

**The incremental effect of Dark personality over the Big Five in workplace  
bullying: Evidence from perpetrators and targets**

Elena Fernández del Río<sup>1</sup>, Pedro J. Ramos-Villagrasa<sup>1</sup>, and Jordi Escartín<sup>2</sup>

<sup>1</sup>Department of Psychology and Sociology, University of Zaragoza, Spain.

<sup>2</sup>Department of Social Psychology and Quantitative Psychology, University of  
Barcelona, Spain.

E-mail addresses:

Elena Fernández del Río: [elenario@unizar.es](mailto:elenario@unizar.es)

Pedro J. Ramos-Villagrasa: [pjramos@unizar.es](mailto:pjramos@unizar.es)

Jordi Escartín: [jordiescartin@ub.edu](mailto:jordiescartin@ub.edu)

Corresponding author:

Pedro J. Ramos-Villagrasa

Faculty of Work and Social Sciences

Department of Psychology and Sociology, University of Zaragoza

C/ Violante de Hungría, 23, 50009

Zaragoza, Spain

Telephone number: +34 876 554555

**Conflict of interest statement:** The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Highlights

- Dark Tetrad has incremental predictive validity of workplace bullying over Big Five
- High neuroticism and especially Machiavellianism were related to being a target
- Low agreeableness, high narcissism and sadism were related to being a bully
- Sadism fully mediates the effect of psychopathy on bullying others at work

## Abstract

The current study analyzes the relationship between workplace bullying (self-reported experience of being a target and perpetration of bullying behaviors), Big Five and Dark Tetrad personality traits. The sample comprised 613 employees (54% female) from different Spanish organizations. Hierarchical regression analyses showed that neuroticism and Machiavellianism were positively related to being a target to bullying-related behaviors, whereas narcissism was negatively related. In the case of perpetrators, narcissism and sadism were positively, and agreeableness negatively related to workplace bullying behaviors. We conclude that personality traits are different in targets and perpetrators and should always be considered when investigating workplace bullying.

Keywords: workplace bullying; narcissism; Machiavellianism; psychopathy; sadism; Big Five.

# **The incremental effect of Dark personality over the Big Five in workplace bullying: Evidence from perpetrators and targets**

## **1. Introduction**

Workplace bullying, conceptualized as a form of interpersonal misconduct at the workplace that involves repeated demeaning or destructive behaviors towards other organizational members (Rai & Agarwal, 2018), is considered one of the greatest social stressors, having a negative impact on targets, witnesses, harassers, and even the organizations in which these behaviors occur. As Samnani and Singh (2016) highlighted, the consequences of bullying go from physiological and psychological outcomes (e.g., psychosomatic symptoms, anxiety, depression, and suicide) to work-related outcomes (e.g., intention to leave, absenteeism, and job dissatisfaction).

Given the negative consequences of workplace bullying, scientific research has made great efforts to identify its determinants. There is usually no single cause of workplace bullying, but rather a set of factors that can facilitate or promote such abuse (Zapf, 1999). In this sense, Einarsen and Hauge (2006) proposed two complementary approaches: those that address bullying from contextual factors and those that do so from the personality of both the target and the harasser. Focusing on personality models, previous research emphasized the existence of individual dispositions that promote or prevent workplace bullying as a response to environmental factors (Nielsen & Knardahl, 2015). The extant research on personality traits as antecedents of workplace bullying has usually been studied from the Five Factor model (FFM; Nielsen et al., 2017) although some recent studies also supported the connection of bullying behaviors to another set of personality traits (e.g., Baughman et al., 2012). For instance, there is a growing interest in the personality of targets and perpetrators from the model of socially aversive personality traits, the so-called “dark personality.” It is defined by the subclinical traits of the “Dark

Triad” (narcissism, Machiavellianism, and psychopathy; Paulhus & Williams, 2002), or the “Dark Tetrad” (the aforementioned plus everyday sadism; Buckels et al., 2013).

In the next two sections, we briefly review the literature on the FFM and the dark personality separately, to extract that both predictor’s sets and both roles involved (i.e., target and perpetrator) should be treated symmetrically.

### *1.1. FFM and workplace bullying*

Regarding targets, the literature is widespread although findings about some traits are mixed (Coyne et al., 2000; Glasø et al., 2007; Persson et al., 2019). Studies consistently show that neuroticism is the strongest FFM trait linked to exposure to workplace bullying, but extraversion, agreeableness, and conscientiousness also have negative and positive associations with it. The evidence for openness is scarce, but it shows a negative association (Dåderman & Ragnestål-Impola, 2019).

An explanation for these mixed findings could be found in the victim precipitation theory (Aquino & Lamertz, 2004), which proposes two types of victims: provocative and submissive. Provocative victims contribute to their own victimization by eliciting certain emotional or behavioral answers. For instance, employees scoring high on conscientiousness, as reflected in general high levels of job performance, provoke envy among other employees, which elicits bullying behaviors (Brodsky, 1976). In contrast, submissive or passive victims are seen as an “easy target”. For instance, individuals with low scores in extraversion or high scores in neuroticism could be selected by perpetrators because they do not possess social skills to defend their own interests or they tend to avoid conflicts (Zapf, 1999).

In order to clarify the role of the FFM in workplace harassment, including bullying, Nielsen et al. (2017) carried out a meta-analysis including 36 independent samples.

Altogether, bullying was most strongly associated with neuroticism, whereas extraversion,

agreeableness, and conscientiousness were weakly correlated, the latter two lower for a self-labeling dependent variable and not at all in European samples.

Research on perpetrators' personality from the FFM is very scarce, especially in workplace settings. An exploratory study found that bullies scored lower on agreeableness than non-bullies (Seigne et al., 2007). Findings by Mathisen et al. (2011) indicate that supervisors' low levels of conscientiousness and high levels of neuroticism were significantly related to more subordinates' reports of exposure to bullying. Recently, Dåderman and Ragnestål-Impola (2019) concluded that low agreeableness and high extraversion were significant predictors of using bullying behaviors at work.

### *1.2. Dark personality and workplace bullying*

The relationship between bullying and the Dark Triad has been investigated mostly focusing on perpetrators. Tokarev et al. (2017) investigated how workers rated their leaders' levels of narcissism and psychopathy. They found that these traits contributed to explain bullying, but the effect of narcissism disappeared when both variables were included simultaneously in the predictive model. Another noteworthy study is that by Linton and Power (2013), which analyzed the dark side of personality both in perpetrators and targets, using a sample of students with work experience. Findings determined that perpetrators and targets shared certain traits (the Dark Triad and aggression). However, for targets, these traits had a lower magnitude than for perpetrators, and only psychoticism was involved in the predictive model.

Recently, the addition of sadism has led to a Dark Tetrad taxonomy of personality (Buckels et al., 2013). Scholars have suggested that, although there is some conceptual overlap with psychopathy (Johnson et al., 2019), subclinical sadism should be considered as a unique construct due to some of its traits, such as enjoyment of cruelty (Mededović & Petrović, 2015). However, research on the incremental validity of sadism in the prediction

of organizational outcomes is scarce (Fernández-del-Río et al., 2020). In this line, van Geel et al. (2017) found that agreeableness, Machiavellianism, psychopathy, and sadism were significantly related to perpetrate bullying in emerging adults. Although their findings did not focus on the workplace, they highlighted that sadism was the unique predictor of bullying when controlling for the Dark Triad and Big Five. To our knowledge, there are no similar studies on targets from the Dark Tetrad approach.

### *1.3. The present study*

In the light of prior literature and the unfilled gaps, we intend to provide two specific contributions: (1) to extend understanding of the relationship between bright and dark personality traits and workplace bullying both from the perspective of perpetrators and targets; (2) to estimate the incremental value of everyday sadism over and above FFM and the Dark Triad.

From the FFM, we expect that self-reported experience of being a target will be positively associated with neuroticism, but negatively with extraversion, agreeableness, and conscientiousness (H1). In the case of perpetrators, we hypothesize that perpetration of workplace bullying will be positively related to extraversion and neuroticism, and negatively related to openness, agreeableness, and conscientiousness (H2).

Regarding dark personality, empirical evidence suggests that the use of bullying behaviors at work will be positively associated with narcissism and Machiavellianism (H3). Regarding sadism, although there are no previous studies about this personality trait and the use of bullying behaviors at work, it seems plausible to expect that it will be positively associated with being a perpetrator, due to its unique traits (i.e., enjoyment of cruelty, subjugating nature). We therefore hypothesized that sadism would be positively related to perpetration of workplace bullying and it would increase the explained variance of being a perpetrator, above the Big Five and Dark Triad (H4).

## 2. Materials and Methods

### 2.1. Participants

The sample comprised 613 employees (54% female;  $M_{\text{age}} = 38.78$ ,  $SD_{\text{age}} = 14.06$ ) from different Spanish organizations. Their average job tenure was 8.38 years ( $SD = 10.09$ ).

### 2.2. Measures

A paper-and-pencil questionnaire was designed to measure, in this order, sociodemographic and work behavior characteristics, bright and dark personality, and workplace bullying (both self-reported experience of being a target, and perpetration of bullying behaviors).

#### 2.2.1. Sociodemographic and work behavior characteristics

We asked participants about their gender, age, and job tenure.

#### 2.2.2. Personality

The Big Five was assessed with the 60-item Spanish version of the NEO-FFI (Costa & McCrae, 2008), rated on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

#### 2.2.3. Dark Tetrad

We applied the Dark Tetrad at Work Scale by Thibault (2016) adapted to Spanish by Fernández-del-Río et al. (2020). This scale comprises 22 items rated on a 5-point Likert type scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

#### 2.2.4. Self-reported experience of being a target to bullying-related behaviors

The reduced form of the EAPA-T-R (Escartín et al., 2017) was used to assess the self-reported experience of exposure to bullying-related behaviors. It contains four items on a 5-point Likert scale ranging from 1 = *never* to 5 = *daily*.

#### 2.2.5. Perpetration of workplace bullying



We used the four work-related items from the Negative-Acts-Questionnaire-Perpetrators (Escartín et al., 2012). This is a self-reported scale rated on a 5-point Likert type scale, ranging from 1 = *never* to 5 = *daily*.

### 2.3. Procedure

Data were collected with non-probability sampling with the help of university students who answered the authors' call to collaborate distributing the questionnaire to people working in any kind of job. Workers who voluntarily agreed to participate were informed about the research objectives of this survey and the confidentiality and anonymity of their responses. Seven hundred and twenty questionnaires were distributed, and six hundred and twenty-five were returned (86.8%). After removing those with missing values in any variables of interest, statistical analysis was performed with data from six hundred and thirteen employees (85.1%). With  $n = 613$  statistical significance (alpha 5%, beta 5%, both one-tailed) is given for  $r = .13$  (sensitivity analysis: g\*power, Faul et al., 2009).

### 2.4. Statistical analysis

We computed means, standard deviations, and reliabilities (Cronbach's  $\alpha$ ). Associations between the variables were assessed with Pearson correlations for numerical variables. The correlations between gender and numerical variables were transformed to Cohen's  $d$  to facilitate their interpretation (McGrath & Meyer, 2006). Predictive models were performed with hierarchical regression analysis with control variables in Step 1, Big Five in Step 2, Dark Triad in Step 3, and sadism in Step 4.

## 3. Results

### 3.1. Descriptive statistics, reliabilities, and correlations

Descriptive statistics, reliabilities, and correlations are shown in Table 1. Internal consistency coefficients ranged from .57 to .91. Scores on extraversion and agreeableness

were high, i.e., one standard deviation above, compared to the Spanish population's average (Costa & McCrae, 2008).

[Insert Table 1 about here]

Big Five traits presented low-to-medium correlations with Dark Tetrad scores ( $M_{|r|} = .20$ , range [-.34, .33]). Extraversion, openness, and conscientiousness showed a positive correlation with narcissism, but negative ones with Machiavellianism, psychopathy, and sadism. All Dark Tetrad traits correlated negatively with agreeableness ( $M_{|r|} = -.27$ , range [-.10, -.33]). Except for the correlation between psychopathy and sadism ( $r = .67$ ,  $p < .001$ ), the Dark Tetrad traits presented low-to-medium bivariate associations ( $M_{|r|} = .20$ , range [.02, .35]).

Scores on neuroticism, agreeableness, conscientiousness, and Machiavellianism correlated significantly with being a target to bullying-related behaviors. Except for extraversion, the remaining FFM traits presented low bivariate associations with being a target ( $M_{|r|} = .15$ , range [-.11, .21]). In the case of dark personality, Machiavellianism was positively related to experience of being a target ( $r = .26$ ,  $p < .001$ ).

Regarding perpetration of workplace bullying, agreeableness was the only Big Five personality trait that showed a negative bivariate relationship ( $r = -.23$ ,  $p < .001$ ). However, all Dark Tetrad traits correlated positively with being a perpetrator ( $M_{|r|} = .24$ , range [.13, .30]). Notably, sadism displayed the highest correlation with the use of bullying behaviors ( $r = .30$ ,  $p < .001$ ).

### *3.2. Prediction of workplace bullying*

Regression analyses are shown in Table 2. For all analyses the tolerance scores were higher than 0.5 and the VIF scores were lower than 2.0, which suggest that there were no problems with multicollinearity. Regarding being a target of workplace bullying, the incorporation of the Big Five added 5% of explained variance, mainly due to a positive

contribution of neuroticism, which remained stable after the dark traits were added. The Dark Triad (Step 3) added another 5%, mainly due to Machiavellianism (positive sign), conforming with the provocative target hypothesis. According to this, H1 was partially supported.

Regarding the perpetration of workplace bullying, being male predicted the use of bullying tactics, although the effect faded out when gender-related personality scales were added. The inclusion of the Big Five added 6% of explained variance, mainly due to a negative contribution of agreeableness, which remained significant after all dark traits were included. The Dark Triad (Step 3) added 6% essentially due to narcissism (positive sign). Thus, H2 and H3 were partially supported. Finally, sadism (Step 4) led to an additional 1% of explained variance, fully supporting H4.

[Insert Table 2 about here]

#### **4. Discussion**

The current study contributes to the extant literature, providing additional evidence to research about personality traits of targets and perpetrators of workplace bullying. Concretely, this was the first study focused on the work setting wherein the Dark Tetrad was analyzed as a predictor of bullying.

Overall, our hypothesis regarding the associations between the FFM and workplace bullying were partially supported. In the case of targets, neuroticism was the most important predictor. Some of the hallmarks of this trait, like the enduring tendency to experience negative emotional states, a tendency to interpret ordinary situations as threatening, and a differential reactivity to environmental stressors (Tackett & Lahey, 2017) could increase the risk of being a target of workplace bullying. Although we hypothesized that extraversion, conscientiousness, and agreeableness would be negatively associated with workplace bullying, the findings revealed too small relationships (e.g., the

bivariate association of conscientiousness,  $r = -.13$ , vanished under the control of neuroticism). The non-results for extraversion and agreeableness may be due to the recruitment strategy of our sample and its high scores on both factors.

In the case of perpetrators of workplace bullying, we only confirmed its negative relationship with agreeableness. This trait was shown to be related to responsiveness to interpersonal conflict (Jensen-Campbell & Graziano, 2001). Consequently, less agreeable and friendly employees may be more likely to use bullying behaviors. In the same line of van Geel et al. (2017), neuroticism, extraversion, openness, and conscientiousness were not related to bullying at work. As meta-analytic evidence found small and varied effect sizes for these traits and for bullying (Mitsopoulou & Giovazolias, 2015), further research is needed to clarify these relationships in the work setting.

Regarding dark personality, the use of bullying was positively associated with all the components of the Dark Tetrad. Narcissism and sadism were also significant predictors of being a bully in a hierarchical regression step that accounted for 16% of the variance in perpetrator scale scores. Sadism ranked as the strongest personality predictor of bullying others at work, improving the explained variance over the other dark traits. Moreover, when sadism was introduced, psychopathy was no longer a significant predictor. Most research about dark personality and workplace bullying has focused on the Dark Triad, with psychopathy being the most strongly related to these behaviors (Baughman et al., 2012). However, when sadism was added to the prediction of bullying and cyberbullying (van Geel et al., 2017), it predicted antisocial and delinquent behaviors better than any other dark trait. Although the relationship between sadism and bullying has not been explored in work settings previously, it seems reasonable to assume that an employee who takes pleasure in others' suffering will be likely to use behaviors to subjugate or shame others by attacking their dignity and self-respect, especially publicly. As Buckels et al.

(2013) pointed out, sadists possess an “intrinsic appetitive motivation to inflict suffering on victims” (p. 2207), a motivation that is not present in other dark personalities. Additionally, external incitement would not be necessary to engage in aggressive behaviors (Reidy et al., 2011), so targets’ dispositions or vulnerabilities would not cause the bullying, as the victim precipitation theory proposed (Aquino & Lamertz, 2004). Future research should focus on better understanding the role of sadism in the dynamics of workplace bullying. Narcissism was also a positive predictor of the use of bullying tactics like other recent studies found (Tokarev et al., 2017). Some traits of narcissistics, as interpersonally exploitativeness, low tolerance to take criticism, and the need to safeguard their low self-esteem (Paulhus & Williams, 2002) could increase the likelihood of bullying others at work, especially if they perceived that their status at the organization could be in danger or their ego could be threatened.

Surprisingly, two dark personality traits were associated to being a target (i.e., Machiavellianism and narcissism), and some explanations could be plausible. Some Machiavellian features may provoke bullying by others. For instance, high Machs are often seen as more desirable leaders, with high ratings on charisma and effectiveness (Jones & Paulhus, 2009), and these characteristics could elicit aggressive behaviors, for example, when they resort to unethical behaviors for their career success. However, narcissism, if controlled for Machiavellianism, got a negative beta. A possible explanation for this result is that some characteristics of this dark trait, such as an inflated or grandiose sense of self and a sense of superiority, could make it difficult for narcissists to acknowledge that they have been bullied at work. Negative behaviors could be interpreted by narcissists as a sign of weakness in the face of others and a lack of dominance and superiority (Paulhus & Williams, 2002). As the effect size was small in the present study, this finding should be interpreted cautiously and would require independent replication.

The profile of targets and perpetrators was not only different regarding personality traits, but also regarding gender, because being a male was a significant predictor of using bullying tactics, mediated by the Dark Tetrad. Thus, we stress that perpetrators and targets at the workplace do not share a wide range of characteristics.

#### *Limitations and future research*

Limitations of this study include the use of self-reports, although Jones and Paulhus (2014) showed that it is a reliable and valid approach to assess dark personality. Meta-analytic evidence also found reduced FFM predictions with self-report dependent variables (Nielsen et al. 2017). Secondly, we used a cross-sectional design, so we cannot determine the evolution of bullying processes, and no inferences about causal relationships can be made. This became apparent at the narcissism - target result: it is yet possible that narcissism react on the experience of either being a target or of doing a successful bullying act. Lastly, the scale of self-reported experience of being a target has low reliability. This could be attributed to the fact that each item on the scale measures different bullying behaviors but, in any case, the results referring to this measure should be interpreted cautiously.

In spite of these limitations, the present study also offers promising directions for future research. We believe that is mandatory to continue the debate on dark personality. Although several researchers have pointed out the overlap between dark personality traits and have defended the existence of a single common factor (Bertl et al., 2017), our findings showed different relationships between workplace bullying and the Dark Tetrad traits. Concretely, sadism emerged as the most important predictor of the use of workplace bullying. Future research should delve deeper and distinguish between vicarious sadism (enjoying others' suffering without necessarily causing it) and direct sadism (enjoying perpetrating the suffering; Paulhus & Jones, 2015). Whereas the latter would be

characteristic of perpetrators, vicarious sadism may be more prevalent among bystanders. Besides that, given the contradictory findings in the literature about the relationships between personality and workplace bullying, more primary studies are needed to allow meta-analysis to unravel this issue.

## 5. Conclusions

Personality cannot be ignored in the prevention of bullying. To fully understand the dynamics of workplace bullying, personality should be considered in human resources management procedures, such as the process of recruitment and personnel selection or in the constitution of work teams (Nielsen et al., 2017). Managers and Human Resources staff should consider that employees with these characteristics —high Machiavellianism combined with high neuroticism—could be more vulnerable to bullying. On the other hand, individuals who are disagreeable and score high on narcissism and sadism may resort more frequently to bullying behaviors, such as professional discredit, denigration, or emotional abuse.

## References

- Aquino, K., & Lamertz, K. (2004). A Relational Model of Workplace Victimization: Social Roles and Patterns of Victimization in Dyadic Relationships. *Journal of Applied Psychology, 89*(6), 1023–1034. <https://doi.org/10.1037/0021-9010.89.6.1023>
- Baughman, H. M., Dearing, S., Giammarco, E., & Vernon, P. A. (2012). Relationships between bullying behaviours and the Dark Triad: A study with adults. *Personality and Individual Differences, 52*(5), 571–575. <https://doi.org/10.1016/j.paid.2011.11.020>
- Bertl, B., Pietschnig, J., Tran, U. S., Stieger, S., & Voracek, M. (2017). More or less than the sum of its parts? Mapping the Dark Triad of personality onto a single Dark

- Core. *Personality and Individual Differences*, 114, 140–144.  
<https://doi.org/10.1016/j.paid.2017.04.002>
- Brodsky, C. M. (1976). *The harassed worker*. Lexington Books Heath and Company.
- Buckels, E. E., Jones, D. N., & Paulhus, D. L. (2013). Behavioral Confirmation of Everyday Sadism. *Psychological Science*, 24(11), 2201–2209.  
<https://doi.org/10.1177/0956797613490749>
- Costa, P., & McCrae, R. R. (2008). *Inventario de personalidad NEO Revisado (NEO PI-R). Inventario NEO reducido de Cinco factores (NEO- FFI) [Revised NEO Personality Inventory—NEO PI-R]*. TEA.
- Coyne, I., Seigne, E., & Randall, P. (2000). Predicting workplace victim status from personality. *European Journal of Work and Organizational Psychology*, 9(3), 335–349. <https://doi.org/10.1080/135943200417957>
- Dåderman, A. M., & Ragnestål-Impola, C. (2019). Workplace bullies, not their victims, score high on the Dark Triad and Extraversion, and low on Agreeableness and Honesty-Humility. *Heliyon*, 5(10), e02609.  
<https://doi.org/10.1016/j.heliyon.2019.e02609>
- Einarsen, S., & Hauge, L. J. (2006). Antecedentes y consecuentes del acoso psicológico en el trabajo: Una revisión de la literatura [Antecedents and consequences of workplace mobbing: A literature review]. *Journal of Work and Organizational Psychology*, 22, 251–273.
- Escartín, J., Sora, B., Rodríguez-Muñoz, A., & Rodríguez-Carballeira, A. (2012). Adaptación y validación de la versión española de la escala de Conductas Negativas en el Trabajo Realizadas por Acosadores: NAQ-Perpetrators [Adaptation and Validation of a Spanish Version of the Negative Acts Questionnaire at Work



- Showed by Bullies: NAQ-Perpetrators]. *Journal of Work and Organizational Psychology*, 28, 157–170.
- Escartín, J., Monzani, L., Leong, F., & Rodríguez-Carballeira, Á. (2017). A reduced form of the Workplace Bullying Scale – the EAPA-T-R: A useful instrument for daily diary and experience sampling studies. *Work & Stress*, 31(1), 42–62.  
<https://doi.org/10.1080/02678373.2017.1295113>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fernández-del-Río, E., Ramos-Villagrasa, P. J., & Barrada, J. R. (2020). Bad guys perform better? The incremental predictive validity of the Dark Tetrad over Big Five and Honesty-Humility. *Personality and Individual Differences*, 154, 109700.  
<https://doi.org/10.1016/j.paid.2019.109700>
- Glasø, L., Matthiesen, S. B., Nielsen, M. B., & Einarsen, S. (2007). Do targets of workplace bullying portray a general victim personality profile? *Scandinavian Journal of Psychology*, 48(4), 313–319. <https://doi.org/10.1111/j.1467-9450.2007.00554.x>
- Jensen-Campbell, L. A., & Graziano, W. G. (2001). Agreeableness as a Moderator of Interpersonal Conflict. *Journal of Personality*, 69(2), 323–362.  
<https://doi.org/10.1111/1467-6494.00148>
- Johnson, L. K., Plouffe, R. A., & Saklofske, D. H. (2019). Subclinical Sadism and the Dark Triad: Should There Be a Dark Tetrad? *Journal of Individual Differences*, 40(3), 127–133. <https://doi.org/10.1027/1614-0001/a000284>

- Jones, D. N., & Paulhus, D. L. (2009). Machiavellianism. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 93–108). Guildford.
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits. *Assessment*, *21*(1), 28–41.  
<https://doi.org/10.1177/1073191113514105>
- Linton, D. K., & Power, J. L. (2013). The personality traits of workplace bullies are often shared by their victims: Is there a dark side to victims? *Personality and Individual Differences*, *54*(6), 738–743. <https://doi.org/10.1016/j.paid.2012.11.026>
- Mathisen, G. E., Einarsen, S., & Mykletun, R. (2011). The Relationship Between Supervisor Personality, Supervisors' Perceived Stress and Workplace Bullying. *Journal of Business Ethics*, *99*(4), 637–651. <https://doi.org/10.1007/s10551-010-0674-z>
- McGrath, R. E., & Meyer, G. J. (2006). When effect sizes disagree: The case of  $r$  and  $d$ . *Psychological Methods*, *11*(4), 386–401. <https://doi.org/10.1037/1082-989X.11.4.386>
- Mededović, J., & Petrović, B. (2015). The Dark Tetrad: Structural Properties and Location in the Personality Space. *Journal of Individual Differences*, *36*(4), 228–236.  
<https://doi.org/10.1027/1614-0001/a000179>
- Mitsopoulou, E., & Giovazolias, T. (2015). Personality traits, empathy and bullying behavior: A meta-analytic approach. *Aggression and Violent Behavior*, *21*, 61–72.  
<https://doi.org/10.1016/j.avb.2015.01.007>
- Nielsen, M. B., Glasø, L., & Einarsen, S. (2017). Exposure to workplace harassment and the Five Factor Model of personality: A meta-analysis. *Personality and Individual Differences*, *104*, 195–206. <https://doi.org/10.1016/j.paid.2016.08.015>

- Nielsen, M. B., & Knardahl, S. (2015). Is workplace bullying related to the personality traits of victims? A two-year prospective study. *Work & Stress*, 29(2), 128–149. <https://doi.org/10.1080/02678373.2015.1032383>
- Paulhus, D. L., & Jones, D. N. (2015). *Measuring dark personalities via questionnaire*. In *Measures of personality and social psychological constructs*. Academic Press.
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556–563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- Persson, R., Mikkelsen, E. G., & Høgh, A. (2019). The role of personality in workplace bullying research. In P. D'Cruz, E. Noronha, E. Baillien, B. Catley, K. Harlos, A. Høgh, & E. Gemzøe Mikkelsen (Eds.), *Pathways of job-related negative behavior: Handbooks of workplace bullying, emotional abuse and harassment* (Vol. 2, pp. 1-27). [https://doi.org/10.1007/978-981-10-6173-8\\_14-1](https://doi.org/10.1007/978-981-10-6173-8_14-1)
- Rai, A., & Agarwal, U. A. (2018). A review of literature on mediators and moderators of workplace bullying: Agenda for future research. *Management Research Review*, 41(7), 822–859. <https://doi.org/10.1108/MRR-05-2016-0111>
- Reidy, D. E., Zeichner, A., & Seibert, L. A. (2011). Unprovoked Aggression: Effects of Psychopathic Traits and Sadism: Psychopathy, Sadism, and Unprovoked Aggression. *Journal of Personality*, 79(1), 75–100. <https://doi.org/10.1111/j.1467-6494.2010.00691.x>
- Samnani, A.-K., & Singh, P. (2016). Workplace Bullying: Considering the Interaction Between Individual and Work Environment. *Journal of Business Ethics*, 139(3), 537–549. <https://doi.org/10.1007/s10551-015-2653-x>
- Seigne, E., Coyne, I., Randall, P., & Parker, J. (2007). Personality traits of bullies as a contributory factor in workplace bullying: An exploratory study. *International*

*Journal of Organization Theory & Behavior*, 10(1), 118–132.

<https://doi.org/10.1108/IJOTB-10-01-2007-B006>

Tackett, J. L., & Lahey, B. B. (2017). Neuroticism. In T. A. Widiger (Ed.), *The Oxford Handbook of the Five Factor Model*. The Oxford University Press.

Thibault, T. (2016). *The Dark Tetrad at Work*. Saint Mary's University.

Tokarev, A., Phillips, A. R., Hughes, D. J., & Irwing, P. (2017). Leader dark traits, workplace bullying, and employee depression: Exploring mediation and the role of the dark core. *Journal of Abnormal Psychology*, 126(7), 911–920.

<https://doi.org/10.1037/abn0000299>

van Geel, M., Goemans, A., Toprak, F., & Vedder, P. (2017). Which personality traits are related to traditional bullying and cyberbullying? A study with the Big Five, Dark Triad and sadism. *Personality and Individual Differences*, 106, 231–235.

<https://doi.org/10.1016/j.paid.2016.10.063>

Zapf, D. (1999). Organisational, work group related and personal causes of mobbing/bullying at work. *International Journal of Manpower*, 20(1/2), 70–85.

<https://doi.org/10.1108/01437729910268669>

Table 1  
*Descriptive statistics, reliabilities, and bivariate relations of the variables*

	Descriptives			Associations												
	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender (Female = 0, Male = 1)	0.46	0.50														
2. Age	38.78	14.06		<b>.18</b>												
3. Job tenure (years)	8.38	10.09		<b>.22</b>	<b>.64</b>											
4. Neuroticism	31.07	7.08	.79	<b>-.35</b>	<b>-.15</b>	-.08										
5. Extraversion	42.87	7.13	.83	-.12	<b>-.19</b>	<b>-.17</b>	<b>-.33</b>									
6. Openness	38.59	6.23	.73	<b>-.27</b>	<b>-.14</b>	-.08	.04	<b>.25</b>								
7. Agreeableness	41.66	6.12	.72	<b>-.29</b>	<b>.16</b>	<b>.14</b>	<b>-.26</b>	<b>.25</b>	.06							
8. Conscientiousness	44.91	5.99	.78	-.01	.09	.07	<b>-.40</b>	<b>.32</b>	.12	<b>.28</b>						
9. Narcissism	17.47	3.16	.61	<b>.27</b>	.09	.07	-.07	<b>.18</b>	.11	-.10	<b>.14</b>					
10. Machiavellianism	10.84	3.30	.75	.06	-.07	-.09	<b>.33</b>	<b>-.16</b>	-.10	<b>-.32</b>	<b>-.17</b>	.02				
11. Psychopathy	10.34	3.46	.78	<b>.43</b>	-.01	.02	<b>.27</b>	<b>-.21</b>	<b>-.16</b>	<b>-.33</b>	<b>-.34</b>	<b>.14</b>	<b>.35</b>			
12. Sadism	8.20	3.44	.91	<b>.23</b>	-.03	-.01	<b>.21</b>	<b>-.20</b>	-.09	<b>-.31</b>	<b>-.25</b>	<b>.21</b>	<b>.28</b>	<b>.67</b>		
13. Experience of being a target	5.13	2.30	.57	<b>.26</b>	-.05	-.09	<b>.21</b>	-.05	.03	-.11	<b>-.13</b>	-.09	<b>.26</b>	.12	.07	
14. Use of bullying tactics at work	5.32	2.07	.66	.09	-.05	-.07	.05	.03	.03	<b>-.23</b>	-.05	<b>.26</b>	<b>.13</b>	<b>.26</b>	<b>.30</b>	<b>.16</b>

*Note.* *M* = mean; *SD* = standard deviation;  $\alpha$  = Cronbach's alpha. The correlations between gender and the remaining variables were transformed to Cohen's *d*. Bold values correspond to statistically significant associations.

Table 2  
*Hierarchical regression analysis of workplace bullying*

	Experience of being a target				Use of bullying tactics at work			
	<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>	<i>Step 4</i>	<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>	<i>Step 4</i>
Gender <sup>a</sup>	.09	<b>.11</b>	<b>.10</b>	<b>.10</b>	<b>.16</b>	<b>.13</b>	.08	.08
Age	.02	.07	.08	.07	-.01	.06	.02	.03
Job tenure	-.10	-.11	-.08	-.08	-.07	-.05	-.07	-.07
Neuroticism		<b>.21</b>	<b>.15</b>	<b>.15</b>		.05	.03	.03
Extraversion		.05	.08	.07		<b>.11</b>	.06	.08
Openness		.02	.06	.06		.02	.01	.01
Agreeableness		-.03	.01	.01		<b>-.25</b>	<b>-.18</b>	<b>-.17</b>
Conscientiousness		-.05	-.03	-.03		-.01	-.01	-.01
Narcissism			<b>-.13</b>	<b>-.12</b>			<b>.22</b>	<b>.19</b>
Machiavellianism			<b>.19</b>	<b>.19</b>			.02	.02
Psychopathy			.07	.09			<b>.11</b>	.02
Sadism				-.03				<b>.15</b>
$R^2$	.01	.07	.12	.12	.03	.09	.15	.16
$\Delta R^2$	.01	.05	.05	.01	.03	.06	.06	.01
$p$	.076	< .001	< .001	.579	.002	< .001	< .001	.007

Note. <sup>a</sup>Coding: Female = 0, Male = 1; <sup>b</sup>Coding: No = 0, Yes = 1. Bold values correspond to statistically significant associations,  $p < .05$ .

**Funding**

This research was supported by the Government of Aragón (Group S31\_20D) and co-supported by FEDER 2014-2020, "Building Europe from Aragón".

### **Author contributions**

All authors were substantially involved in the conceptualization of the study and participated in its design. EFR and PJRV collected the data. EFR and PJRV conducted the statistical analysis. EFR and PJRV drafted the first version of the manuscript. All authors contributed to the review and editing of the manuscript and read and approved the final manuscript.