



Personality and Workaholism



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ABSTRACT

This study examined how a range of contemporary models of personality were associated with Workaholism (Feeling driven to work and Enjoyment of work). Approach, avoidance, addictive personality, Agreeableness, Openness, and Conscientiousness were measured using instruments of the Big Five, Eysenck's biosocial model (1967), and two versions of Reinforcement Sensitivity Theory. Data were collected using online questionnaires in two studies. The first comprised 476 fulltime workers from Australia, while the second comprised 105 managers from the US. Results showed that approach pathways were associated with Enjoyment of work and avoidance pathways were generally associated with Feeling driven to work in fulltime workers only. Workaholism was not related to an addictive personality. The study provides a new understanding of how personality is associated with Workaholism. Managerial implications and differences in relations between personality and Workaholism in workers and managers are discussed.

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1. Introduction

The term 'workaholic' is becoming common in the increasingly rapidly changing world of work. The changing nature of careers (Arthur & Rousseau, 1996), fading boundaries between work and life (Fletcher & Bailyn, 1996), and advances in technology allowing work outside traditional office hours and locations, contribute to the increase in work hours over the past two decades. Employees now have greater inducement and opportunity to work longer hours.

Workaholism is associated with positive outcomes such as job satisfaction and psychological well-being (e.g., Burke, 2001a) and negative outcomes such as poor work-life balance (Burke, 2001b), addiction and psychological distress (e.g., Schaufeli, Bakker, Van der Heijden, & Prins, 2009). Whilst there is relatively rich understanding of these outcomes, there has been less research on how Workaholism is influenced by personality. The aim of this study is therefore to investigate the personality traits associated with Workaholism. Moreover, our study will be of practical value because it will help managers identify occurrence of Workaholism from employee characteristics, enabling them to target interventions accordingly.

1.1. Workaholism

"Workaholism" has been defined as a form of addiction, (Oates, 1971; Porter, 1996), a pathology (Fassel, 1990), a behavioral pattern

(Scott, Moore, & Miceli, 1997), and a set of attitudes about work (Spence & Robbins, 1992). Others tried to reconcile these differences by distinguishing between different types of Workaholism, such as the 'enthusiastic' and 'non-enthusiastic' workaholics (Andreassen, Hetland, & Pallesen, 2010). Given disagreements about definition, it is perhaps unsurprising that there are relatively few empirically validated instruments available to measure the construct (McMillan, O'Driscoll, Marsh, & Brady, 2001).

Currently, the most widely used instrument is the Workaholism battery (Spence & Robbins, 1992). A two-subscale solution has been endorsed in the literature (Kanai, Wakabayashi, & Fling, 1996; McMillan et al., 2001) that consists of two scales (Feeling driven to work and Work Enjoyment). Work Enjoyment concerns pursuit of work-related rewards (Spence & Robbins, 1992). Feeling driven to work concerns putting excess effort into work to avoid aversive consequences (e.g., loss of job) and is more strongly linked to stress than Work Enjoyment (Kanai et al., 1996).

There are theoretical reasons to believe that many personality models will be associated with Workaholism. Contemporary personality models often have a basis in 'approach and avoidance pathways' (e.g. Carver & White, 1994; Eysenck & Eysenck, 1991; Elliot & Thrash, 2010). 'Approach' refers to a learnt motivation aimed at obtaining rewards. High sensitivity to rewards, in theory, leaves a person more motivated to pursue rewards in general, including those obtained from work, and is therefore likely to be associated with Work Enjoyment. 'Avoidance' refers to a learnt motivation to avoid aversive outcomes. High sensitivity to aversive outcomes is likely to make a person more motivated to engage in behavior perceived to help relieve them from dangers, and is thus likely linked to Feeling driven to work.

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1.2. Personality models

In the Big Five model of personality, Extraversion (being outgoing and energetic) and Neuroticism (nervous and insecure) are often treated as approach and avoidance pathways, respectively. Other scales in the Big Five, Conscientiousness (well-organized, responsible), Agreeableness (friendly and compassionate) and Openness (curious and inventive), are not explicitly linked to approach and avoidance pathways, but all five factors have been reported to be related to Workaholism. Burke, Matthiesen, and Pallesen (2006), for instance, found that Neuroticism was related to Feeling driven to work and Extraversion was related to Enjoyment of work. More recently, Andreassen et al. (2010) replicated these findings, further noting Conscientiousness was associated with both subscales of Workaholism. Moreover, they reported that Openness was related to Enjoyment of work, Neuroticism was negatively related to Enjoyment of work, and Agreeableness was negatively related to Feeling driven to work. Clark, Lelchok, and Taylor (2010) identified personality factors related to Workaholism outside of general personality models.

Although the Big Five has many advantages such as excellent psychometric properties, satisfactory understanding of its neurobiological basis remains elusive (Block, 1995) despite some enthusiasm (DeYoung, 2010). We therefore consider personality models which make stronger theoretical claims of a biological basis, including Gray's (1970) original reinforcement sensitivity theory (o-RST) and Gray and McNaughton's (2000) revised reinforcement sensitivity theory (r-RST). Such models have two advantages over personality models such as the Big Five (Furnham & Jackson, 2008): Firstly, biological models are theory-based and thereby offer explanations for the process by which personality contributes to behavior. Secondly, these models identify what interventions may have difficulty addressing, because biologically-based personality traits are likely to be relatively impervious to change.

Both of Gray's theories postulate three motivational systems, whose sensitivity determines an individual's personality. The Behavioral Approach System (BAS) concerns a tendency to approach rewards and is generally similar across o-RST and r-RST. We thus argue that o-BAS and r-BAS will both be positively associated with Work Enjoyment as people high in reward pursuit are likely to work hard and gain appropriate rewards to reinforce the behavior. We also suggest that the avoidance system, which concerns the sensitivity to aversive outcomes, will be related to Driven to Work, but the relationships are more complicated due to the conceptual differences between the o-RST and r-RST. In o-RST, the Behavior Inhibition System (o-BIS) confounds fear and anxiety, whereas in r-RST, the r-BIS is redefined such that it measures anxiety independently from fear. In r-RST, fear is measured as the Fight/Flight/Freezing system (r-FFFS): Fight is a vociferous defensive aggression to very proximal threat, whereas Freezing or Flight occurs in the presence of a more distal threat (Gray & McNaughton, 2000). The r-BIS represents anxiety and concerns the tendency to respond with escalating distress to situations that involve uncertainty and social evaluative judgments by others (Gray & McNaughton, 2000; Jackson, 2009; White & Depue, 1999). Moreover, anxiety is associated with narrowing of attention onto the threat such that there is likely to be an over-reaction to work related cues. Feeling driven to work involves much uncertainty, and is partly a function of social judgment (Ng, Sorensen, & Feldman, 2007). As a result, Workaholism is likely related to anxiety, and more likely to be measured by r-BIS rather than o-BIS since r-BIS is more clearly related to anxiety than o-BIS.

The above discussion leads to the following hypotheses:

- H1.** Extraversion and BAS will be positively associated with Enjoyment of work.
- H2.** Neuroticism and r-BIS will be positively associated with Feeling driven to work.

Since we have already discussed significant findings with the three other scales of the Big Five, we also hypothesize:

- H3.** Openness will be positively associated with Enjoyment of work.
- H4.** Conscientiousness will be positively associated with both subscales of Workaholism.
- H5.** Agreeableness will be negatively associated with Feeling driven to work.

1.3. Eysenck's Psychoticism

Workaholism has long been associated with addiction (Oates, 1971; Seybold & Salomone, 1994). Eysenck (1997) suggested that there is an 'addictive personality', associated with a type of person who will readily be addicted to certain types of reinforcing behaviors and continue to indulge in these behaviors even after the circumstances giving rise to them have changed. Following this, Eysenck (1997) identified Psychoticism (recklessness, disregard for common sense, and inappropriate emotional expression) as associated with drug dependency (Gossop, 1978; Teasdale, Seagraves, & Zacune, 1971). Both Workaholism and addiction to substances are linked to a person engaging in goal-oriented behavior (i.e., putting excess effort into work and abuse of the substance in question) leading to obsessive and harmful consequences. In such cases, the agent's inability to inhibit that behavior (i.e., which is an interpretation of Psychoticism; Eysenck, 1997) is implied. As a result, we hypothesize:

- H6.** Psychoticism will be positively associated with Workaholism

We test our hypotheses using two studies. In Study 1 we use workers and in Study 2 we use managers.

2. Study 1: Method

2.1. Participants

A total of 464 full-time workers, based in Australia. The sample included 55.3% male and 44.7% female, with mean age of 39.89 years, ranging from 18 to 69 years old, and a standard deviation of 13.24 years. The majority of the participants worked within the service sector (42.3%) and were employed in organizations containing over 100 employees (52%).

2.2. Measures and procedure

Data were collected using the YWeDo online cognitive laboratory (Jackson, 2008).

2.2.1. Independent measures

NEO-International Personality Item Pool (NEO-IPIP) (Goldberg, 1999) measures the Five-Factor model of personality: (1) Neuroticism, (2) Extraversion, (3) Agreeableness, (4) Conscientiousness, and (5) Openness. The questionnaire includes 50 items rated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree; α s = .77 to .86).

The Eysenck Personality Questionnaire (EPQ-R) (Eysenck & Eysenck, 1991) measures three dimensions of personality based on Eysenck's (1967) biosocial model: (1) Extraversion (2) Neuroticism, and (3) Psychoticism (detached and dispassionate). The questionnaire includes 48 (yes/no) items (α s = .87, .84, and .52 respectively). Social desirability is also included (α = .68).

BIS/BAS scales (Carver & White, 1994) measures three components of the Behavioral activation system (o-BAS), including: (1) Drive, (2) Fun-seeking, and (3) Reward-responsiveness and the Behavioral inhibition system (o-BIS). The questionnaire includes 24 items rated on a four-point scale (1 = very true for me to 4 = very false for me; α s = .74 to .82).

Jackson-5 scales of revised Reinforcement Sensitivity Theory (r-RST) (Jackson, 2009) provides appropriate measures of a neurobiological revised Reinforcement Sensitivity Theory (r-RST; Gray & McNaughton, 2000). The Jackson-5 scales measure the extent to which three postulated biological systems (r-BAS, r-BIS, and r-FFFS) regulate an individual's behavior. It has five subscales: (1) Behavioral activation system (r-BAS), (2) Behavioral inhibition system (r-BIS), (3) Fight (r-Fight), (4) Flight (r-Flight) and (5) Freeze (r-Freeze). The last three subscales make up the 'Fight/Flight/Freeze system' (r-FFFS). The questionnaire includes 24 items rated on a five-point Likert scale (1 = Completely disagree to 5 = completely agree; α s = .72 to .81).

2.2.2. Dependent measure

2.2.2.1. *Workaholism battery* (Spence & Robbins, 1992). Some criticism had been made about the factor structure of the original version of the Workaholism battery. As a result, we use a revised version measuring two scales: (1) Feeling driven to work ($\alpha = .82$), and (2) Work Enjoyment ($\alpha = .86$) (Kanai et al., 1996; McMillan et al., 2001). The revised version is based on the original questionnaire but uses 14 out of the 24 items in the original measure.

2.3. Data analysis

Bivariate correlations were conducted to examine the associations between the constructs included in this study. Next, regression analyses were conducted to examine how o-BAS, r-BAS, o-BIS, r-BIS, r-FFFS, the Big Five traits, and Psychoticism are associated with the dependent variable of the two dimensions of Workaholism. To reduce the effects of common method variance and potential effects of responding in a socially desirable manner, we partialled the effects of the social desirability as measured by the Lie Scale of the EPQ from all correlations and

regressions (see Podsakoff, MacKenzie, & Podsakoff, 2012 for more information about reducing effects of common method variance).

3. Study 1: Results

The means, standard deviations, and alphas are shown in Table 1. Cronbach's alpha coefficients for the personality scales are mostly above an acceptable level of .7, except for Psychoticism (.52). Cronbach's alpha coefficients for the two Workaholism scales were both acceptable.

3.1. Correlations

Correlations among the Workaholism scales and personality models are shown in Table 1 both with and without the partialling of the EPQ Lie Scale. As we have partialled the EPQ Lie Scale to reduce effects of common method variance, we mainly focus on reporting these correlations. Correlations between Feeling driven to work and Enjoyment of work was significant ($r = .36, p < .01$).

Correlations between Workaholism and the Big-Five scales generally supported the current study's hypotheses. Significant correlations were found between most of the approach pathways with Workaholism enjoyment. These included Eysenck's Extraversion ($r = .22, p < .01$), NEO-IPIP Extraversion ($r = .23, p < .01$) and r-BAS ($r = .17, p < .01$). Curiously, none of the o-BAS subscales were associated with Workaholism enjoyment.

Likewise, there is evidence for the association between the avoidance pathways and the Workaholism drive scale. These included Eysenck's Neuroticism ($r = .11, p < .05$), o-BIS ($r = .22, p < .01$) and r-BIS (revised scale $r = .18, p < .01$). Unexpectedly, it is also associated with o-Reward responsiveness ($r = .20, p < .01$). Overall, these results generally provide support for the hypotheses that different dimensions of Workaholism can be understood in terms of approach and avoidance pathways.

Table 1
Means, standard deviations, alphas, and correlations: Study 1.

	Mean	S.D.	Alpha	(1)	(2)	(1a)	(1b)
<i>Workaholism</i>							
1. Feeling driven to work	22.86	6.04	.82				
2. Enjoyment of work	24.46	5.68	.86	.37***		.36***	
<i>EPQ</i>							
Psychoticism	2.92	1.95	.52	-.16**	-.11*	-.15**	-.10*
Extraversion	6.95	3.73	.87	.09*	.21***	.10*	.22***
Neuroticism	5.44	3.51	.84	.10*	-.18***	.11*	-.16**
Lie Scale	4.48	2.55	.68	.10*	.17***		
<i>B5</i>							
Neuroticism	28.50	7.10	.77	.08	-.18***	.10*	-.15**
Extraversion	31.26	7.17	.86	.08	.21***	.10*	.23***
Openness	36.26	5.48	.77	.14**	.12*	.16**	.15**
Agreeableness	37.94	5.81	.82	.19**	.19**	.19***	.18***
Conscientiousness	35.27	5.77	.87	.15**	.19**	.14**	.15**
<i>R-RST</i>							
r-BAS	22.34	3.86	.81	.13**	.17***	.13**	.17***
r-BIS	22.08	3.77	.76	.17***	.10*	.18***	.11*
r-Flight	16.47	4.38	.75	.05	.00	.04	-.02
r-Freeze	16.90	4.19	.72	.04	-.08	.04	-.08
r-Fight	18.99	4.26	.78	.00	-.08	.01	-.06
<i>o-RST</i>							
o-Drive	10.78	2.64	.82	.11*	.04	.14	.06
o-Fun Seeking	11.62	2.38	.74	.05	.01	.08	.05
o-Reward responsiveness	16.45	2.42	.76	.17***	.05	.20***	.09
o-BIS	20.02	3.53	.76	.20***	-.13**	.22***	-.11*

Note: Columns 1a and 1b present correlations with Lie Scale partialled. Full correlation matrix available upon request.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Conscientiousness, Agreeableness and Openness correlated positively with all of the Workaholism scales (ranging between $r = .14$, $p < .01$ to $r = .19$, $p < .01$). We note, however, that our result indicates a positive relationship between Agreeableness and Feeling driven to work, whereas we hypothesized a negative relationship.

However, there was little evidence for the hypotheses involving the addiction theories of personality. Significant and negative correlations between Psychoticism and the Workaholism drive and enjoyment scales ($r = -.15$, $p < .01$; $r = -.10$, $p < .05$ respectively) suggest that people scoring higher on the Psychoticism scale possess lower workaholic tendencies which is evidence against H6.

3.2. Regression results

The regression results showing the associations between the personality scales and Workaholism are shown in Table 2.

Generally, the regression results echoed the correlations, except for Openness and Agreeableness of the Big Five. Neuroticism, o-BIS and r-BIS was associated with Feeling driven to work; Extraversion, r-BAS and o-Reward responsiveness was associated with Enjoyment of work. Agreeableness and Conscientiousness, but not Openness, were associated with Feeling driven to work. Psychoticism remained negatively associated with Driven to Work. Almost none of the Fight, Flight or Freezing subscales were associated with Workaholism: Only r-Fight was significant in being negatively associated with Enjoyment of work.

Overall, the personality models explained a modest amount of variance in Workaholism. The EPQ-R, NEO-IPIP, BIS/BAS and R-RST explained similar amounts of variance (varying between 4% and 9%).

Table 2
Study 1: standardized regression weights of personality scales.

	Feeling driven to work	Enjoyment of work	Feeling driven to work	Enjoyment of work
EPQ-R				
Lie Scale			.12*	.15**
Psychoticism	-.44***	-.26	-.15**	-.09
Extraversion	.18*	.32***	.12*	.20***
Neuroticism	.24**	-.20*	.15**	-.12*
Adjusted R ²	.06	.09	.05	.09
NEO-IPIP				
Lie Scale			.10	.17***
Neuroticism	.11**	-.08*	.14*	-.10*
Extraversion	.04	.14**	.05	.16*
Openness	.08	.05	.07	.04
Agreeableness	.13*	.09	.13*	.09
Conscientiousness	.12*	.12*	.12*	.10
Adjusted R ²	.08	.12	.07	.10
R-RST				
Lie Scale			.11*	.16***
r-BAS	.15	.25**	.10	.16**
r-BIS	.22**	.12	.15**	.07
r-Flight	.04	.13	.03	.09
r-Freeze	.05	-.15	.04	-.10
r-Fight	-.07	-.16*	-.05	-.11*
Adjusted R ²	.04	.08	.04	.07
BIS/BAS				
Lie Scale			.15**	.17***
o-Drive	.25	.03	.11	.01
o-Fun Seeking	-.06	-.07	-.02	-.03
o-Reward responsiveness	.26	.39*	.11	.15*
o-BIS	.31***	-.26**	.19***	-.15**
Adjusted R ²	.09	.06	.08	.05

Last 2 columns include the EPQ Lie Scale to remove effects of social desirability and common method variance.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

4. Study 2: Method

4.1. Participants

To enhance our results' generalizability, another set of data was collected. A total of 105 participants were involved in Study 2. All participants were working managers from the United States. The sample included 50.5% male and 49.5% female, with mean age of 31.51 years (S.D. = 9.31 years), ranging from 19 to 62 years old. The majority of the participants worked in large companies (i.e., with >100 people; 40.2%) or medium ones (i.e., with 21 to 100 people; 36.4%). Most were from the service sector (55.7%).

4.2. Measures, procedure and data analysis

As Study 1.

5. Study 2: Results

The means, standard deviations, and alphas for Study 2 are shown in Table 3. Cronbach's alpha coefficients for the personality and Workaholism scales are almost all above an acceptable level of 0.7, except EPQ Psychoticism was 0.62.

5.1. Correlations

Correlations among the variables are also included in Table 3. Correlations between Feeling driven to work and Enjoyment of work was significant ($r = .32$, $p < .01$). Correlations between Workaholism and the Big-Five scales are generally weaker than in Study 1. Still, significant correlations existed between most of the approach pathway factors with Work Enjoyment. These included Eysenck's Extraversion ($r = .21$, $p < .01$), r-BAS ($r = .39$, $p < .01$), o-Drive ($r = .21$, $p < .01$), and o-Fun-seeking ($r = .25$, $p < .01$). Curiously, Big Five Extraversion was not associated with Work Enjoyment.

In contrast, the findings related to avoidance pathways were much weaker, with r-BIS being the only avoidance pathways factor associated with Driven to Work ($r = .34$, $p < .01$). In fact, multiple approach pathways factors were associated with Driven to Work, including r-BAS ($r = .39$, $p < .01$), o-Drive ($r = .25$, $p < .01$), o-Fun-seeking ($r = .40$, $p < .01$), and o-Reward-responsiveness ($r = .23$, $p < .01$), as opposed to what H2 would suggest.

Conscientiousness and Openness correlated positively with all of the Workaholism scales (ranging between $r = .22$, $p < .05$ to $r = .25$, $p < .01$), but we found no relationship between Workaholism and Agreeableness. Findings about Psychoticism were also opposed to H6, with no relationship found between Psychoticism with either scale of Workaholism.

5.2. Regression results

The findings of the regression analysis are shown in Table 4. Interestingly, the regression findings in Study 2 are much weaker than in Study 1: The only significant factors associated with Work Enjoyment were r-BAS ($B = .40$, $p < .01$) and low o-BIS ($B = -.20$, $p < .05$). The only scales related to Driven to Work were, surprisingly, o-Fun Seeking ($B = .35$, $p < .01$) and r-BAS ($r = .28$, $p < .01$). None of the Big Five factors was associated with either dimension of Workaholism, nor was Psychoticism. In general, for Managers, the findings pertaining to approach pathway factors were in line with our hypotheses, but we found approach pathways were associated with Driven to work.

6. Discussion

To our knowledge, there has been little research on the relationship between personality and Workaholism, even though Workaholism is an

Table 3
Means, standard deviations, alphas, and correlations: Study 2.

	Mean	S.D.	Alpha	(1)	(2)	(1a)	(2a)
<i>Workaholism</i>							
1. Feeling driven to work	25.28	5.49	.79				
2. Enjoyment of work	24.19	6.39	.87	0.32**		.32**	
<i>EPQ</i>							
Psychoticism	2.85	2.12	.62	-.03	.15	-.03	.18
Extraversion	7.25	4.04	.90	.12	.19	.14	.21*
Neuroticism	3.86	3.51	.86	-.00	-.26**	-.09	-.25*
Lie Scale	5.89	3.06	.77	-.01	.33**		
<i>B5</i>							
Neuroticism	23.91	8.32	.91	-.10	-.33***	-.09	-.25*
Extraversion	31.91	7.82	.87	.07	.06	.10	.10
Openness	38.83	5.70	.79	.24*	.24*	.23*	.25**
Agreeableness	39.64	5.63	.82	.18	.24	.17	.19
Conscientiousness	38.49	6.63	.86	.20*	.30**	.22*	.24*
<i>R-RST</i>							
r-BAS	23.64	4.54	.87	.38***	.39***	.39***	.39***
r-BIS	23.20	4.02	.78	.33**	.17	.34**	.18
r-Flight	16.67	5.03	.81	.01	-.06	.01	-.05
r-Freeze	17.27	4.41	.70	-.07	-.16	-.07	-.10
r-Fight	18.23	4.62	.77	-.16	.01	.16	.03
<i>BIS/BAS</i>							
o-Drive	11.64	2.65	.82	.24*	.18	.25*	.21*
o-Fun Seeking	11.50	2.56	.74	.37***	.13	.40***	.25*
o-Reward responsiveness	16.53	2.64	.79	.23*	.15	.23*	.19
o-BIS	18.98	4.53	.83	.13	-.24*	.13	-.16

Note: Columns 1a and 1b present correlations with Lie Scale partialled.
Full correlation matrix available upon request.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

increasingly major problem across the world. We have focused our hypotheses on approach systems, avoidance systems, and addictiveness. The first two are especially important, as they or constructs very similar to them are present in a wide range of personality models (e.g., Elliot & Thrash, 2010). Thus, our study is of value to a wide range of researchers interested in examining the link between personality and Workaholism as we use multiple measures of personality.

In support of the approach perspective (H1), different personality models converged in indicating that r-BAS was associated with Enjoyment of work in both studies. People high in r-BAS are high in reward orientation, exploration and curiosity, so we are not surprised at this relationship. Whilst other approach scales (Extraversion, o-Reward responsiveness) were associated with Enjoyment in workers (Study 1), there was no relationship for managers (Study 2). We conclude that r-BAS is a good personality construct for measuring Workaholism and that personality is less related to Work Enjoyment in managers than workers.

In support of the avoidance perspective (H2), we found Neuroticism, o-BIS and r-BIS were associated with Feeling driven to work, but only in workers (Study 1), not for Managers (Study 2). These relationships can be interpreted as reflecting a tendency for neurotic and anxious people to feel compelled to work in junior work positions, but not in managerial jobs. In an organization, lower-ranking employees are often subject to fear and anxiety due to work demands (Magee & Galinsky, 2008), and this likely to lead to Feeling driven to work. Due to their relatively high status in organizations, it is plausible that managers are less likely to experience anxiety during work. Thus, Driven to Work among managers may become more of a function of other factors, such as compulsive personality. Interestingly, we found evidence that approach pathways were associated with Driven to Work in managers (in terms of r-BAS and o-Fun Seeking). We think this surprising result indicates that senior people in the workplace are driven to work hard to achieve high levels of rewards

whereas more junior people are driven to work hard to avoid punishment. The possibility that the relationships between Workaholism and personality may be moderated by such factors as relative position within the organization is an important finding that requires further research.

Focusing on other regression results, we found evidence that Conscientiousness was associated with Driven to Work (H4) in Study 1, in support of previous findings by Andreassen et al. (2010), but no evidence in support of H3 and H5. Since Conscientiousness is associated with being well organized and responsible, we are not surprised that there is a small relationship between this personality scale and Workaholism. However, in Study 2 with managers, we found no evidence in support of our hypotheses.

Apart from these, we also sought to determine if an addictive personality was associated with Workaholism, by examining the relationship between Psychoticism and Workaholism. A positive relationship would have indicated addictiveness (Eysenck, 1997). Contrary to this hypothesis (H6), we found a negative relationship in Study 1 and a null relationship in Study 2. This suggests that Workaholism does not activate the addictive pleasure system associated with other types of dependency such as drug addiction. This result casts doubt on the interpretation of Workaholism as a form of addiction (e.g., Porter, 1996). Our finding suggests that the common reference to Workaholism as “addictive” is probably a misnomer.

Since people of different personalities (i.e., high BAS vs high BIS) may be driven to engage in workaholic behavior for different reasons, interventions should be administered accordingly. For instance, workaholics who are high in Enjoyment of work are likely to be high in BAS sensitivity. Therefore, “reward-focused interventions” will be more effective (e.g., encouraging interests outside work), whilst junior staff who are workaholics who are high in Driven to Work may be more receptive to “punishment-focused” interventions (e.g., educating them about Workaholism’s negative effects on health).

Table 4

Study 2: standardized regression weights of personality scales.

	Feeling driven to work	Enjoyment of work	Feeling driven to work	Enjoyment of work
EPQ-R				
Lie Scale			.00	.28**
Psychoticism	-.04	.18	.07	.17
Extraversion	.15	.07	-.04	.10
Neuroticism	.07	-.24*	.15	-.14
Adjusted R ²	.00	.08	.02	.14
NEO-IPIP				
Lie Scale			-.04	.26**
Neuroticism	.06	-.28*	.05	-.22
Extraversion	.01	-.13	.01	-.11
Openness	.16	.11	.15	.16
Agreeableness	.08	.02	.08	.01
Conscientiousness	.12	.11	.13	.08
Adjusted R ²	.03	.12	.02	.17
R-RST				
Lie Scale			-.04	.31**
r-BAS	.28*	.40***	.28**	.40***
r-BIS	.16	-.03	.16	-.04
r-Flight	.10	.11	.11	.05
r-Freeze	-.10	-.16	-.11	-.06
r-Fight	.03	-.06	.03	-.05
Adjusted R ²	.13	.13	.13	.21
BIS/BAS				
Lie Scale			.12	.31**
o-Drive	.10	.02	.10	.02
o-Fun Seeking	.32**	.05	.35**	.14
o-Reward responsiveness	-.02	.20	-.04	.15
o-BIS	.12	-.30**	.14	-.20*
Adjusted R ²		.08	.12	.16

Last 2 columns include the partialling of the EPQ Lie Scale to remove effects of social desirability and common method variance.

Finally, we did not find much evidence that fear (reflected in the FFFS) is associated with Workaholism, except that in regression, low Fight was related to Enjoyment at work in workers (Study 1). Whilst this indicates that generally submissive people have more of a tendency to enjoy excessive work, overall we were not surprised that fear seems unrelated to Workaholism.

These results highlight the importance of using r-RST over o-RST, the EPQ-R and the Big Five at least in the context of Workaholism research, since r-RST more clearly distinguishes anxiety (which is generally associated with Workaholism) from fear (which generally is not associated with Workaholism). This study also adds evidence in favor of Jackson's (2009) measurement model of r-RST given that both r-BAS and r-BIS are associated with Workaholism in Study 1 and r-BAS is associated with Workaholism in Study 2. Moreover, usage of different personality models aside from the Big Five has also been shown to be a useful technique since the Big Five was unrelated to Workaholism in managers (Study 2).

Future research may utilize personality models which focus on biological and socio-cognitive components of personality, such as those advocated by Elliot & Thrash (2010) and Jackson (2008). These models are likely to highlight learning mechanisms linked to individual differences that are antecedents of Workaholism. Socio-cognitions as opposed to biological constructs are more likely to be responsive to interventions such as training or counseling. As a result, such research is likely to point to ways in which interventions may reduce the negative consequences of Workaholism in the workplace.

This study has a few limitations including that the data are cross sectional and self-report which likely increase common method variance and socially desirable responding. However, these problems were countered to some degree by including multiple measures of personality (the Big Five and the two RST models) and partialling the EPQ Lie Scale from our multivariate results.

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