this report:

2.2.1. The survey of guiding principles (SGP; Ciarrochi & Bailey, 2008)

The SGP was developed based on a synthesis of the values and goals literature, measuring not only item importance, but also pressure and success. It was designed to be brief and cover as wide a range of principles as possible. The SGP was designed to build on previous values measures, rather than be distinct from them. As such, the items are similarly worded to that used by Schwartz (1992) and include items derived from his 10 value dimensions (see scales below). Research suggests that ratings of value importance on the SGP correlate highly with ratings on Schwartz's measure (Williams & Ciarrochi, 2010). In addition to Schwartz's dimensions, the SGP contains items related to spiritual and religious values, to sexuality, and seeking positive emotions.

Previous factor analytic research on importance ratings suggests that some items on the SGP were sufficiently similar to be averaged together to form a new scale (Ciarrochi & Bailey, 2008). The new scales were named power (e.g., 'having authority and being in charge,' 2 items;  $\alpha$  = .89), conscientious achievement (e.g., 'being ambitious and hard working,' 5 items;  $\alpha = .85$ ), hedonism (e.g., 'having an enjoyable, leisurely life,' 2 items;  $\alpha$  = .79), stimulation (e.g., 'having an exciting life,' 3 items;  $\alpha$  = .85), artistic direction (e.g., 'being creative,' 4 items;  $\alpha$  = .82), benevolence (e.g., 'being loyal to friends, family, and/or my group,' 4 items;  $\alpha$  = .87), religious values ('being at one with god,' 2 items;  $\alpha$  = .92), health (e.g., 'being physically fit,' 3 items;  $\alpha$  = .80), sex ('being sexually active,' 2 items;  $\alpha$  = .79), and seeking positive emotions (e.g. 'experiencing positive mood states,' 3 items;  $\alpha$  = .85). If a principle did not fall into one of these scales, it was utilized as an individual item in all analyses reported below.

Participants rated the extent that fifty-four values were important to them, on a Likert scale of 1 (*unimportant*) to 9 (*extremely important*). Respondents then indicated the extent they felt pressured to hold each value, from 1 (*no pressure*) to 9 (*extreme pressure*). Next, participants indicated their level of success from 1 (*not at all successful*) to 5 (*highly successful*).

For importance ratings,  $\alpha$ s ranged from .79 (hedonism) to .92 (religious values), pressure ratings ranged from .78 (power) to .96 (stimulation), and success ratings ranged from .64 (sex) to .88 (stimulation). These reliabilities fall within the range commonly observed for values (see Roccas et al., 2002).

# 2.2.2. International personality item pool five factor scale (IPIP-50; Goldberg, 2008)

This instrument assesses the major 5 personality dimensions, namely extraversion (E), openness-intellect (O), neuroticism (N), conscientiousness (C), and agreeableness (A) with strong convergent validity with the NEO Inventory Revised. Responses were provided on a 5-point Likert scale from 1 (*very inaccurate description of me*) to 5 (*very* accurate). Alpha coefficients were E = .78, N = .81, O = .78, C = .78, and A = .77.

#### 2.2.3. Psychoticism scale (Eysenck & Eysenck, 1975)

We used Corulla's (1990) revision of this instrument. It comprises 12 items ( $\alpha$  = .73).

#### 2.3. Procedure

After obtaining parental and student permission, participants completed surveys in class under the supervision of a teacher or researcher. The IPIP and psychoticism scales were completed first, using paper and pencil, followed by completion of the SGP online. Surveys were completed anonymously and without discussion.

#### 3. Results

#### 3.1. Skewness

Several variables were slightly negatively skewed, with skewness statistics being larger than twice their standard error. To deal with skewness, we examined all relationships in parametric (e.g., Pearson) and nonparametric (e.g., Spearman) analyses, and declared a result to be significant only if it was significant in both instances. For ease of interpretation, Pearson correlations are presented in the tables.

#### 3.2. Preliminary analyses

3.2.1. Correlations between importance, pressure, and success ratings The link between importance and success ratings of values tended to be modest and positive, with most (90%) of the correlations falling between r = .35 (p < .01) and r = .49 (p < .01). Thus, higher levels of value importance were often associated with higher levels of success. The link between importance and pressure ratings of values tended to be somewhat lower and positive, with most (90%) of the correlations falling between r = .13 (p < .05) and r = .20 (p < .05). Further, the link between pressure and success ratings of values was also lower and positive, with most (90%) of the correlations falling between r = .14 (p < .05) and r = .22 (p < .001).

#### 3.2.2. Mean ratings

Mean scores on the key value scales are shown in Table 1. Participants rated benevolence and relationship values as the most important (M > 7.6), and being competent, meeting my obligations, helping others, health, and benevolence as the most pressured values (M > 5.60). Benevolence, friendship, and helping others were rated as the most successful (M > 4.8).

Participants perceived that they succeeded at putting the values of benevolence, friendship, and helping others into play. Further, although individuals felt pressured to hold the values benevolence and helping others, they still rated themselves as being successful at those values. Importance ratings were

**Table 1** Descriptive statistics for key scales (N = 246).

Scale	Impor	tance	Pressu	ire	Success		
	М	SD	М	SD	М	SD	
Power							
Having influence	3.90	.94	4.33	2.27	4.02	1.04	
Being wealthy	5.83	1.98	5.17	2.52	3.41	1.08	
Being admired	6.36	1.94	4.52	2.45	4.00	1.15	
Achievement							
Conscientious achievement	6.54	1.35	4.93	1.97	4.11	.84	
Lasting achievement	7.54	1.55	5.42	2.47	4.31	1.10	
Being competent	7.39	1.51	5.84	2.35	4.48	2.35	
Hedonism	7.39	1.41	4.45	2.34	4.42	.92	
Stimulation	7.28	1.38	4.80	2.43	4.34	1.14	
Creative self-direction							
Artistic	6.38	1.71	3.71	2.01	4.03	1.22	
Being self-sufficient	7.23	1.48	5.22	2.46	4.23	1.09	
Being curious	7.31	1.61	3.88	2.27	4.36	1.04	
Solving problems	6.92	1.57	4.55	2.33	4.17	.97	
Striving to be a better person	7.54	1.45	5.16	2.47	4.39	.96	
Universalism							
Connecting with nature	4.69	2.12	2.97	2.10	3.57	1.00	
Promoting justice	6.57	1.92	5.11	2.36	3.81	1.02	
Wisdom and understanding	6.92	1.88	4.67	2.25	4.22	1.00	
Benevolence	7.96	1.25	5.68	2.28	4.96	1.06	
Relationship							
Friendship	8.28	1.31	4.96	2.57	4.93	1.14	
Helping others	7.72	1.50	5.70	2.54	4.86	.97	
Love	7.65	1.58	5.17	2.52	4.40	1.35	
Tradition							
Religion	4.97	2.30	4.97	2.30	3.53	1.13	
Respect tradition	6.33	1.73	4.81	2.36	4.11	1.06	
Conformity							
Being self-disciplined	6.50	1.70	5.00	2.32	3.96	1.11	
Meeting obligations	7.23	1.50	5.84	2.34	4.45	.94	
Security							
Being safe from danger	7.46	1.63	5.27	2.47	4.49	1.03	
Reciprocation of favours	7.60	1.50	5.42	2.36	4.53	1.06	
Health	6.76	1.61	5.70	2.11	4.00	1.27	
Sex	5.41	2.01	4.91	2.42	3.88	1.15	
Seeking positive emotions	7.51	1.39	4.87	2.33	4.09	.97	

evaluated higher than pressure ratings for every value, except religion and "having influence."

#### 3.4. Gender effects

We compared males and females on all value dimensions, and utilized a conservative alpha criterion (.001) to reduce the problem of Type 1 error. Relative to males, females gave higher importance ratings to the values creating beauty (Mf = 6.33; Mm = 5.28) and being safe from danger (Mf = 7.81; Mm = 6.87). Relative to females, males gave higher importance ratings to the sex values (Mf = 4.89; Mm = 6.03). No gender differences were found for pressure ratings. Relative to females, males reported more success at the values of stimulation (Mm = 4.38; Mf = 3.96) and working outdoors (Mm = 4.06, Mf = 3.42). We found no significant interactions between gender and values in predicting personality, indicating that the links between values and personality were similar for males and females.

#### 3.5. Correlations between personality and values

Table 2 presents the correlations between values and each personality dimension. Items and scales have been rank-ordered by importance, except in the case of N, which was ranked by pressure ratings due to higher correlations. (see Table 3).

Inspection of the table reveals that higher levels of neuroticism were associated with lower importance being given to the values of health and working outdoors. Further, neuroticism was associated with increased pressure to strive for wealth, health and solving problems, with pressure also associated with lower success at such values. N was also associated with lower success at seeking positive emotions and friendship.

Higher levels of extraversion were associated with importance at the sex and hedonism values, as well as greater perceived success at the being admired, having courage, and sex values. Higher intellect/openness was associated with ascribing importance to many values, such as being artistic, creating beauty and solving problems. Higher levels of intellect/openness were also associated with higher perceived success at creating beauty, being artistic and teaching others.

Higher levels of conscientiousness were associated with more achievement and competence values, and with a higher level of success at most of the values they deemed important. Higher agreeableness was associated with higher success at being safe from danger, benevolence, promoting justice and helping others. Interestingly, both agreeable and conscientious individuals valued being competent and lasting achievement, but only conscientious people rated themselves as actually successful at these values. Higher psychoticism was associated with less importance at being honest, helping others, benevolence, and greater success at working outdoors, sex and stimulation, and greater pressure to engage in sex.

# 4. Discussion

This study is the first to explore the relationships between the major personality dimensions and value importance, how much pressure was felt to hold such values, and how successful participants thought they were at implementing their values. Generally, participants rated the values as higher in importance than pressure, indicating that the values tended to be viewed as personally desirable (intrinsic or autonomous) rather than driven from the outside (controlled or extrinsic). As hypothesized, those higher in neuroticism reported more pressure and less success at values, those higher in extraversion reported greater success, and those

 Table 2

 Guiding principle items correlated with neuroticism, extraversion and intellect/openness.

Neuroticism			Extraversion				Intellect/Openness				
Item	Imp	Pres	Succ	Item	Imp	Pres	Succ	Item	Imp	Pres	Succ
Being wealthy	06	.24**	15*	Sex	.25**	.02	.20*	Artistic	.47**	06	.28**
Health	16*	.21**	22**	Hedonism	.21**	06	.19**	Solving problems	.36**	03	.20*
Solving problems	08	.20**	15*	Self-sufficient	.20**	10	.19**	Curious	.34**	08	.16*
Seek positive emotions	07	.17*	30**	Being admired	.19**	02	.35**	Self-sufficient	.33**	03	.14*
Self-sufficient	01	.17*	08	Power	.18*	.02	.18*	Teaching others	.30**	12	.25**
Love	.06	.17*	.05	Health	.17*	07	.22**	Wisdom	.30**	.01	.13
Striving to be better	07	.16*	09*	Stimulation	.17*	08	.20**	Connect w nature	.29**	02	.21*
Sex	.00	.16*	01	Being wealthy	.17*	.13	.18	Striving to be better	.28*	04	.21*
Benevolence	08	.15*	15*	Courage	.15*	09	.24**	Resolve disputes	.26**	03	.13
Promoting justice	.07	.15*	.04	Religion	.15*	07	.18*	Promoting justice	.24**	01	.07
Curious	.02	.15*	.03	Curious	.15*	05	.13	Lasting achieve	.22**	12	.11
Resisting temptation	14*	.14*	14*	Love	.10	04	.18*	Love	.21**	15*	.12
Stimulation	09	.14*	$17^{*}$	Teaching others	.10	03	.17*	Conscient achieve.	.21*	.01	.10
Hedonism	06	.13	21**	Striving to be better	.09	09	.21**	Respect tradition	.21**	04	.11
Lasting achieve	.00	.11	16*	Seek positive emotions	.08	05	.22**	Having courage	.20**	06	.06
Friendship	04	.06	16*	Lasting achieve.	.05	09	.19**	Seek positive emotions	.18**	01	.01
Working outdoors	18**	.00	23**	Connect w nature	.04	.13	.19*	Stimulation	.19**	08	.17*
Respect tradition	14**	.01	10	Promoting justice	02	05	.22**	Power	.17*	08	.13

*Note*: p < .05, p < .01, p < .001.

**Table 3**Guiding principle items correlated with conscientiousness, agreeableness, and psychoticism.

Conscientiousness				Agreeableness		Psychoticism					
Item	Imp	Pres	Succ	Item	Imp	Pres	Succ	Item	Imp	Pres	Succ
Conc. achievement	.37**	05	.30**	Striving to be better	.41**	.01	.13	Helping others	34**	09	06
Resist temptation	.33**	.01	.16*	Helping others	.39**	08	.18**	Benevolence	32**	07	16*
Meet obligations	.34**	.00	.22**	Love	.39**	04	.13	Sex	.31**	.18*	.23**
Benevolence	.30**	07	.20**	Being honest	.38**	08	.22**	Safe from danger	29**	03	21*
Respect tradition	.29**	05	.17*	Benevolence	.37**	07	.25**	Meet obligations	28**	02	01
Being competent	.28**	.02	.24**	Friendship	.34**	05	.11	Promoting justice	27**	08	10
Striving to be better	.28**	01	.24**	Being competent	.33*	.04	.08	Friendship	22**	03	.01
Religion	.25**	06	.03	Promoting justice	.31**	.03	.23**	Striving to be better	21**	04	04
Solving problems	.23**	05	.24**	Resolves disputes	.31**	04	.12	Tradition	19**	01	12
Lasting achievement.	.22**	.03	.24**	Seek positive emotions	.31**	01	.02	Being competent	18**	08	05
Teaching others	.24**	01	.21**	Lasting achievement	.31**	.06	.12	Lasting achievement	− <b>.</b> 17*	01	12
Wisdom	.24**	03	.10	Safe from danger	.30**	.01	.30*	Religion	16*	.00	01
Return favours	.23**	05	.18**	Respect tradition	.29**	.00	.18	Wisdom	16*	.01	.00
Health	.22**	02	.09	Resist temptation	.29**	02	.09	Power	.14*	.13	.09
Helping others	.20**	05	.19**	Meet obligations	.28**	.02	.22**	Working outdoors	.12	.13	.27**
Sex	19**	14*	11	Curious	.28**	.09	.16*	Build and repair	.08	.18*	.12
Safe from danger	.18*	00	.08	Wisdom	.26**	03	.10	Stimulation	.06	.09	.19**
Justice	.18**	.01	.13	Hedonism	.24**	17*	.03	Courage	.06	.02	.15*

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001.

higher in openness reported feeling less pressure, at least in the domains of love and stimulation.

## 4.1. Neuroticism

Consistent with past research, little association was found between neuroticism and value importance (Roccas et al., 2002), although neurotics reported feeling pressure to hold stimulation values. Overall, high Ns were characterised by how much external pressure they felt to hold their values as well as how successful they perceived themselves to be at implementing their values. Such findings are consistent with the view that negative affect is associated with lower perceived control (Sheldon & Elliot, 1998) and lower success at achieving goals (Little et al., 1992). Indeed, for neuroticism, values rated as pressured were often associated with less success. As past studies have found, goals are more successful when pursued for autonomous rather than controlled reasons (Sheldon & Elliot, 1998), and it may be that neuroticism increases susceptibility to feeling pressure from others, leading

to low success at values. High Ns did not rate relationship principles as less important, but rather as less successful.

# 4.2. Extraversion

Extraverts valued hedonism, being self-sufficient, and stimulation, consistent with past research using the Schwartz measure (Haslam et al., 2009; Luk & Bond, 1993; Roccas et al., 2002). Their striving to be admired is consistent with their attention-seeking and assertive nature (Costa & McCrae, 1985). The importance and success ascribed to the sex values is compatible with the extravert's desire for and success at sensual gratification and with past findings relating extraversion and sexual behaviours (Eysenck, 1976). Extraverts did not prioritise relationship values more than did other personality types, but they did report more success at their relationships. This supports previous findings suggesting that E is implicated in successful relationships (e.g. Watson, Hubbard, & Wiese, 2000). As predicted, extraverts were generally more successful at their values, while those high in neuroticism were not

(Emmons, 1986; Little et al., 1992). Given that goal pursuit is often pleasurable and satisfying (Parks & Guay, 2009), and that extraverts are driven by pleasantness and rewards (Lucas & Diener, 2001), they are likely to find it more reinforcing to succeed.

#### 4.3. Intellect/openness

Intellect/openness was highly associated with prioritising being self-sufficient and with universalism, consistent with past research using both Schwartz and Rokeach measures (Dollinger, Leong, & Ulcini, 1996; Haslam et al., 2009; Luk & Bond, 1993). The high importance placed on being artistic and creating beauty is also consistent with past research linking O with imagination (Dollinger et al., 1996). Open people also reported moderate levels of success at those values mentioned above. Further, open people reported a low level of pressure to hold values across domains. This is consistent with their open-mindedness as opposed to conventionalism (Roccas et al., 2002). It seems that higher levels of openness may be related to relying on one's own judgements (self-direction), and being less likely to be influenced by external pressures to conform to the expectations of others.

#### 4.4. Conscientiousness

Conscientious individuals were more likely than others to find a number of values to be important and to succeed at them, consistent with their goal-directed nature and expectancy for success (Barrick, Mount, & Strauss, 1993). Consistent with past studies using the Schwartz measures, conscientious individuals placed importance on achievement (Dollinger et al., 1996; Roccas et al., 2002), conformity (Haslam et al., 2009; Luk & Bond, 1993), and tradition values (Haslam et al., 2009). While C was related to prioritising health values, consistent with past research (Ludke, Ulrich, & Husemann, 2009), it was not associated with success at these values. Although past studies have found C to be associated with health behaviours (Bogg & Roberts, 2004), it may be that highly conscientious adolescents may not have time to implement their health values choosing, instead, to focus on the high demands of school work.

C also tended not to be associated with external pressure to hold values, consistent with the high levels of intrinsic motivation of these individuals (Furnham, 1995). However, they did report feeling pressure from others, but manifested low levels of success at the sex values. This reflects the finding that C individuals engage in sex less frequently than other personality types (Heaven, Fitzpatrick, Craig, Kelly, & Sebar, 2000).

#### 4.5. Agreeableness

The results point to agreeable individuals as being 'intrinsically' pro-social; they desire loyalty, honesty, and are concerned for the welfare of others supporting earlier work (Habashi & Graziano, 2005). Further, consistent with previous studies, benevolence (Haslam et al., 2009; Luk & Bond, 1993), tradition (Luk & Bond, 1993), and friendship (Roccas et al., 2002) were rated as important. Agreeable individuals also prioritised seeking positive experiences and hedonism. Thus, while our results fit with the agreeable *persona* of being friendly, and wanting approval and acceptance (Luk & Bond, 1993), it is possible that they may be agreeable because of a desire to maintain a comfortable level of positive internal experiences.

Individuals high on A and C were similar in valuing self-direction and achievement, contrary to previous studies (Roccas et al., 2002). However, one striking difference emerged: Conscientious people were more successful at those values. Thus, A relates to pro-social preferences like 'achievement,' but does not necessarily

relate to having the skills to put those preferences into play. Agreeable individuals' prioritising of hedonism and seeking positive emotions may also contribute to the lower success rates. High C individuals have a preference for and the skill to achieve which is in keeping with their achievement striving (Costa & McCrae, 1985).

#### 4.6. Psychoticism

Almost all of the ratings for P reflect the antisocial nature of these individuals (Zuckerman, 1993), with negative associations found for all domains except the sex values. The results replicate the low importance those high in P ascribe to religion and relationships (Heaven, 1993). Further, those high in P did not believe they succeeded less at relationship values indicating that, while they may not value people, they believe they are good at forming sexual relationships. That those high in P did not prioritise stimulation values is surprising given past associations of psychoticism with sensation-seeking (Zuckerman, 1993), although they did report succeeding at stimulation values. Thus, while high P scorers may engage in various sensation-seeking behaviours, they may not prioritise such values.

#### 4.7. Implications, limitations and future directions

The present results highlight the merits of treating value-related behaviour as a multidimensional construct. The results suggest that values theory (Schwartz & Bilsky, 1987) would benefit by extending its focus beyond importance ratings. Our study suggests that personality types differ not only with regard to value importance, but also on the dimensions of pressure and success.

Our data were collected from high school students from a similar culture and age, which may impose limitations on the generalisability of the results. However, this differs from the typical university sample often used in research. Further, our data are cross-sectional and therefore cannot address the question of whether personality leads to the development of values, or vice versa. Future research should examine values and personality in a longitudinal context. The moderate correlations exhibited between values and the personality dimensions highlight, for instance, that succeeding at one's values is determined by factors other than personality. Future research should investigate other possible sources of variance that serve to influence the relationships of importance, pressure, and success to values. Including these value dimensions in future personality research will provide a much richer understanding of personality.

#### References

Barrick, M. R., Mount, M. K., & Strauss, J. (1993). Conscientiousness and performance among sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology*, 78, 715–722.

Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviours: A meta-analysis of the leading behavioural contributors to mortality. Psychological Bulletin, 130, 887–919.

Ciarrochi, J. V., & Bailey, A. (2008). A CBT practitioners guide to ACT: How to bridge the gap between cognitive behavioural therapy and acceptance and commitment therapy. Oakland, CA: New Harbinger Publications, Inc.

Corulla, W. J. (1990). A revised version of the psychoticism scale for children. Personality and Individual Differences, 11, 65–76.

Costa, P. T., & McCrae, R. R. (1985). Manual of the NEO personality inventory: Form S and Form R. Odessa, FL: Psychological Assessment Resources.

Dollinger, S. J., Leong, F. T. L., & Ulicni, S. K. (1996). On traits and values: With special reference to openness to experience. *Journal of Research in Personality*, 30, 23–41.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109–132.

Elliot, A. J., & Sheldon, K. M. (1998). Avoidance personal goals and the personality – illness relationship. *Journal of Personality and Social Psychology*, 75, 1282–1299.
 Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51, 1058–1068.

Eysenck, H. J. (1976). Sex and personality. London: Open books Publishing Limited.

- Eysenck, H. J., & Eysenck, S. (1968). *Manual for the eysenck personality inventory*. San Diego, CA: Educational and Industrial Testing Service.

  Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the eysenck personality*
- Eysenck, H. J., & Eysenck, S. B. G. (1975). Manual of the eysenck personality questionnaire. London: Hodder & Stoughton.
- Feather, N. T. (1988). From values to actions: Recent applications of the expectancyvalue model. Australian Journal of Psychology, 40, 105-124.
- Furnham, A. (1995). The relationship of personality and intelligence to cognitive learning styles and achievement. In D. Saklofske & M. Zeidner (Eds.), International handbook of personality and intelligence (pp. 397–413). New York: Plenum Press.
- Goldberg, L. R. (2008). The International Personality Item Pool. Retrieved 8 January 2008, from the World Wide Web: http://ipip.ori.org.ipip/.
- Habashi, M. M., & Graziano, W. G. (2005). "I am not...": The effect of priming agreeableness on helping behaviour. New Orleans, Louisiana: Poster presented at the annual meeting of the Society for Personality and Social Psychology.
- Haslam, N., Whelan, J., & Bastian, B. (2009). Big Five traits mediate associations between values and subjective well-being. *Personality and Individual Differences*, 46. 40–42.
- Heaven, P. C. L. (1993). Human values and personality dimensions: A test of the social values inventory. *Personality and Individual Differences*, 15, 307–312.
- Heaven, P. C. L., Fitzpatrick, J., Craig, F. L., Kelly, P., & Sebar, G. (2000). Five personality factors and sex: Preliminary findings. Personality & Individual Differences, 28, 1133–1141.
- Little, B. R., Lecci, L., & Watkinson, B. (1992). Personality and personal projects: Linking Big Five and PAC units of analysis. *Journal of Personality*, 60, 501–525.
- Lucas, R. E., & Diener, E. (2001). Understanding extraverts' enjoyment of social situations: The importance of pleasantness. *Journal of Personality and Social* Psychology, 81, 343–356.
- Ludtke, O., Ulrich, T., & Husemann, N. (2009). Goal and personality trait development over a transitional period: Assessing change and stability in personality development. Personality and Social Psychology Bulletin, 35, 428–441.

- Luk, C. L., & Bond, M. H. (1993). Personality variation and values endorsement in Chinese university students. Personality and Individual Differences, 14, 429–437.
- Ozer, D. J., & Benet-Martinez, B. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 401–421.
- Parks, L., & Guay, R. P. (2009). Personality, values and motivation. Personality and Individual Differences, 47, 675–684.
- Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The Big Five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28, 789–801.
- Romero, E., Villar, P., Luengo, M. A., & Gómez-Fraguela, J. A. (2009). Traits, personal strivings and well-being. *Journal of Research in Personality*, 43, 535–546.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. Advances in Experimental Social Psychology, 25, 1–65.
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. Journal of Personality and Social Psychology, 53, 550–562.
- Sheldon, K. M., & Elliot, A. J. (1998). Not all personal goals are personal: Comparing autonomous and controlled reasons for goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin*, 24, 546–557.
   Steel, P., Schmidt, J., & Schultz, J. (2008). Refining the relationship between
- Steel, P., Schmidt, J., & Schultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, 134, 138–161.
- Watson, D., Hubbard, B., & Wiese, D. (2000). General traits of personality and affectivity as predictors of satisfaction in intimate relationships: Evidence from self- and partner-ratings. *Journal of Personality*, 68, 413–449.
- Williams, K. & Ciarrochi, J. V. (in preparation). A critical evaluation of the Survey of Guiding Principles.
- Zuckerman, M. (1993). P-Impulsive sensation seeking and it's behavioural, psychophysiological and biochemical correlates. Neuropsychobiology, 28, 30-33