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Personality at home vs. work: Does framing for work increase predictive validity of the Dark Triad on work outcomes?



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ABSTRACT

In a between subject design 903 people completed a robust Dark Triad and a Big Five trait measure and each group was asked to report their behaviour in two situations: at work or in general. Those individuals that were asked to think of work when reporting their personality reported behaviour that was more Extraverted, Conscientious, more Emotional Stable and less Machiavellian. Unexpectedly, there was no difference for Narcissism and Psychopathy. Gender differences were smaller in the work group than the non-work group suggesting situation may moderate gender differences in personality. Implications and limitations are acknowledged.

1. Introduction

There is considerable debate around the interaction between personality and situation, specifically to what extent behaviour is situationally determined. Most researchers focus on whether individual differences or situations predict behaviour, and very few have examined the interaction between these variables in the organisational psychology domain. Although situational effect has been investigated with the Big Five personality traits, it is yet to be examined related to dark side personality traits.

Fleeson (2001, 2007) examined variation of the Big Five personality traits within-individuals and found this variation to be as a large as the variation between-individuals. Furthermore, this within-individual variation was dependent on the situation, specifically the "psychologically active characteristics" (Fleeson, 2007, p.829) of the situation, such as the anonymity, friendliness, and task orientation of the situation.

This research is important for organisational psychologists because currently when assessing an individual's personality to predict work outcomes no stipulation is made to participants to consider their behaviour in the workplace. If individuals' work behaviour, and therefore personality are situation-dependent, researchers are likely to get inconsistent patterns of relationships between personality and work outcomes.

This potential inconsistency in how people report their behaviour is likely to result in some studies finding positive relationships with work variables, others finding negative relationships and some finding none at all. Moreover, this theory is further supported with a study by Hunthausen, Truxillo, Bauer, and Hammer (2003) which found that utilising an at work frame-of-reference when assessing personality compared to a general personality assessment, at work personality added incremental validity above cognitive ability when predicting job performance but general personality did not. Further, a meta-analysis comparing contextualized and non-contextualized personality measures found higher mean validity of contextualized measures (Shaffer & Postlethwaite, 2012).

The present study looks to extend this existing literature by examining whether the Dark Triad traits may vary in different socialcontextual situations. This will be achieved by asking individuals to report their behaviour in general (non-work group) versus their behaviour at work. Additionally, meta-analyses have shown gender differences in the Dark Triad (Grijalva et al., 2015b; Muris, Merckelbach, Otgaar, & Meiher, 2017), these gender differences will be explored in the non-work group and the work group. With the expectation that gender differences will be lower at work, as men and women constrain their behaviour to work norms. The framing used in this study is novel and as previous research has repeatedly found differences in Big Five personality and situations, it seemed necessary to include the Big Five in order to validate the frame-of-reference used in this study.

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1.1. Situational differences and Big Five personality

The research examining variation in Big Five personality traits across interpersonal contexts and social roles (Donahue & Harary, 1998; Robinson, 2009; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997) has consistently found that individuals tend to report more Conscientious behaviour at work than they report in more social roles such as those with friends and family. However, the results for the other Big-Five traits have been less consistent: Donahue and Harary (1998) and Sheldon et al. (1997) found Agreeableness to be higher in an employeeand friend-roles when compared to partner-roles and family-roles, however, Robinson (2009) found Agreeableness to be lowest with parents, followed by work colleagues and then highest with friends. Robinson theorises that individuals adapt their personalities to the social context in a systematic way, however, there is also a core of consistency within individuals.

Utilising an experience sampling method, Fleeson (2007) assessed participants' personality and characteristics of the situation they had just experienced, at multiple time points and the findings showed that the predictive power of the situation characteristics was dependant on the personality trait. The results showed that Neuroticism increased with task orientation. Conscientiousness increased with greater task orientation and anonymity. Agreeableness was found to increase as friendliness increased and reduced as task orientation increased. These findings provide initial evidence of within-individual variability across situations. Furthermore, the results support those prior in self-perception studies of personality traits across roles and contexts (e.g. Donahue & Harary, 1998; Robinson, 2009; Sheldon et al., 1997).

Donahue and Harary (1998) explored self-perceptions of the Big Five personality traits in different role identities. Conscientiousness was rated significantly higher than general for work identity and it was rated significantly lower than general for the spouse and daughter/son roles. The authors suggested that the salience of a legitimized chain of authority in work roles is what predicates this result as well as the expectation and reward of conscientious behaviour in the workplace. Neuroticism was higher then in general in spouse and daughter/son roles and lower than in general for work and friend roles. This was in line with the hypothesis that people are more likely to display their anxieties and have increased self-disclosure in more intimate personal relationships (Donahue & Harary, 1998).

For Agreeableness, work and friend role identities were rated significantly higher than general, and sibling and daughter/son roles were rated lower than general. Although the aim of this study was to examine cross-role variation in participants, the results did also highlight the consistency of the Big Five traits: the alphas for consistency were all above 0.80 (Donahue & Harary, 1998). However, the participants for both studies were undergraduate students and although presented with definitions for each role, these individuals may have struggled to give accurate perceptions if they have never experienced work, being a spouse, sibling or parent.

In line with the findings of previous research the following hypotheses will be tested: Individuals will report higher Conscientiousness (H1a), lower Neuroticism (H1b) and higher Agreeableness (H1c) in the work group compared to the non-work group.

1.2. Situational differences and Dark side personality

The Dark Triad by definition encompasses antisocial behaviours. Individuals have been found to display more prosocial behaviour and more agreeable behaviour in the workplace or work roles due to the potential ease of termination in these situations (Donahue & Harary, 1998). Therefore it is likely that individuals will display lower levels of Psychopathy, Machiavellianism and Narcissism in order to preserve their employment. Furthermore, as Machiavellians and narcissists are driven by status it is likely that they are more driven to hide their dark tendencies in order to maintain their level of status and lifestyle through the job they have.

Additionally, relationships outside of work, specifically at home with family will be harder to terminate and therefore individuals may be more comfortable to display darker tendencies. Also due to the genetic effects of personality traits; for example, Vernon, Villani, Vickers, and Harris (2008) found Psychopathy and Narcissism to have moderate to large heritable components that at home and in family environments dark behaviours may be normalised by family behaviour. Individuals in a family may be more homogenous in their personality traits due to genetics. Furthermore, previous research (Simons & Burt, 2011) has shown that certain behaviours, be they prosocial or antisocial are learned, are due to an individual's upbringing and shared environment. Therefore, when examining their behaviour in general individuals may report higher levels of the Dark Triad traits than when they are reporting on their behaviour in the workplace. Therefore, the following hypotheses will be tested: Individuals will report lower Primary and Secondary Psychopathy (H2a), Machiavellianism (H2b) and Narcissism (H2c) in the work group compared to the non-work group

1.3. Gender differences with situations

A recent investigation (Robinson, 2009) of the impact of situational factors on Big Five personality traits found that gender moderated some of the differences in personality traits in specific contexts. For Agreeableness, women were more agreeable with friends and with work colleagues. Men were much less neurotic with parents than women but there were no gender differences with friends and work colleagues. This study shows support for gender differences between context and roles but the results are not consistent. The lack of consistency could suggest that gender differences may be specific to the situation or context. Some research (Block, von der Lippe, & Block, 1973) has shown that personality differences between the genders may be due to varying social roles rather than innate differences. However, the fewer gender differences at work (Robinson, 2009) may be because work environments are likely to constrain behaviour in both males and females in the same way, therefore any differences between the genders will be smaller at work than in general (H3).

2. Method

2.1. Sample

The sample for this study consisted of 903 participants (56.3% females; $M_{age} = 34.20$, $SD_{age} = 12.25$). The majority (81.8%) spoke English as their first language and over half had an undergraduate degree. A large proportion of participants were from the UK (51.5%) followed by the US (21.3%), Canada (4.5%) and Australia (3.4%). All participants had some experience of full-time employment.

2.2. Procedure

The data was collected using an online survey that was advertised on web forums. Participants were incentivised to take part in the survey in order to get feedback on their personality scores.

For this between subjects design, an online survey with two alternative sets of personality questions was created. Participants with unique IP addresses were randomly given one of two sets of questions: work questions vs non-work questions. The questions for the work group and non-work group for this study were derived from those used by Cohn, Fehr, and Maréchal (2014). For the work questions, participants were asked the following questions preceding the personality assessment: "Have you ever worked?", "How many years of work experience do you have?", "What is your title at work?" and "Please give a short description of your average day at work". Following this, participants were given the personality items with these instructions: Please answer the following statements in relation to your behaviour and attitudes in the

Table 1

Means, standard deviations and correlations between variables.

| | | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|---------|-------|-------|---------------|----------------|----------|-----------|-----------|----------------|----------------|----------|---------|---------|---------|------|
| 1 | Sex | 1.56 | .50 | | | | | | | | | | | | |
| 2 | Age | 34.20 | 12.25 | -0.009 | | | | | | | | | | | |
| 3 | IQ | 3.50 | 2.31 | -0.055 | .015 | | | | | | | | | | |
| 4 | SM | 9.33 | 3.88 | -0.150*** | -0.113^{***} | .006 | | | | | | | | | |
| 5 | Ext | 3.51 | 1.17 | .027 | .158*** | .001 | .428*** | | | | | | | | |
| 6 | Agr | 4.53 | .99 | .305*** | .111*** | .001 | .011 | .282*** | | | | | | | |
| 7 | Con | 4.08 | .99 | .078* | .164*** | .023 | -0.171*** | .050 | .040 | | | | | | |
| 8 | Neu | 3.44 | 1.05 | .191*** | -0.147*** | -0.074* | .024 | -0.173*** | .059 | -0.192^{***} | | | | | |
| 9 | Ope | 4.69 | .85 | -0.095^{**} | -0.009 | -0.022 | .229*** | .098** | .060 | -0.133^{***} | -0.014 | | | | |
| 10 | Psych 1 | 2.40 | .80 | -0.300*** | -0.202^{***} | -0.024 | .322*** | -0.013 | -0.542^{***} | -0.134*** | .027 | -0.020 | | | |
| 11 | Psych 2 | 2.83 | .72 | -0.154*** | -0.130*** | -0.093** | .145*** | -0.085* | -0.277*** | -0.378*** | .368*** | -0.002 | .418*** | | |
| 12 | Mach | 2.93 | .81 | -0.241*** | -0.269*** | -0.009 | .310*** | -0.032 | -0.412^{***} | -0.116^{***} | .168*** | .050 | .774*** | .462*** | |
| 13 | Narc | 4.53 | 3.34 | -0.221*** | -0.015 | .044 | .503*** | .369*** | -0.225^{***} | -0.011 | -0.092** | .187*** | .461*** | .138*** | .472 |

Note. *p < .05. **p < .01. ***p < .01, SM = Self-Monitoring, Ext = Extraversion, Agr = Agreeableness, Con = Conscientiousness, Neu = Neuroticism, Ope = Openness, Psych 1 = Primary Psychopathy, Psych 2 = Secondary Psychopathy, Mach = Machiavellianism, Narc = Narcissism.

workplace or organisational settings. Consider your relationships with your colleagues, team and line manager.

For the non-work group questions, participants were asked the following questions preceding the personality assessment: "Do you have any hobbies?", "How many hours a week do you dedicate to these hobbies?", "How many individuals would you consider to be close friends of yours?" and "Please give a short description of the types of activities you take part in at the weekend". Following this, participants were given personality items with these instructions: Please answer the following statements in relation to your behaviour and attitudes in general, such as at home, at the weekend or in personal settings. Consider your relationships with your family, close friends and/or partner.

The majority of the personality items did not require any amendment for the non-work vs. work setting. The only two items that were adapted were from the Machiavellian Personality Scale (MPS; Dahling, Whitaker, & Levy, 2009). The items were: "team members backstab each other all the time to get ahead" and "if I show any weakness at work, other people will take advantage of it". These were adapted to "people backstab each other all the time to get ahead" and "if I show any weakness, other people will take advantage of it" for the non-work group.

2.3. Measures

2.3.1. Psychopathy

The Levenson Self-Report Psychopathy (LRSP; Levenson, Kiehl, & Fitzpatrick, 1995) was used to measure Psychopathy. In this study the Cronbach's alphas for the LSRP total, Primary Psychopathy and Secondary Psychopathy were: 0.90, 0.72 and 0.88 for those in the non-work group and 0.91, 0.70 and 0.89 for those in the work group.

2.3.2. Narcissism

Narcissism was measured using a short form of the Narcissistic Personality Inventory (NPI-16; Ames, Rose, & Anderson, 2006). The Cronbach's alpha for the work group was 0.78 and for the non-work group was 0.76.

2.3.3. Machiavellianism

Machiavellianism was measured using the MPS (Dahling et al., 2009). In this study the Cronbach's alpha for the entire 16-item scale was 0.89 in the work group and 0.89 in the non-work group.

2.3.4. Big Five

The Mini-IPIP developed by Donnellan, Oswald, Baird, and Lucas (2006) was used to measure the Big Five personality traits of participants. It is a 20 item short form of the 50-item International Personality Item Pool-Five-Factor Model measure (Goldberg, 1999). The Mini-IPIP consists of 4 items per factor of Extraversion, Agreeableness, Neuroticism, Conscientiousness, and Openness to Experience. In this study the Cronbach's alphas for the Mini-IPIP factors were as follows: Extraversion – work group = 0.84, non-work group = 0.85; Agreeableness – work group = 0.80, non-work group = 0.83; Conscientiousness – work group = 0.70, non-work group = 0.72; Neuroticism – work group = 0.74, non-work group = 0.76; Openness – work group = 0.68, non-work group = 0.72.

2.3.5. Demographic/control variables

Participants were also asked their age, gender, level of education, and whether they spoke English as a first language. In order to test whether the situational-framing technique only affected those personality traits that are influenced by situational factors, participants IQ was tested using a short-form of an Eysenck IQ test and their levels of selfmonitoring were assessed with an 18-item measure that was scored True or False. The IQ variable was used as a manipulation check. Although self-monitoring is a variable that is associated with an individuals motivation and ability to adapt their behaviour to those around them, a participants level of self-monitoring is expected to be consistent across situations. Therefore will be used to check the effect of the frame-of-reference manipulation.

3. Results

3.1. Descriptive statistics

Table 1 shows the means, standard deviations and correlations between the demographic variables, personality traits and work outcomes. This data is combined across both groups. The correlations are mostly as expected.

3.2. Manipulation check

A MANOVA examining the two groups showed no significant differences between gender, age, education, self-monitoring and IQ; *F* (5834) = 0.880, p = .494, Wilk's Lambda = 0.995 with partial eta squared = 0.005. As discussed above, we would not expect the situational-framing to influence participants IQ scores or self-monitoring score.

3.3. Framing for work

A MANOVA examining the two groups showed significant differences between the groups for personality traits; F(9859) = 4.277, p < .000, Wilk's Lambda = 0.957 with partial eta squared = 0.043. The results for each variable are summarised in Table 2.

 Table 2

 MANOVA findings comparing personality traits in work and non-work groups.

| Dependent variable | Non- work mean | sd | Work mean | sd | f | sig. | cohen's d |
|--------------------------|----------------------|------|--------------|------|-------|------|-----------|
| Extraversion | 3.43 | 1.19 | 3.61 | 1.14 | 4.89 | .027 | .154 |
| Agreeableness | 4.52 | 1.01 | 4.55 | .97 | .26 | .612 | .030 |
| Conscientiousness | 3.94 | 1.01 | 4.20 | .96 | 15.28 | .000 | .264 |
| Neuroticism | 3.53 | 1.06 | 3.36 | 1.04 | 5.81 | .016 | .162 |
| Openness | 4.65 | .87 | 4.73 | .82 | 1.94 | .165 | .095 |
| Primary Psychopathy | 2.42 | .79 | 2.37 | .80 | 1.02 | .312 | .063 |
| Secondary Psychopathy | 2.87 | .73 | 2.78 | .71 | 3.30 | .070 | .125 |
| Machiavellianism | 3.01 | .78 | 2.85 | .82 | 9.48 | .002 | .200 |
| Narcissism | 4.51 | 3.28 | 4.54 | 3.41 | .02 | .897 | .009 |

The differences between the groups for Extraversion, Conscientiousness, Neuroticism and Machiavellianism were all significant. Extraversion and Conscientiousness were higher in the work group than the non-work group, which supports **H1a**. The effect for Extraversion was not hypothesized but previous research has found situational differences for Extraversion (Fleeson, 2007). Neuroticism was lower in the work group than the non-work group, showing support for **H1b**. Agreeableness was not significantly different between the groups so **H1c** was not supported. Machiavellianism was lower in the work group than the non-work group. However, due to multiple comparisons, a Bonferroni correction applied to the significance level gives a corrected value of p = .0056, which results in only Conscientiousness and Machiavellianism being significant. These results show support for **H1a** and **H2b**. The other Dark Triad traits were not significant so **H2a** and **H2c** were not supported.

3.4. Gender differences at work

A MANOVA examining differences between males and females in the work group showed significant differences between males and females for personality traits; F(9419) = 8.30, p < .000, Wilk's Lambda = 0.849 with partial eta squared = 0.151. The results for each variable are summarised in Table 3.

Utilising the more stringent alpha level of 0.0056 the following variables all show significant differences between the genders in the work group: Agreeableness, Neuroticism, Primary Psychopathy, Secondary Psychopathy, Machiavellianism and Narcissism. Men had lower levels of Agreeableness and Neuroticism and had higher levels of the Dark Triad traits.

3.5. Gender differences in non-work group

A MANOVA examining differences between males and females in

| MANOVA | examining | gender | differences | in | the | work | group. |
|--------|-----------|--------|-------------|----|-----|------|--------|
|--------|-----------|--------|-------------|----|-----|------|--------|

| Dependent variable | Male mean | sd | Female mean | sd | f | sig. | cohen's d |
|--------------------------|--------------|------|----------------|------|-------|------|-----------|
| Extraversion | 3.62 | 1.16 | 3.60 | 1.13 | .013 | .910 | .017 |
| Agreeableness | 4.29 | 1.03 | 4.77 | .87 | 27.36 | .000 | .508 |
| Conscientiousness | 4.12 | .95 | 4.27 | .96 | 2.97 | .086 | .157 |
| Neuroticism | 3.17 | .98 | 3.51 | 1.06 | 11.83 | .001 | .332 |
| Openness | 4.85 | .78 | 4.64 | .84 | 7.68 | .006 | .258 |
| Primary | 2.62 | .86 | 2.16 | .69 | 36.44 | .000 | .597 |
| Psychopathy | | | | | | | |
| Secondary Psychopathy | 2.89 | .74 | 2.69 | .67 | 9.19 | .003 | .285 |
| Machiavellianism | 3.08 | .82 | 2.66 | .77 | 29.24 | .000 | .530 |
| Narcissism | 5.35 | 3.57 | 3.89 | 3.13 | 20.45 | .000 | .438 |

Table 4MANOVA examining gender differences in the non-work group.

| Dependent variable | Male mean | sd | Female mean | sd | f | sig. | cohen's d |
|--------------------------|--------------|------|----------------|------|-------|------|-----------|
| Extraversion | 3.37 | 1.23 | 3.48 | 1.16 | .954 | .329 | .092 |
| Agreeableness | 4.10 | 1.10 | 4.84 | .81 | 66.02 | .000 | .781 |
| Conscientiousness | 3.85 | 1.01 | 4.02 | 1.00 | 3.06 | .081 | .169 |
| Neuroticism | 3.27 | 1.08 | 3.73 | 1.01 | 20.91 | .000 | .442 |
| Openness | 4.72 | .83 | 4.60 | .89 | 2.02 | .156 | .139 |
| Primary Psychopathy | 2.71 | .88 | 2.20 | .63 | 49.78 | .000 | .681 |
| Secondary Psychopathy | 3.01 | .74 | 2.76 | .71 | 12.93 | .000 | .346 |
| Machiavellianism | 3.22 | .82 | 2.85 | .72 | 25.90 | .000 | .484 |
| Narcissism | 5.37 | 3.60 | 3.85 | 2.86 | 24.23 | .000 | .474 |

the non-work group showed significant differences between males and females for personality traits: F(9430) = 13.877, p < .000, Wilk's Lambda = 0.775 with partial eta squared = 0.225. The results for each variable are summarised in Table 4.

The pattern of results for this analysis is identical to the previous analysis, which shows that regardless of situation, the differences between men and women are consistent in direction for both the work group and the non-work group. Both in general and at work, men had significantly higher levels of the Dark Triad traits than women. The majority of these effects remained significant with the more stringent alpha level (p = .0056).

Furthermore, the partial Eta squared for the non-work group shows a greater effect size than the work group: 0.225 in the non-work group and 0.151 in the work group. Cohen's d for gender differences in Agreeableness at work is 0.508 and is 0.781 in the non-work condition. This suggests a larger difference between the genders in general than compared to at work. This shows support for H3.

Finally, a two-way MANOVA showed there were significant differences between the groups and also between males and females. However the overall omnibus test for the interaction between gender and situation was not significant; F(9857) = 0.776, p = .639, Wilk's Lambda = 0.992 with partial eta squared = 0.008. However, examining the individual variable results showed that Agreeableness was close to the standard significance threshold; p = .044. Agreeableness was higher in the non-work group for females than in the work group but was lower for men in the non-work group than the work group, see Fig. 1.

4. Discussion

The majority of hypotheses in this study were supported by the results. Framing individuals to think of work when reporting their personality lead them to report behaviour that was more Extraverted, Conscientious, more Emotional Stable (less neurotic), and less Machiavellian. The results for the Big Five traits are in line with those found by previous studies (Donahue & Harary, 1998; Fleeson, 2007; Robinson, 2009; Sheldon et al., 1997). Previous research has suggested that individuals are likely to display more prosocial behaviour in the workplace compared to other situations because non-prosocial behaviour may lead to termination in the workplace (Donahue & Harary, 1998). Additionally, even if an individual does not lose their job if they display non-prosocial behaviour they may be more likely to be ostracized from their colleagues or team members, which may lead to poorer performance.

Not all of the Dark Triad traits were found to be significantly different in the work group compared to the non-work group. Narcissism was not significant but the mean level of Narcissism was 4.53 and previous research has found a curvilinear relationship between Narcissism and leadership (Grijalva et al., 2015a), so the level of Narcissism in these groups may have been under the threshold and

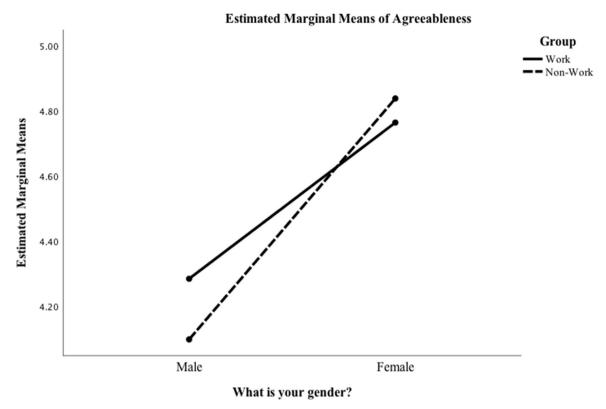


Fig. 1. Interaction of gender and groups for Agreeableness.

therefore beneficial in the workplace. The results for Secondary Psychopathy were close to significance with p = .07, the lack of significance could suggest that some aspects of Secondary Psychopathy, such as sensation seeking, could be positive for the workplace. Individuals with Secondary Psychopathy could be seen as fun, so work colleagues enjoy being around them and the individual's performance may benefit from this. The results for Primary Psychopathy are surprising given the correlation between Primary Psychopathy and Machiavellianism, r = 0.77, was so high. This result could mean that aspects of Primary Psychopathy may be beneficial at work. Furthermore, the sample for this study was diverse in terms of job role, organisation and sector. Research has shown that certain traits are more beneficial in certain roles and industries, for example Extraversion in a sales or leadership role.

The results for gender difference align with previous research that women report lower levels of the Dark Triad traits. However, the size of the gender difference was lower in the work group compared to the non-work group. This supports the theory that an individual's behaviour is constrained in the workplace, if a smaller range of personality traits, such as those that are prosocial, are acceptable in the workplace then both men and women will attempt to display those behaviours and therefore are going to be closer in terms of their reported personality and the difference in personality between the genders will be smaller. The work group was still found to show gender differences, so although men and women are potentially constrained to displaying prosocial behaviour in the workplace. Women on average still report lower levels of the Dark Triad traits than men, showing that gender differences are consistent and women may inherently have fewer Dark Triad traits than men. No interaction was found between gender and situation, which suggests that the effect of framing for work is consistent across men and women. However, further investigation is necessary for the Dark Triad traits as there was a significant result for Agreeableness, however this may have just been due to chance as a number of variables were tested in the model and at a corrected significance level the interaction is not significant.

4.1. Limitations and future research

All of the variables in this study were self-report, so common method variance may be inflating the results found. Follow up research should gather observer-rated personality to see if the differences between personality at work and in general is different for those around the individual, potentially a partner or friend for the general personality and a colleague or supervisor for the work personality. Furthermore, the situational-framing intervention may have increased social desirability and impression management. Participants may have reported behaviour and attitudes that they thought should be displayed in the workplace and would be desirable to an employer but they do not actually behave that way in the workplace. There is some research that suggests candidates use impression management during the selection process but do not display that behaviour in the job (Peck & Levashina, 2017). However, as this was not a personality assessment for employee selection it is unlikely that individuals were impression managing the personality traits they reported.

Additionally, this study was a between subjects design so the differences between the two groups could have been pre-existing rather than due to the framing of the personality assessment. Due to the number of variables, a within-subjects design would have been too time consuming. However, future research could focus specifically on the Dark Triad traits and a within subjects design.

Although the framing of work seemed to have the desired effect, the non-work group was given some instructions about their behaviour in general, this may have in some way influenced the participants but it is unclear what effect it may have had. Additionally, as individuals in the non-work were given a number of different relationships or settings to consider: home, friends or time alone. Some participants may have responded with their behaviour with very intimate relationships and others may have responded with their behaviour with acquaintances. Intimacy of a relationship is likely to influence the level of authenticity an individual may display in terms of their attitudes and behaviours. Therefore, it is important that follow up research is more prescriptive in the instructions for the comparison group.

Moreover, some individuals may have strong and intimate relationships with their colleagues and supervisor at work and others may have distant or strained relationships, these factors may influence the level of authenticity associated with their personality, individuals who have intimate relationships with those around them are more authentic and display more of the Big Five traits (Fleeson and Wilt, 2010; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). Future research should control for levels of intimacy, authenticity, and any other situational factors that may constrain behaviour.

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