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The dark side of career preference: dark side traits, motives, and values

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Abstract

Over 2000 people completed two validated questionnaires: one measuring "dark side" personality traits and the other a measure of values and preferences that indicates the type of work that an individual would like to do and is best suited for. Dark side variables (and demographics) accounted for between 11% (science) and 46% (affiliation) variance in specific vocation related values. Factor analysis suggested three overall value/vocation factors (enterprising, traditional, and social) and three dark side variables (moving against, away from, and toward others). The three dark side factors predicted around a third of the variance in favoring enterprising and social occupations. Implications for vocational guidance and limitations of the study are considered.

Introduction

Vocational psychology is concerned with understanding how, when, and why people with a unique set of abilities, preferences, and values enjoy, thrive in, and become particularly productive in specific work environments. It is about maximizing person–job fit.

There is an extensive literature on the association between "normal" bright side personality traits and occupational values and preferences. However, this article is concerned with the relationship between dark side traits and occupational values and preferences. While there is an emerging literature on the relationship between dark side traits and leadership derailment (Furnham, 2010; Hogan, 2006), there are numerous studies that show the potential benefits of dark side traits in various work situations (Furnham & Trickey, 2011; Furnham, Hyde, and Trickey, 2012a,b; Race, Hyde, & Furnham, 2012). The rationale of this study was to examine the relationship between dark side traits and occupational value preferences to understand how, why, and when dark side traits may prove, at least initially, beneficial in certain work situations.

There are many taxonomies of value systems in the area of personality and vocational psychology that are used to help make decisions on vocational choice and change. The one theory of vocational preferences that has attracted most attention is Holland's theory of vocational choice (Holland, 1966, 1973, 1985). It remains one of the most fecund and researched theories in vocational psychology (Furnham, 2001). It has also served to inspire other instruments such as the one used in this study. Further, because of the longstanding use of this measure, it has been correlated with measures of the (bright side) Big Five personality traits. Inevitably, there have been various attempts to examine the relationship between personality measures and values mainly using the Holland measure (De Fruyt & Mervielde, 1997; Furnham, 1994; Goh & Leong, 1993; Schinka, Dye & Curtiss, 1997; Tokar & Swanson, 1995).

This study will use the Hogan and Hogan (1997) Motives, Values, Preferences Inventory (MVPI), which is a modern, psychometrically valid measure with impressive adult norms. It is based on Holland's work and ideas (Hogan & Blake, 1999). It has been used in a number of studies on leadership efficacy, and fit (Goiberson, Resick, & Dickson, 2005; Thomas, Dickson, & Bliese, 2001).

The MVPI has ten dimensions of motives, values, and preferences (see Table 1). These were arrived at by a content analysis of the literature including the taxonomies of five authors working in the area (Hogan & Hogan, 1997, p. 11). A principal component analysis yielded four factors relating to Holland's enterprising, social, conventional, and investigative types. Concurrent validity with various other measures is reported in the manual. Correlations with the Myers Briggs Type Indicator (Myers & McCaulley, 1985) showed

Table 1 Sex Differences and Factor Analytic Results for the Values Mea	asure
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		Male		Female						
		Х	SD	X	SD	<i>F</i> value	η	Factor and	alysis	
Recognition	Desire to be known, seen, visible and famous, dreams of fame, high achievement.	40.24	7.56	39.51	7.37	7.76**	004	.53		
Power	Desire to succeed, make things happen, outperform the competition.	47.14	6.87	43.95	7.35	96.23***	046	.77		
Hedonistic	Pursuit of fun, excitement, pleasure e.g., eating, drinking and entertainment.	40.49	6.61	42.08	6.73	14.46***	007			.77
Altruistic	Desire to help others, a concern for the welfare of less fortunate, public service.	45.84	7.07	48.30	6.18	71.31***	034		.82	
Affiliation	Needing and enjoying frequent and varied social contact and a social lifestyle.	49.23	5.59	50.03	5.40	8.11**	004			.76
Tradition	A belief in and dedication to old-fashioned virtues: family, church, thrift, hard work.	42.72	5.86	42.70	5.47	0.34	000		.78	
Security	A need for predictability, structure and efforts to avoid risk and uncertainty and a lifestyle minimizing errors and mistakes.	36.68	7.80	37.17	7.54	1.68	000			73
Commerce	Interest in earning money, realizing profits, finding new business opportunities, investments and financial planning.	44.37	6.69	41.39	6.71	98.00***	046	.78		
Esthetics	Need for self-expression, a dedication to quality and excellence, an interest in how things look, feel and sound.	33.14	7.68	34.17	7.92	19.83***	008			.69
Science	Being interested in science, comfortable with technology, preferring data based—as opposed to intuitive decisions, and spending time learning how things work.	41.03	8.04	36.68	8.13	133.71***	062	.65		
Eigenvalue								1.98	1.71	1.69
variance 70								19.0 1	7.1	10.9

***p < .001. **p < .01. *p < .05. SD, standard deviation.

the affiliation scale a good marker (i.e., consistent high correlate) for extraversion-introversion, esthetics and security for sensing-intuition; altruism for thinking-feeling and security and tradition for judging-perception. They also reported correlations with the 7-factor Hogan Personality Inventory (Hogan & Hogan, 1995). Many correlations were significant and nine showed moderate-strong relationships of r > .30(N = 2,692). They showed adjustment (neuroticism) negatively related to hedonism; ambition positively correlated with affiliation; sociability with both affiliation and recognition; likeability (interpersonal sensitivity) with affiliation; prudence positively with security and tradition, but negatively with hedonism; intellectance (inquisitive) with aesthetic, and school success (learning approach) with no values (r > .20). This study looks at dark side correlates of these values.

Dark side measures

There are various self-report dark side measures. (Kaye & Shea, 2000; Widiger & Coker, 2001). This study used the Hogan "dark side" measure now extensively used in

organizational research and practice to measure these traits in the "normal population" (Hogan & Hogan, 1997). Its aim was partly to help selectors and individuals themselves diagnose how they typically react under work stress and therefore help prevent derailment.

If a person's dark side profile does not fit well with their organization (i.e., someone highly reserved in an affiliative job, or mischievous on a job where security and tradition are important) it is quite likely the lack of fit would encourage their dark side traits to manifest themselves and to lead to lower effectiveness and satisfaction. Thus it is suggested that where correlations are positive between a dark side trait and an occupational preference or value the trait is unlikely to cause the individual problems and may even facilitate performance up to a point. However, if the correlation is negative, the dark side trait would lead to stress, which would deleteriously affect performance over time.

The Hogan development survey (HDS) focuses only on the core construct of the 11 dark side traits from a dimensional perspective (Hogan & Hogan, 2001, p. 41). An overview of the item selection guidelines can be found in Hogan and Hogan (2001). The HDS has been cross-validated with the MMPI

personality disorder scales. Correlations (n = 140) range from .45 for antisocial to .67 for borderline (Hogan & Hogan, 2001). Fico, Hogan, and Hogan (2000) report coefficient alphas between .50 and .70 with an average of .64 and test– retest reliabilities (n = 60) over a 3-month interval ranging from .50 to .80, with an average of .68. There were no meanlevel differences between sexes, racial/ethnic groups, or younger versus older persons (Hogan & Hogan, 2001).

Various relatively small-scale studies have used the HDS and have shown it to be a robust and reliable instrument (De Fruyt et al., 2009; Furnham, 2006; Furnham & Crump, 2005; Rolland & De Fruyt, 2003; Khoo & Burch, 2008). Studies have attempted to explore the factor structure of the HDS. With a very large sample Furnham and Trickey (2011) subjected the 11 dark side traits to a varimax-rotated factor analysis. Three factors emerged similar to those reported in the Hogan manual (p. 1), and Furnham, Petrides, Isaousis, Pappas, and Garrod (2005).

The dark side of vocational preferences

Various writers have noted the potential benefits of high scores on dark side traits (Judge & LePine, 2009; Petrides, Vernon, Schermer, & Veselka, 2011) demonstrating that socially undesirable traits can in some (work) situations have positive implications. Harms, Spain, and Hannah (2011) demonstrated this in a longitudinal study of dark side traits in military cadets over a 3-year period. Zibarras, Port, and Woods (2008) found innovative characteristics in managers related to "moving against people" traits like narcissism and antisocial behavior.

This study explores the idea that dark side traits are logically related to vocational values; that is, people with particular dispositions seek out vocational settings that fulfill various drives. Furnham, Hyde, and Trickey (2012b) found that certain dark side traits were positively associated with work success (i.e., mischievousness with stress tolerance and sales potential; boldness with clerical potential). Similarly Race et al. (2012) showed that certain dark side traits are associated with promotion at work (i.e., diligent, dutiful).

Furnham et al. (2012a) showed that people who had elected to work in the public sector differed on nine of the 11 dark side traits. They also showed that successful people who worked in different occupations (insurance, finance, emergency services) had different dark side profiles. This suggests that to a degree, dark side traits may be thought of as adaptable and useful in particular occupations. Hence, it seems logical that people with particular dark side profiles are attracted to, and may well succeed in, different occupations.

Hogan and Hogan (1997), in a small pilot study explored the relationship between the MVPI and the HDS. They showed 13 of the correlations (110 in all) had moderate to

strong correlations of r > .40 (N = 145). Considered as markers of the dark traits the following were found: affiliation (negative) for reserved, excitable, and cautious; recognition for imaginative; affiliation, power, and recognition for colorful; commercial, power, and recognition for bold; security for diligent and power, and recognition for mischievous. That was a small-scale study on a restricted population: this study has a more representative sample over ten times the size. Furthermore it considers demographic differences (sex and age) and their impact on values as well as controlling for social desirability. First, previous studies have indicated sex differences in both values and dark side traits (Hogan & Hogan, 1997, 1999). It was predicted that women would score higher than men on the values of altruism, affiliation, and esthetics, but lower on power, commerce, and science. Women would score lower on the dark side traits of bold and mischievous, but higher on excitable and cautious.

Second, various predictions were made on the basis of the recent articles on dark side correlates of work success (Furnham et al. 2012a,b; Race et al., 2012). They were that the trait bold (associated with vanity and narcissism) would be positively associated with values of recognition, power, and commerce; trait mischievous (associated with risktaking) with values hedonism and security (negatively); trait imaginative (associated with creativity) with value esthetics; and trait diligence and dutifulness (associated with reliability, rule following, and conscientiousness) with the value security.

Method

Participants

There were 2,022 participants of which 1,271 were male. Their ages ranged from 21 to 67 years with a median of 43 years and a mean of 41.71 years. They were 89.5% native white Britons. They were tested over a 10-year period as part of an assessment centre. They were all at managerial level in a large, mostly multinational organization in both the public and private sector.

Tests used

Dark side traits

HDS (Hogan & Hogan, 1997) has 154 items, score for 11 scales, each grouping 14 items. Respondents are requested to "agree" or "disagree" with the items. The HDS has been cross-validated with the MMPI personality disorder scales. It has considerable evidence of satisfactory reliability and validity (Fico et al., 2000; Hogan & Hogan, 1999, 2001). The test has been used in many recent studies (Harms et al., 2011; Khoo & Burch, 2008).

Value preferences

The MVPI (Hogan & Hogan, 1999) measures ten motives/ preferences. According to the manual personal values impact on careers in four ways: they act as key drivers (they determine aspirations, attainment hopes, symbolic strivings); they determine organizational culture fit (where the values of senior management match the individuals); they determine the individual's leadership style and the culture they create; and reveal unconscious biases as they influence many decisions.

Each scale is composed of five themes: (a) lifestyles, which concern the manner in which a person would like to live; (b) beliefs, which involve "shoulds", ideals, and ultimate life goals; (c) occupational preferences, which include the work an individual would like to do, what constitutes a good job, and preferred work materials; (d) aversions, which reflect attitudes and behaviors that are either disliked or distressing; and (e) preferred associates, which include the kind of persons desired as coworkers and friends. The initial norms for the inventory were based on the responses of 10,000 employed adults from a variety of industries including health care, banking and finance, food service, construction and transportation. More than 200,000 people have completed the MVPI over the past 10 years and it continues to be used as the primary tool for assessing values in hundreds of organizations throughout the world. MVPI scores are quite stable over time, with test-retest reliabilities ranging between .64 and .88 (M = .79). More than 100 validation studies have been conducted on the MVPI with results indicating that the inventory is effective in predicting job performance and outcome variables such as turnover (Hogan Assessment Systems, Tulsa, OK; Thomas et al., 2001).

Table 2 Sex Differences and Factor Analysis of the 11 Scale HDS Test

	Male		Female				Factors		
	Х	SD	Х	SD	F level	η	1	2	3
Excitable: enthusiastic, lacking persistence	3.17	2.74	3.48	2.92	4.26*	002		.75	
Skeptical: socially insightful, but cynical	4.68	2.44	4.63	2.45	1.04	001		.66	
Cautious: worried about criticism, change averse	3.26	2.62	4.26	2.77	54.76***	026		.65	
Reserved: poor communicator, low awareness	4.39	2.23	3.70	1.91	50.34***	0.24		.68	
Leisurely: stubborn, uncooperative, procrastinator	5.13	2.33	5.11	2.35	0.53	000		.60	
Bold: inflated view of competence and worth	7.46	2.73	6.79	2.77	28.99***	014	.78		
Mischievous :charming, risk-taking, excitement	7.13	2.60	6.45	2.42	35.72***	0.17	.72		
Colorful: dramatic, engaging, attention seeker	7.94	3.06	7.46	3.50	8.86**	004	.72		
Imaginative: creative and eccentric	5.86	2.45	5.43	2.39	2.52	001	.67		
Diligent: conscientious, perfectionistic	9.11	2.69	9.30	2.53	1.17	001			.74
Dutiful: eager to please	7.29	2.18	7.96	2.35	25.87***	013			.72
Eigenvalue							2.64	2.36	1.41
Variance %							23.9	21.4	12.1

***p < .001. **p < .01. *p < .05. SD, standard deviation.

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Procedure

Participants were tested by a British-based psychological consultancy over a 10-year period. Most of the participants were given personal feedback on their scores. They were nearly all employed as middle to senior managers in British companies. They took this test as part of an assessment exercise, run either by an external psychological consultancy or by their internal human resources function. Inevitably, this could have affected their results because of issues such as impression management and general dissimulation.

Results

Table 1 one shows both sex differences in the rated values as well as the varimax-rotated factor analysis. Eight of the ten values showed significant sex differences: men scored higher than women on recognition, power, commerce, and science, while women scored higher than men on hedonistic, altruistic, affiliation and esthetics. This confirms the first hypothesis. The orthogonally rotated factor analytic results showed three factors: the first was described as *enterprising*, the second *tradition*, and the third *social*. Results from other studies that have factor analyzed the MVPI show similar results.

Table 2 shows both the sex differences for each of the 11 dark side variables as well as the factor analytic results. Seven showed significant differences: men scored higher on reserved, bold, mischievous, and colorful, while women scored higher on excitable, cautious, and dutiful. Again, this confirms hypothesis one The orthogonally rotated factor analytic results showed three factors: the first was described as *moving against people*, the second *moving away from people*, and the third as *moving toward people*. Results from other

studies that have factor analyzed the HDS show similar results.

Table 3 shows the results of the regression with the ten values as the criterion variables and sex, age, social desirability, and the 11 dark side variables. Sex, age, and social desirability were entered first, then the ten variables. The table shows the variance (in brackets) accounted in the first step as well as the total variance accounted for in the final step. It is a matter of debate as to whether social desirability is measuring a style variable (impression management) or is, in and of itself a substantial trait (Furnham, 1986). From the perspective of the HDS measure it is usually considered a response style measure. Thus it was placed in the first block in the regressions, and treated as a possible measure of dissimulation.

All the regressions were significant: sex, age, and social desirability accounted for relatively little of the variance (six with equal or less than 5%). In four of the regressions the total variance accounted for was over 40%. All of the relationships in hypothesis two were confirmed.

Five of the dark side traits predicted an interest in jobs that provided *recognition*: bold, colorful, excitable, reserved, and dutiful. In regards to power, males scored higher than females. In addition, power was particularly favoured by those who scored high in bold, mischievous, colorful, and diligent. Those who valued *hedonism* tended to be female, and those who were mischievous and leisurely, but low reserved. Those who scored high on *altruism* tended to be female, imaginative, and dutiful, but not at all reserved and cautious. There were two dark side traits that very significantly predicted affiliation: those very low on reserved, but high on colorful.

The demographic and dark side variables did not account for much of the variance in the value *tradition*: cautious people, low on mischievous rated this highly. In all, six dark side traits predicted the value of *security*: high in diligent, dutiful, bold, and skeptical but low on mischievous and imaginative. Those who valued *commerce* tended to be men with high scores on skeptical, bold, and diligent. Overall, the demographic and dark side variables were not strongly related to the value *esthetics*, which showed women and those who scored high on imaginative scored highest.

Table 4 repeats the regressions shown earlier, but this time using the three higher-order factors as the criterion scores namely an interest in enterprising, traditional, and social occupations. The first regression on *enterprising* values/ activities was highly significant accounting for 42% of the variance. It showed younger males were more likely to share these values. Further those who endorsed the enterprising values tended to score highly on five dark side traits: bold, diligent, colorful, skeptical and mischievous. The second regression on *traditional* values/activities was significant, but accounted for only 15% of the variance. Younger females were more likely to prefer these value/vocations, although there Results of Regressions for Ten Occupational Scales

Table 3

	Recogniti	ion	Power		Hedonisr	۶	Altruism		Affiliation		Tradition		Security		Commerc	e	Esthetics		Science	
	β	t	β	t	β	t	β	t	β	t	β	t	β	t	β	t	β	t	~	t
Age	04	2.34	03	2.08	07	3.69	.05	2.45	04	2.46	.03	1.29	90.	3.47	0.02	1.12	.02	0.81	03	1.26
Sex	03	1.56	13	7.26	.11	5.32	.13	6.12	.02	1.32	03	1.35	03	1.50	16	8.13	.10	4.59	24	10.99
Social desirability	00	0.14	00	0.05	02	0.70	.13	5.98	01	0.37	60.	3.97	.05	2.79	.02	0.97	.02	0.85	00	0.31
Excitable	.13	6:39	.01	0.68	.02	0.84	-09	3.71	08	3.84	08	3.13	-00	4.32	10	4.11	.06	2.15	08	2.87
Skeptical	.08	3.92	.11	5.52	.12	4.86	13	5.15	.01	0.23	00.	0.07	.16	7.75	.16	6.71	10	3.91	00.	0.02
Cautious	.13	5.70	08	3.29	.12	4.39	.07	2.63	04	1.81	.15	5.10	.08	3.26	07	2.38	.06	2.02	.03	0.86
Reserved	-0.7	3.77	02	1.11	12	5.17	24	10.55	51	27.32	11	4.55	.07	3.40	.01	0.28	.01	0.41	05	1.95
Leisurely	.02	1.04	.02	0.92	.11	5.16	.03	1.43	01	0.64	.02	0.73	.04	2.25	.04	1.88	.06.	2.64	.05	1.91
Bold	.37	17.71	.35	16.26	60.	3.64	.03	1.27	:03	1.61	.08	3.24	.11	5.32	.17	6.94	-04	1.33	.11	3.97
Mischievous	.07	3.15	.15	7.00	.25	10.09	07	2.83	60.	4.40	21	7.92	31	14.65	.12	4.94	01	0.49	03	0.97
Colorful	.36	16.07	.16	6.85	.11	4.17	.01	0.26	.20	8.95	.08	2.82	05	2.18	.04	1.56	.07	2.47	02	0.69
Imaginative	.01	0.40	04	2.24	06	2.74	.17	7.54	01	0.74	60.	3.60	13	6.90	08	3.70	.31	12.93	60.	3.86
Diligent	.04	2.37	.15	8.18	08	3.95	.06	2.99	01	0.30	.07	3.08	.31	17.24	.21	9.72	06	2.73	.13	5.93
Dutiful	.12	6.43	10	5.07	.11	4.79	.12	5.36	.08	4.11	04	1.62	.17	8.86	.02	0.94	02	0.78	.02	0.49
F(14, 2158) =	128.46		115.08		41.06		35.95		135.21		12.61		115.45		44.00		25.05		128.46	
Adj R ² (1st step) final	(.05).45		(.07).42		(.03).21		(.05).18		(.09).46		(.01).07		(.01).43		(.06).22		(.01).13		(06).11	

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30ld indicates the most significant findings

Table 4 Regression onto the Three Enterprising Value Factors

	Enterprising		Traditional		Social	
	β	t	β	t	β	t
Age	-04	2.55**	05	2.26*	-06	3.67***
Gender	-20	11.43***	07	3.09***	11	6.25***
Social desirability	00	0.45	13	5.96***	-02	1.24
Excitable	-01	0.51	-10	4.08***	05	2.38**
Skeptical	12	5.75***	-08	3.20***	-07	3.42***
Cautious	01	0.44	13	4.51***	03	1.15
Reserved	-01	0.62	-22	9.19***	-25	12.56***
Leisurely	04	2.31*	03	1.31	05	2.71**
Bold	35	16.17***	07	2.61**	01	0.55
Mischievous	10	4.83***	-16	6.22***	27	12.68***
Colorful	18	8.11***	05	1.74	17	7.26***
Imaginative	00	0.23	16	6.76***	18	9.04***
Diligent	19	10.14***	08	3.60**	-21	11.47***
Dutiful	02	1.09	06	2.46**	-02	0.93
<i>F</i> (14,2158) =	112.13***		27.51***		107.46***	
Adj R ²	.42		.15		.41	

***p < .001. **p < .01. *p < .05. Bold indicates the most significant findings.

	Enterprising		Tradition		Social	
	β	t	β	t	β	t
Age	-04	2.44**	06	2.95**	-07	3.73***
Gender	-21	12.05***	12	5.82***	16	9.09***
Social desirability	02	1.19	11	4.74***	-04	2.28*
Moving against	54	29.18***	06	2.71**	48	25.43***
Moving away	08	4.55***	-15	6.89***	-11	5.76***
Moving toward	20	10.98***	19	8.82***	-17	8.61**
F(6, 2166) =	201.81***		31.61***		168.67***	
Adj R²	.36		.08		.32	

***p < .001. **p < .01. *p < .05. Bold indicates the most significant findings.

was also evidence that social desirability was associated with these values. Four of the significant dark side traits were negatively associated with these traditional values: those low on excitable, skeptical, reserved, and mischievous endorsed those values. The two strongest positive dark side traits associated with traditional occupations were cautious and imaginative.

The third regression on *social* values/activities was highly significant and the accounted for over 40% of the variance.

Younger women with high mischievous, but low reserved and diligent scores preferred these occupations/activities.

Table 5 shows the results of the regression with the higherorder factors from both scales being both dependent and independent variables. The results show that three factors are associated with a preference for enterprising environments: being male and having high moving against and moderate moving toward traits. On the other hand, those who favored more traditional settings and values were likely to be women with low moving away from and higher moving toward figures. Finally, those favoring more social settings were likely to be women and high on moving against, but low on moving away and toward others.

Discussion

The study replicated known sex difference findings in values and dark side traits. While these differences were not large from a statistical point of view (see η 's in Tables 1 and 2) the differences are well known and explicable in terms of sociobiological and socialization theories. Further the results of the factor analyses of both measures in this study replicated previous analyses of a similar sort and were clearly explicable.

The results shown in Table 3 showed that for some values like affiliation and esthetics only a few dark side traits predicted these preferences whereas for other values like power and hedonism many dark side traits were involved. Some of Possible type II errors were avoided by doing the analysis showed in Tables 4 and 5. The analysis shown in Table 4 shows how the dark side traits predict an interest in three work areas/job types. Indeed, with the demographic factors they account for over 40% of the variance.

The regression for enterprising is perhaps the most interesting. There is an extensive literature on entrepreneurism and in particular the personality traits of entrepreneurs (Brandstatter, 2011) as well as the ideal fit between personenvironment fit for entrepreneurs (Dvir, Sadeh, & Malach-Pines, 2010: Markman & Baron, 2003). The vast majority of would-be entrepreneurs fail and there have been speculations on the possible cause of failure (Furnham, 2008). There have however been very few studies on dark side trait correlates of interest in enterprising/entrepreneurial jobs. This study showed that those most attracted to enterprising entrepreneurial jobs were bold, diligent, colorful, skeptical, and mischievous, which sums out the usual view of the self-confident, hardworking, attention-seeking, tough, and risk-taking entrepreneur. Those attracted to more social and artistic jobs were also mischievous and colorful, but very low on reserved and diligence. Again, this reflects the data on creative people. (Furnham, 2008).

This study showed an interesting pattern. First, that younger men are attracted to these jobs possibly because of the energy and the risk involved. The three dark side traits most predictive of an interest in enterprising job are bold (inflated view of competency and self worth), diligent (meticulous, picky, and critical), and colorful (preoccupied with being noticed, lacking in sustained force). The manual suggests that those with high scores on these three traits have potentially negative work behaviors: bold (feedback resistant, demanding overbearing; weak team player; sense of entitlement); diligent (micro-management, slow decision making; stubborn when under pressure); and colorful (management by crisis, easily distracted, poor listening skills). Those high on skeptical (argumentative, critical, defensive) and mischievous (rule breaking, pushing the limits, ignores commitments) are also attracted to enterprising jobs. Studies of successful and unsuccessful entrepreneurs indeed confirm these findings (Markman & Baron, 2003). These results suggest two things: first, that the profile of the dark side of the budding entrepreneur attracted to enterprising jobs is known, and that second, being very high on a number of these dimensions may be a major contribution to the failure and derailment of so many hopeful entrepreneurs. That is, while these dark side characteristics provide the impetus for the entrepreneur to go it alone,

having high scores on these traits can also result in potentially negative work behaviors.

The results for those attracted to social jobs were similar yet in many instances quite different from those expressing enterprising values. Those advocating social jobs tend to be young and female. They tend to be mischievous and bold (like the enterprising), but they are low on diligent and reserved and high on imaginative. This may indeed make them somewhat unreliable and eccentric, unconventional, but very communicative. In this sense, they may enjoy and thrive in some jobs, but not others that are in fact very similar (i.e., a restaurant waiter/waitress vs. cabin crew). Clearly social jobs can be very different and in some elevated dark side scores maybe not at all a handicap. Thus being high on imaginative and colorful may help people a great deal in a creative agency.

In both analyses shown in Tables 4 and 5, the demographic and dark side traits were not strongly related to traditional jobs or those reflecting the two values of altruism and tradition. This is not surprising as dark traits are often associated with disturbed work patterns and problems in the work place. Those who moved toward and not away from others favored jobs with old-fashioned virtues of service to others. They tended to be very low on mischievious as well as reserved which suggested the interpersonal nature of those jobs.

The dark side traits measure how people are likely to behave under pressure. The manual suggests that people with very high scores may pose a risk to themselves and their organization. There is accumulating evidence that they predict management derailment (Furnham, 2007, 2008). They also echo the Eysenckian idea that extremes of normality are linked to abnormality. In this sense there may well be a curvilinear relationship between the dark side measures and success in specific work settings.

While it is not usual to use the HDS (or any other dark side measure) in vocational guidance and counseling it is selfevident why it may be of considerable benefit. Indeed, it may be prophylactically useful to counsel people about some unhelpful reactions they are likely to experience in a particular work setting and what to do about them. Currently the HDS seems more used by coaches and counselors to help identify people experiencing problems at work that those who are attempting to give people advice as to what sort of job suits their temperament. The latter may benefit from assessing dark side traits, but also using these data to warn people about how their profile might lead to specific problems in the workplace.

Like all others, this study had limitations. While it was a large sample of working adults it would have been desirable to have more data on the current job and work history of the participants. It would be particularly interesting to know about their current level as well as their job satisfaction and productivity. Further, given the work of Furnham et al. (2012b) it would be very interesting to know if they were working in the public or private sector. Second, the study was restricted to self-report for both measures. It is always desirable to use multiple methods to overcome well-established problems of method invariance. Further, there is also the problem of dissimulation which has been discussed.

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