

MBTI and Aberrant Personality Traits: Dark-Side Trait Correlates of the Myers Briggs Type Inventory

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Abstract

This was a semi-replicative study on the relationship between the Myers-Briggs Type Indicator (Briggs & Myers, 1987) (MBTI) and the aberrant (dark-side) personality traits. Over 8000 British adults completed the Myers-Briggs Type Indicator (Briggs & Myers, 1987) and the NEO-PI-R which allows for scoring of the Aberrant Traits/Personality Disorders (PDs) (De Fruyt et al., 2009). Correlations and regressions indicated that the PDs were weakly related to the SN dimension but strongly related to the TF dimension. Most aberrant traits were associated with the Feeling preference. The results are compared to other studies using different measures of the dark-side variables. Implications and limitations are discussed.

Keywords

Aberrant Personality, Dark-Side Traits, MBTI, Thinking-Feeling

1. Introduction

This study looked at the aberrant personality disorder correlates of the Myers Briggs Type Indicator (MBTI) (Briggs & Myers, 1987). It attempts to replicate the study of Furnham and Crump (2014) using a different measure of the dark-side traits/personality disorders. The MBTI remains one of the best known and widely used of all personality tests (Amato & Amato, 2005; Brown & Reilly, 2009; Capraro & Capraro, 2002; Chung, 2017; Edwards et al., 2002; Furnham, 1996; Kennedy & Kennedy, 2004; Janowsky et al., 2002; Nelson & Stake, 1994; Pulver & Kelly, 2008; Passmore et al., 2010; Quenk, 2009; Randall et al., 2017; Renner et al., 2014; Saggino & Kline, 1996; Yang et al., 2016; Zhao et al., 2020) despite many critiques (Barbuto, 1997; King & Mason, 2020; Lloyd, 2012; Mi-

chael, 2003; Randall et al., 2017; Sample, 2017; Stein & Swan, 2019). Despite this, comparatively few studies have looked at negative or pathological correlates of the MBTI.

Previous studies, however, showed that MBTI scores are logically correlated with less adaptive personality traits like Neuroticism (Furnham et al., 2003; McCrae & Costa, 1989; MacDonald et al., 1994), as well as the personality disorders (Coolidge et al., 2001). The results seem to indicate that trait Neuroticism (measured that both the domain and facet level) was correlated most consistently with MBTI Feelings and Introversion. This study examines aberrant personality trait correlates of the MBTI using a large adult sample.

There have been a number of similar concepts that refer to aberrant or dysfunctional personality traits: dark-side traits, sub-clinical personality disorders, derailers, etc.

Table 1 shows the DSM-IV personality disorders and the renaming and interpretation used the Hogan Development Survey (HDS) which is probably the most popular dark-side measure used today (Furnham & Crump, 2005; Hogan et al., 2009).

Wille and colleagues (2013) suggested the term *aberrant personality tendencies*, instead of “dark side” traits, are defined as “... *personality peculiarities that do not necessarily lead to clinically impaired functioning (like personality disorders), but that may affect daily functioning (at work) in such ways that they deserve further attention*” (p. 176). They argued that this conceptual and label shift has various advantages: 1) the focus on a compound of general traits alters the attention from a clinical construct (i.e. a personality disorder) to subclinical manifestations of these tendencies, 2) the reframing into aberrant tendencies also leaves the door open for considering positive effects on work behaviours. Aberrant tendencies are not dysfunctional per se; under certain conditions or for some work criteria, they may be more an asset than a disadvantage, and finally 3) a more comprehensive set of aberrant tendencies than the Dark Triad can be studied, providing a more comprehensive portrait of personality-related problems observable at work (Wille et al., 2013).

There are various self-report measures available to assess Aberrant/Dysfunctional Personality Traits and Disorders (Morey et al., 1985; Moscoso & Salgado, 2004; Widiger & Coker, 2001). More interestingly, it has been suggested that it is possible to derive aberrant personality scores from standard inventories of bright-side, Big Five, personality traits. De Fruyt et al. (2009) and Wille et al. (2013) argued that one could calculate aberrant traits by adopting a set of Big-Five compound scales proposed by Miller and colleagues (Miller et al., 2005; Miller et al., 2008a, 2018b). In other words, using the long 240-item NEO-PI-R, which assesses 30 facets of the Big Five personality traits, it is possible to derive a reliable measure of the aberrant traits based on the Personality Disorders conceptual scheme.

This suggestion supports the conceptualization of personality disorders as a dimension instead of a category (Samuel & Widiger, 2008). Miller and colleagues

Table 1. DSM and HDS definitions of the personality disorders.

DSM-IV Personality Disorder		Hogan & Hogan (1997) HDS Themes	
Borderline	Inappropriate anger; unstable and intense relationships alternating between idealisation and devaluation.	Excitable	Moody and hard to please; intense but short-lived enthusiasm for people, projects or things.
Paranoid	Distrustful and suspicious of others; motives are interpreted as malevolent.	Sceptical	Cynical, distrustful and doubting others' true intentions.
Avoidant	Social inhibition; feelings of inadequacy and hypersensitivity to criticism or rejection.	Cautious	Reluctant to take risks for fear of being rejected or negatively evaluation.
Schizoid	Emotional coldness and detachment from social relationships; indifferent to praise and criticism.	Reserved	Aloof, detached and uncommunicative; lacking interest in or awareness of the feelings of others.
Passive-Aggressive	Passive resistance to adequate social and occupational performance; irritated when asked to do something he/she does not want to.	Leisurely	Independent; ignoring people's requests and becoming irritated or argumentative if they persist.
Narcissistic	Arrogant and haughty behaviours or attitudes, grandiose sense of self-importance and entitlement.	Bold	Unusually self-confident; feelings of grandiosity and entitlement; over valuation of one's capabilities.
Antisocial	Disregard for the truth; impulsivity and failure to plan ahead; failure to conform	Mischievous	Enjoying risk taking and testing the limits; needing excitement; manipulative, deceitful, cunning and exploitative.
Histrionic	Excessive emotionality and attention seeking; self dramatising, theatrical and exaggerated emotional expression.	Colourful	Expressive, animated and dramatic; wanting to be noticed and needing to be the centre of attention.
Schizotypal	Odd beliefs or magical thinking; behaviour or speech that is odd, eccentric or peculiar.	Imaginative	Acting and thinking in creative and sometimes odd or unusual ways.
Obsessive-Compulsive	Preoccupations with orderliness; rules, perfectionism and control; over-Conscientiousness and inflexible.	Diligent	Meticulous, precise and perfectionistic, inflexible about rules and procedures; critical of others;
Dependent	Difficulty making everyday decisions without excessive advice and reassurance; difficulty expressing disagreement out of fear of loss of support or approval.	Dutiful	Eager to please and reliant on others for support and guidance; reluctant to take independent action or to go against popular opinion.

(2005, 2008a, 2018b) proposed an easy-to-use technique to describe personality pathology constructs as linear combinations of FFM facets. For example, the borderline pattern was described as the sum of the scores on the NEO-PI-R (Costa & McCrae, 1992) facets of N1: Anxiety + N2: Hostility + N3: Depression + N5: Impulsiveness + N6: Vulnerability + O3: Feelings + reversed scores on A4: Compliance and C6: Deliberation.

2. This Study

A few published studies have related MBTI traits to personality disorders or re-

lated measures (Pierson, 2007). This study attempted to contribute to this literature. In a directly relevant study Coolidge et al. (2001) tested 332 Americans and showed correlational results (with $r > .25$): the E-I scale (with Introversion being high) correlated positively significantly with Avoidant, Obsessive-Compulsive, Paranoid, Schizoid, and Schizotypal, and negatively with Histrionic. The S-N dimensions were positively correlated with Borderline while the T-F scale was significantly negatively correlated with Antisocial, Paranoid, Sadistic, Schizoid, and Schizotypal disorders. Finally, there were two significant correlations with the J-P dimension: Antisocial (positive) and Obsessive-Compulsive (negative). Two disorders had correlations with all four dimensions: Schizotypal people had an INTP profile whereas Obsessive compulsives had an ISTJ profile. Antisocial and Sadistic people were NTP whereas Passive-Aggressive people were INP.

Furnham and Crump (2014) used the Hogan Developmental Survey (HDS) to measure dark side variables and the MBTI (Hogan & Hogan, 1997) consists of 154 items that are concerned with how the respondent typically interacts with family, friends and co-workers. In all, five of the eleven 'dark side' traits were correlated with the Extraversion-Introversion dimensions, none with Sensing-Intuition, seven with Thinking-Feeling and four with the Judging-Perceiving scale. Regressions with the four MBTI scales as criterion variables showed nine of the HDS factors were related to the T-F scale and accounted for 12% of the variance. Thinking types tended to be Sceptical, Reserved and Diligent. Overall correlations were low suggesting the MBTI assesses some specific aspects of dark side traits.

This study attempts to replicate Furnham and Crump (2014) with a bigger N and aberrant personality using the NEO-PI-R measure method described above. From earlier studies we expect to find the aberrant traits most closely related to the T-F dimension and least related to the SN dimension.

3. Method

Participants

In total 8330 mainly British working adults took part in this study of which 1727 were females and 6603 males. Their mean age was 38.66 years ($SD = 7.83$ years) with the range being between 28 and 62 years. In all 70% were between 30 and 50 years. They were nearly all (over 95%) graduates and in middle class occupations with English as their mother tongue.

Measures

1) *Myers-Briggs Type Indicator-Form G* (MBTI: Briggs & Myers, 1987). The Myers-Briggs indicator is a Jungian-based inventory that uses a paper-and-pencil self-report format. It is composed of 94 forced-choice items. Respondents are classified into one of 16 personality types based on the largest score obtained for each bipolar scale (e.g. a person scoring higher on Introversion than Extraversion, Intuition than Sensation, Feeling than Thinking and Judging than Perceiving would be classified as an Introverted Intuitive Feeling Judging). The test provides linear scores on each dimension which are usually discussed in terms of

types based on cut-off scores. The Myers-Briggs Type Indicator has been the focus of extensive research and substantial evidence has accumulated suggesting the inventory has satisfactory concurrent and predictive validity and reliability (Furnham & Stringfield, 1993).

2) *Five Factor Model Personality Disorders* (FFM PD: De Fruyt et al., 2009). Participants completed the 240 item NEO-PI-R. This is one of the best known and most well used of all personality tests. From this 10 personality Disorders were calculated following the scoring instructions in De Fruyt et al. (2009).

Procedure

Participants were tested by a British based psychological consultancy over a 10-year period. Each participant was given personal detailed 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 and developmental exercise. Their anonymous data was logged and they gave permission for it to be used in research. Missing data means the N in the analysis was variable. Ethical permission was sought and granted.

4. Results

Table 2 shows the correlations between the MBTI and the Aberrant traits/PDs. Considering $r > .10$, which is itself recognised as essentially a small effect size, the results show that Extraverts were more Histrionic, Paranoid, Narcissistic, Schizotypal, and OCPD, but less Schizoid and Avoidant than Introverts. There was no correlations $r > .10$ for the SN dimension. All but two of the 10 aberrant

Table 2. Correlational and regression results.

	EI			SN			TF			JP		
	<i>r</i>	<i>Beta</i>	<i>t</i>	<i>r</i>	<i>Beta</i>	<i>t</i>	<i>r</i>	<i>Beta</i>	<i>t</i>	<i>r</i>	<i>Beta</i>	<i>t</i>
Paranoid	.14***	.07*	2.44	.02	.04	1.23	-.29***	-.13***	5.09	-.04***	-.08**	2.93
Schizoid	-.21***	-.15***	3.84	-.03*	-.03	.87	-.02	-.35***	10.39	-.10***	.11**	2.96
Schizotypal	.12***	.00	.19	-.04*	-.05*	2.15	-.14***	-.12***	6.67	.01	.17***	8.05
Antisocial	.09***	.05	1.66	.00	-.02	.63	-.18***	.22***	7.45	.03*	.28***	8.55
Borderline	-.04*	-.05*	2.46	-.01	-.02	1.11	-.20***	-.15***	8.76	.00	-.01	.47
Histrionic	.18***	.00	.15	-.03*	.00	.08	-.10***	-.32***	10.80	-.09***	-.14***	4.25
Narcissistic	.12***	-.07	1.83	.01	.05	1.21	-.31***	-.50***	14.61	-.04**	-.16***	4.16
Avoidant	-.12***	.07*	2.30	-.02	.01	.43	-.15***	.13***	4.98	-.09***	-.19***	6.90
Dependent	-.05***	-.04	1.33	.03*	.02	.70	-.27***	.04	1.56	.06***	.06*	2.14
OCPD	.11***	-.03	1.02	-.05***	-.04	1.45	.08***	.28***	12.14	.00	-.08**	2.98
	$F(10, 7234) = 30.97***,$ $Adj. R^2 = .04$			$F(10, 7237) = 5.39***,$ $Adj. R^2 = .01$			$F(10, 7238) = 221.71***,$ $Adj. R^2 = .23$			$F(10, 7238) = 32.37***,$ $Adj. R^2 = .04$		

*** $p < .001$, ** $p < .005$, * $p < .05$.

personality variables were correlated $r > .10$ with the TF dimension and which indicated that Feeling was particularly associated with Narcissistic, Paranoid and Borderline. The final set of correlations showed that Judging people tended not to be Schizoid.

Regressions were then computed. They showed that the aberrant personality dimensions accounted for four percent of the variance for the EI and JP factor, and only one percent for the SN factor, but nearly $\frac{1}{4}$ of the variance (23%) for the TF factor. Clearly the TF dimension is the best indicator of aberrant personality dimensions.

5. Discussion

The results of this study were somewhat different from that of both Coolidge et al. (2001) and Furnham and Crump (2014). Whilst the size of the correlations was similar, some of the results went in the opposite direction. However, the results were certainly similar for the TF dimension with seven of the eight significant correlations being negative, indicating the dark side of the Feeling Type. Interestingly the dark-side, personality disorder measure used by Coolidge et al. (2001) had 14 dimensions, including Paranoid, Passive-Aggressive, Sadistic and Self-Defeating. They concluded that “*Although previous use of the MBTI has been predominantly as an assessment measure for nonclinical samples, the present findings suggest that the MBTI may have some possible clinical implications as well. It was also found that four of Jung’s dimensions, introversion, intuition, thinking, and perceiving, were more likely to be associated with personality disorders than were their dimensional opposites*” (p. 35).

Furnham and Crump (2014) found Extraversion was correlated with Bold (Narcissistic) ($r = .10$) and Colourful (Histrionic) ($r = .18$) and Introversion with Cautious (Avoidant) ($r = .18$) and Reserved ($r = .12$). Thinking Types was correlated with Sceptical ($r = .15$), Reserved (Schizoid) ($r = .14$) and Diligent (OC) ($r = .08$), Bold (Narcissistic) ($r = .11$) and Mischievous (Anti-Social) ($r = .08$) but not at all Cautious (Avoidant) ($r = -.14$) or Dutiful (Dependent) ($r = -.18$). Equally, Perceiving types were likely to be Mischievous ($r = .15$), Colourful ($r = .08$), and Imaginative ($r = .09$) but not Diligent ($r = -.14$). In the regression results, they found some of the dark side factors (i.e. Excitable and Leisurely) were unrelated to any of the four MBTI factors, and a few (i.e. Mischievous and Diligent) were significantly related to all three. Some of the findings seem clearly interpretable. Thus, MBTI Extraverts are likely to be Colourful (animated, expressive, and dramatic) while Introverts may be very Reserved (aloof, detached, and solitary). Judging types may be Bold (narcissistic, self-confident, arrogant) and Diligent (self-confident, conscientious, and perfectionistic) while Perceiving types maybe prone to being Mischievous (antisocial, adventurous) and Imaginative (adventurous, risk-taking, and creative). Equally, those who score very high on Thinking may be prone to being rather too Sceptical and Cynical, detached and uncommunicative, meticulous and precise, but also self-confident and adventurous.

Furnham and Crump (2014) concluded "... while some of the dark side factors (i.e. *Excitable and Leisurely*) were unrelated to any of the four MBTI factors, a few (i.e. *Mischievous and Diligent*) were significantly related to all three. Some of the findings seem clearly interpretable. Thus, MBTI Extraverts are likely to be *Colourful (animated, expressive, and dramatic)* while Introverts may be very *Reserved (aloof, detached, and solitary)*. Judging types may be *Bold (narcissistic, self-confident, arrogant)* and *Diligent (Self-confident, Conscientious, and Perfectionistic)* while Perceiving types maybe prone to being *Mischievous (antisocial, adventurous)* and *Imaginative (adventurous, risk-taking, and creative)*. Equally, those who score very high on Thinking may be prone to being rather too *Sceptical and Cynical, detached and uncommunicative, meticulous and precise, but also self-confident and adventurous*" (p. 170).

The "top-line" results from this study were that the SN dimension of the MBTI seems essentially unrelated to aberrant traits, while the TF dimension clearly is which supports previous studies. Nearly all of the aberrant traits, particularly Narcissism and Paranoid, were correlated with the Feeling dimension. Similarly, five aberrant traits, particularly Schizoid, Histrionic and Avoidant, were associated with the Perceiving dimensions. Overall, the ten aberrant traits were related very differently to the MBTI traits.

What is striking about the MBTI literature is the message of "gifts differing", that all profiles are adaptive and healthy. Some reviewers of the MBTI are happy to discuss the possible "shortcomings" of a particular type. Thus Rogers (1997) notes that the common ENTJ type which is often the profile of leaders and managers lists a wide range of issues where their personal style may bring them problems: they can be overbearing, and hard on what they see as unenthusiastic or self-indulgent people, over-controlling, impatient if others do not follow, very competitive, restless and demanding, etc. Yet Hirsch and Kummerow (1998) paint a very different picture of the ENTJ person at work: "*ENTJs are logical, organised, structured, objective and decisive about what they view as conceptually valid. They enjoy working with others, especially when they can take charge and add a strategic plan*" (p. 25).

Clearly, this study and the literature review suggest a dark side to the Feeling Dimension of the MBTI. The test suggests that Thinking and Feeling are essential decision-making (judging) functions. Those with a high thinking score favour all forms of decision making, from logical, causal, consistent, and rules-based perspective. On the other hand, those who favour Feeling are influenced by issues like harmony, consensus, and fit. The results of these "dark-side" studies suggest that this dimension maybe mis-labelled and that this dimension is assessing also poor emotional regulation. It is often the case that when professional groups are assessed there are few "Feeling types" which is often considered a problem for the group. However, the data from this and other similar studies suggest that this is not true

This study like all others had limitations. This was a large, but not a community, sample which has implications for the generalisation of the data. Further-

more, the aberrant personality factors were not assessed using a measure specifically devised to do so. This may account for some disparity in the results of the studies reviewed. However, it does draw attention to the fact that there is a dark side to some MBTI profiles.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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