Research article

Workplace bullies, not their victims, score high on the Dark Triad and Extraversion, and low on Agreeableness and Honesty-Humility

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A B S T R A C T

Most past research has focused mainly on the personality of the victims of bullying and not on the personality of workplace bullies. Some researchers have suggested that bullies and their victims may share bully-typifying personality traits. The aims of this study were to find out what characterizes the personalities of workplace bullies and their victims, and to investigate the relationship between the Dark Triad, HEXACO and workplace bullying. We tested three hypotheses. H1: Machiavellianism and Psychopathy, but not Narcissism, predict the use of bullying tactics (i.e., bullying perpetration). H2: (Low) Honesty-Humility, (low) Agreeableness and (high) Extraversion predict the use of bullying tactics. H3: Honesty-Humility moderates the association between Machiavellianism and the use of bullying tactics. Employees in southwestern Sweden ($N = 172$; 99 women) across various occupations and organizations were surveyed. Negative Acts Questionnaire-Perpetrators (NAQ-P) and Negative Acts Questionnaire-Revised (NAQ-R) were used to assess the use of bullying tactics and victimization. NAQ-P was correlated with NAQ-R ($r = .27$), indicating some overlap between the use of bullying tactics and victimization. NAQ-P was correlated with Machiavellianism (.60), Psychopathy (.58), Narcissism (.54), Agreeableness (-.34), Honesty-Humility (-.29) and Extraversion (.28). The results of linear regressions confirmed H1, but only partially confirmed H2: Machiavellianism, Psychopathy, (low) Agreeableness and (high) Extraversion explained 32%, 25%, 27% and 19%, respectively, of the variation in the NAQ-P. Replicating past research, NAQ-R was correlated with Neuroticism (.27), Extraversion (-.22), Openness (-.19) and Conscientiousness (-.16). Neuroticism explained 25% and (low) Extraversion 17% of the variation in the NAQ-R. Confirming H3, Honesty-Humility moderated the relationship between the NAQ-P and Machiavellianism. We conclude that bullies, but not their victims, are callous, manipulative, extravert and disagreeable, and that dishonest Machiavellians are the biggest bullies of all. In practice, the victims of workplace bullying need strong and supportive leadership to protect them from bullies with exploitative and manipulative personality profiles.

1. Introduction

Bullying victimization in the workplace is a growing global problem. Workplace bullying increases the victim's job insecurity, sickness absenteeism, intention to leave the job, and exclusion from social work-related processes, and decreases his or her well-being, job satisfaction, work engagement and self-esteem (e.g., Glambek et al., 2018; Nielsen and Einarsen, 2012, 2018; Theorell et al., 2015; Verkuil et al., 2015). Consequently, an understanding of both the use of bullying tactics (i.e., bullying perpetration) and workplace bullying victimization is an important research issue. To support the victims of workplace bullying, managers in general and Human Resources personnel in particular need to better understand who the bullies *are*.

1.1. Theoretical background regarding workplace bullying personality traits

An individual's personality defines his or her thoughts, feelings and behaviors (such us workplace bullying), and predicts life outcomes (Roberts et al., 2007). Glasø, Matthiesen, Nielsen, and Einarsen (2007) concluded that personality "should not be neglected being an important factor in understanding the bullying phenomenon" (p. 318). The present study examines the relationships between the use of bullying tactics against co-workers, the experience of being bullied by co-workers, and various personality traits. We examine the three socially aversive personality traits Machiavellianism, subclinical Psychopathy and subclinical Narcissism (in the rest of the text the last two concepts are simply

referred to as Psychopathy and Narcissism), known as the Dark Triad (Jones and Paulhus, 2014; Paulhus and Williams, 2002), as well as the general personality traits included in the HEXACO model (Ashton and Lee, 2007, 2008).

A considerable body of research, summarized in a meta-analysis by Nielsen et al. (2017), links bullying to the personality of the victims of workplace bullying. However, less research has examined the personality of the perpetrators of workplace bullying, and the results obtained are inconsistent. This study, building on past research, attempts to clarify these issues.

Below, we briefly describe the investigated personality traits and put forward arguments in support of the assumption that bullies' personalities are characterized by a constellation of malevolent traits (the Dark Triad). The concept of the Dark Triad was introduced by Paulhus and Williams (2002) to measure aversive personalities in non-forensic, non-pathological and high-achievement populations. The personality traits comprising the Dark Triad have different theoretical roots, but share some characteristics such as callousness, i.e. lack of empathy towards others, and being manipulative (Paulhus, 2014). Impulsivity is related to both Psychopathy and Narcissism (Jones and Paulhus, 2011).

The concept of *Machiavellianism,* inspired by the writings of the political strategist Niccolo Machiavelli, was introduced by Christie and Geis (1970). People with a high level of Machiavellianism plan carefully in a strategic way, form coalitions, build a good reputation, treat partners instrumentally, have a cynical worldview, aim at realization of their own goals by every possible means, give high priority to money, power and competition, lack morality, tend to engage in unethical behavior at work, lie for long-term goals, manipulate, do not display open aggression but do display hostile feelings and behavior. It should be pointed out that Machiavellianism is not a clinical concept.

Psychopathy is a well-researched personality disorder (Patrick, 2018). The classical concept of psychopathy was described by Cleckley (1976). People with high levels of Psychopathy possess aversive interpersonal and affective personality traits, and act in a socially deviant way. They are selfish and callous, use other people remorselessly, have shallow and superficial emotions, and are devoid of guilt and empathy. Their behavior is chronically antisocial and unstable. Their life style is socially deviant and characterized by temper tantrums, irresponsibility, impulsive actions and, often, criminality. It is noteworthy that Boddy (2011, Fig. 1, p. 375) found a correlation (.94) between 'corporate' psychopathy in managers and workplace bullying in a variety of organizations in Australia. A 'corporate psychopath' is an unethical and extremely destructive manager who has climbed to a high position, has considerable power, and can influence the climate in the corporation. A corporate psychopath manifests the same personality traits as does a clinical psychopath, as described by Cleckley (1976) and Hare (2003).

Psychopaths manifest some of the same characteristics as Machiavellians, i.e. being manipulative and lacking empathy, remorse and conscience, which indicates a theoretical overlap between bullies, Machiavellians and psychopaths. Indeed, a meta-analysis (Murris et al., 2017) found that Psychopathy and Machiavellianism are moderately related. Psychopathy, in contrast to the other components of the Dark Triad, is characterized by dysfunctional impulsivity, such as saying things without thinking first or acting "impulsively, abandon friends, and family, and pay little attention to their reputation" (Jones and Paulhus, 2014, p. 29). This assumption is, however, not valid for all people with psychopathy. For instance, Dåderman and Kristiansson (2004, Table 3, p. 53) found no correlation (.02) between psychopathy and impulsivity, defined as acting on the spur of the moment, lack of planning, and rapid decision making. Despite the fact that Machiavellianism and Psychopathy are moderately related, we believe that Machiavellianism is a more important trait than Psychopathy for explaining the use of bullying tactics and, consequently, that the former merits more attention. Theoretically, people high in Machiavellianism may use different bullying-related tactics compared to those high in Psychopathy, because 'effective' negative acts require planning strategies instead of impulsive short-term

acts. People high in Machiavellianism strive after a good reputation and probably use 'silent' or 'covert' negative acts that are not always visible to others.

People high in *Narcissism* have an inflated view of themselves (e.g., Ronningstam and Weinberg, 2013). In their relationships they are self-centered and selfish, lack empathy, use others for their own ends, have a need for admiration, depend on others to establish and maintain self-esteem, and struggle with emotional dysregulation. Narcissistic behavior shares characteristics, such as manipulation, callousness and lack of empathy, with Machiavellianism and Psychopathy, but Narcissism does not indicate viciousness. It should be noted that the Dark Triad comprises a subclinical variant of Narcissism, which means a more 'normal' narcissism characterized by grandiosity, entitlement, dominance and superiority (Paulhus and Williams, 2002). It is also characterized by functional impulsivity, such as rapid social engagement and rapid putting of thoughts into words (Jones and Paulhus, 2011). Murris et al. (2017) found that Narcissism is moderately related to Psychopathy and Machiavellianism. Supposedly, people high in Narcissism can perform both negative and positive acts in the workplace, due to their trait ("Me, and only me"), but we believe that they are more interested in their own person than in others, and that they, consequently, would not engage in more intense workplace bullying than would those high in Machiavellianism and Psychopathy.

To examine the Dark Triad in the context of workplace bullying is theoretically and empirically relevant (Baughman et al., 2012; Boddy, 2011; Buckels et al., 2014; Linton and Power, 2013), because these traits relate to aggression, interpersonal issues and antisocial tactics (Murris et al., 2017). In addition, Jones and Paulhus (2014) showed that it is reliable and valid to measure these dark traits by means of a self-report measure. Another reason for examining these traits is that Linton and Power (2013) found that those being bullied act aggressively by sharing several bully-typifying personality traits, including Machiavellianism. This finding is intriguing because, theoretically, victims may sometimes use bullying-like strategies in order to protect their self-esteem.

To obtain a more complete picture, we have also examined the general personality traits of the HEXACO model (Ashton and Lee, 2007, 2008), which in addition to the traditional five personality traits, i.e. Conscientiousness, Agreeableness, Neuroticism, Openness to Experience, and Extraversion, comprises also a trait known as *Honesty-Humility*. Honesty-Humility is defined as "the tendency to be fair and genuine in dealing with others, in the sense of cooperating even when one might exploit them" (Ashton and Lee, 2007, p. 156). People who are high in Honesty-Humility tend to not take advantage of others, keep everyone's best interests in mind, and are truthful and non-manipulative (Lee and Ashton, 2006). Conversely, people low in Honesty-Humility are willing to exploit others by means of lies, selfish and unethical acts, haughtiness, hypocrisy, fraud and cunning; they prioritize the comforts in life and luxury and have sentiments of entitlement and superiority (Ashton and Lee, 2008). Low Honesty-Humility is at the core of the Dark Triad (Book et al., 2015) and is strongly related to Machiavellianism (Murris et al., 2017).

Agreeableness is another trait that is socially negative when found at a low level. At a high level, Agreeableness indicates respect for individual differences, cooperativeness and social harmony (Graziano and Eisenberg, 1997). Conversely, people who are low in Agreeableness are angry, less trusting, disrespectful and uncooperative. Disagreeable people have a tendency of being selfish and putting their own interests above those of others; they tend to use negative behaviors such as being manipulative, competitive, and expressing low empathy. Honesty-Humility and Agreeableness differ from each other in terms of how people react to negative responses; people low in Honesty-Humility do not react immediately with anger – instead they carefully plan their revenge in terms of time and place (Lee and Ashton, 2012), which makes this trait especially interesting to examine in the context of workplace bullying. Low Agreeableness is associated with the Dark Triad (O'Boyle et al., 2015). Murris et al. (2017) found that Agreeableness is moderately

related to both Machiavellianism and Psychopathy. Agreeableness is low in inmates (Eriksson et al., 2017), mainly in violent inmates (Shimotsukasa et al., 2019).

Extraversion is also an interesting personality trait within this context, as it is characterized by a tendency to be outgoing, sociable, interested in other people, assertive and active. People who are high in Extraversion are in search of positive emotions. Positive emotions as such are not related to bullying perpetration (Bowling and Beehr, 2006), but when extravert people take decisions they may overlook the emotions of others. Extraversion is related to the Dark Triad, especially to Narcissism and Psychopathy (Lee and Ashton, 2005; Paulhus and Williams, 2002). Due to the extravert person's sociability and desire to be popular, he or she may pay more attention to external events and excitement seeking than to the feelings of others, thereby becoming part of bullying-provoking situations in the workplace.

1.2. Empirical findings on bullies and their personality traits

After reviewing the findings of past research, we made a number of choices pertaining to our aim and what we wanted to replicate (or not) in our research project. Past research suggests that bullies have the socially aversive traits, i.e. Machiavellianism, Psychopathy and Narcissism, comprising the Dark Triad (Baughman et al., 2012; Book et al., 2015; Jones and Neria, 2015; Linton and Power, 2013; O'Boyle et al., 2015), especially Machiavellianism (Pilch and Turska, 2015; Valentine and Fleischman, 2017), Psychopathy (Boddy, 2011) or both (Buckels et al., 2014). Stickle, Kirkpatrick, and Brush (2009) did not, however, find an association between bullying perpetration and Psychopathy, nor between bullying perpetration and Narcissism.

In contrast to the findings of Linton and Power (2013), who found that bullies and their victims may share similar aversive personality traits such as Machiavellianism, a study by Pilch and Turska (2015) found that the use of bullying tactics against co-workers ($r = .31$), but not bullying victimization ($r = -.03$), was significantly positively correlated with Machiavellianism. However, the other dimensions of the Dark Triad were not investigated by Pilch and Turska, which motivated us to examine whether Linton and Power's results could be replicated.

Until now, there has been little definitive research regarding the HEXACO personality traits in bullies. An association has been found between adolescent bullying perpetration and low *Honesty-Humility* (Book et al., 2012; Volk et al., 2018), but this association has not yet been examined in the context of workplace bullying. Tani, Greenman, Schneider, and Fregoso (2003) found that adolescents perpetrating bullying were lower in *Agreeableness*, and this result was later replicated by Turner and Ireland (2010) in inmates, but Volk et al. (2018) did not find that Agreeableness was a significant predictor of bullying at school.

Seigne et al. (2007) found higher *Extraversion* and lower *Conscientiousness* in workplace bullies compared with non-bullies, but this finding was non-significant. However, Tani et al. (2003) found that adolescent bullies scored high in Extraversion, and Volk et al. (2018) found that they scored low in Conscientiousness. Generally, the relationship between Extraversion and workplace deviance is close to zero (Salgado, 2002). Oh, Lee, Ashton, and de Vries (2011) found that, although Extraversion itself did not predict workplace deviance in terms of counterproductive workplace behaviors, such as theft, vandalism, unexcused absenteeism, and alcohol use or influence, Extraversion did interacted with Honesty-Humility in predicting counterproductive workplace behaviors. *Neuroticism* has not been related to bullying behavior in adolescents, but Turner and Ireland (2010) found that inmates who bully scored high in Neuroticism. However, this result may be sample-specific.

We therefore decided to replicate most of the past research in that the scores on the Honesty-Humility and Agreeableness scales are negatively correlated, whereas those on the Extraversion scale are positively correlated, with the use of bullying tactics in the workplace.

1.3. May victims of workplace bullying also use bullying tactics?

The victims of bullying may also be perpetrators of bullying (Matthiesen and Einarsen, 2007), and vice versa (Aquino and Lamertz, 2004; Einarsen, 2000; Niedl, 1996). Based on these findings, we expected that the scores on a scale measuring the experience of workplace bullying victimization would correlate positively with the scores on a scale measuring the use of bullying tactics.

1.4. Personality of the victims of workplace bullying

The personality of the victims of workplace bullying has been extensively investigated and was summarized in the meta-analyses provided by Glasø et al. (2007) and, more recently, by Nielsen et al. (2017). This research suggests that the victims of bullying are generally more neurotic and introvert, less agreeable and less conscientious than non-victims. Glasø et al. found that the majority of the victims did not differ from non-victims, but that a subgroup of victims scored low in Extraversion, Agreeableness, Conscientiousness, and Openness to Experience, and high in Neuroticism compared to the majority of victims and non-victims.

Therefore, based on the findings from the above-mentioned meta-analyses, we expected to find a negative correlation between the scores on the Extraversion, Agreeableness, Consciousness, and Openness scales, and a positive correlation between the scores on the Neuroticism scale, and the experience of bullying victimization.

1.5. Aims, rationale and hypotheses

The aims of this study were to find out what characterizes the personalities of workplace bullies and their victims, and to investigate the relationship between the Dark Triad, HEXACO and workplace bullying. We tried to replicate past research and to examine three hypotheses. Our main focus was on the personality of the bullies. In their overview of reviews Nielsen and Einarsen (2018) called for examinations of moderating factors, which led us to also investigate the relevance of Honesty-Humility as a moderator in the relationship between Machiavellianism and the use of bullying tactics. It is possible that Machiavellian employees low in Honesty-Humility are the biggest bullies of all. The research by Murris et al. (2017), showing that the average effect size of Honesty-Humility is stronger than that of Agreeableness with Machiavellianism, allowed us to predict that Machiavellians low in Honesty-Humility use of bullying tactics more often than do Machiavellians high in Honesty-Humility. Based on the above-mentioned personality theories, and on past research, we formulated the following hypotheses:

Hypothesis 1. In terms of the Dark Triad model, Machiavellianism and Psychopathy, but not Narcissism, predict the use of bullying tactics.

Hypothesis 2. In terms of the HEXACO model, Honesty-Humility, Agreeableness, and Extraversion, predict the use of bullying tactics.

Hypothesis 3. Honesty-Humility moderates the association between Machiavellianism and the use of bullying tactics.

2. Materials and methods

2.1. Participants, procedure and ethics statement

Five organizations in a small town (population of circa 60,000) in southwestern Sweden were chosen from among different types of occupations. The justification for selecting the organizations was to assess full-time employees, both females and males, across various occupations and organizations. The workplace sizes varied from 5 to 28 employees. In total, there were 177 potential participants (employees), of which 172 (99 females) participated in the study, giving a response rate of 97.6%.

The mean age for all participants was 38 years ($SD = 10.5$), ranging from 19 to 65 years. Key data showing the heterogeneity of the sample are presented in Table 1.

Table 1 shows that the selected occupational groups differed in terms of number of participants, gender, education, managerial responsibility, seniority in the current workplace, and work group size. The group of security personnel had the smallest number of participants; the social workers the greatest number. These groups did not differ in terms of age, marital status or whether the participants had managerial responsibility.

Prior to recruiting participants, Etikprövningsmyndigheten in Gothenburg, which is a Swedish Government Administration Institution, under the Government of Sweden (Ministry of Education and Research), has been consulted. According to Swedish law (2003: 460, §2) on the ethics of research involving humans, the present study required no specific ethical approval. Other Swedish rules (see the Swedish Research Council) and requirements in relation to conducting research, have been respected and applied.

The second author contacted organizations from among her personal contacts to request permission to recruit potential participants. Data sampling, in the form of anonymous questionnaires, was performed during ordinary organization meetings after presenting the aims of the study and its ethics framework. All procedures performed during this study complied with the ethical standards of the institutional and national research committees, the Swedish Code of Professional Ethics for Psychologists, as well as with the 1964 Helsinki Declaration and its later amendments, or comparable ethical standards. All participants gave their informed consent.

2.2. Measures of workplace bullying

2.2.1. Measuring the experience of bullying victimization using the NAQ-R

The Negative Acts Questionnaire-Revised (NAQ-R) (Einarsen et al., 2009, Table 1) was used to measure the experience of being exposed to various bullying-related behaviors and situations (objective measurement of being a victim). The Swedish language version of the NAQ-R (Appendix A), translated and adopted by Dåderman and Ragnestål-Impola, was used. The NAQ-R consists of 23 items measuring the experience of being bullied, with high values signaling that one feels bullied. The NAQ-R consists of two parts. In Part 1, the respondent is asked via 22 items how often he or she has been subjected to specific negative behaviors or situations in the workplace (objective measurement of the experience of bullying in the workplace, without using the word 'bullying'). The response format is 1 (*never*) to 5 (*every day*). In this study, Cronbach's alpha for Part 1 was .89 and its was not significantly lowered by the deletion of any one item. Nineteen items showed reasonable correlation, varying from .39 to .70 with the total NAQ-R scale. Three items, Item 22 ("Threats of violence or physical abuse or actual abuse"), Item 21 ("Being exposed to an unmanageable workload") and Item 16 ("Being given tasks with unreasonable or impossible targets or deadlines") showed low correlation with the total scale, varying from .02 to .15. We have not deleted these items, because they did not lower the scale reliability. The most frequently reported experienced bullying behavior per week was Item 16 (see above); 23% of the participants had experienced this item. The items with the largest item mean (2.8) were Items 16 (see above) and 21 ("Being exposed to an unmanageable workload"), indicating that the participants' managers could potentially mitigate these negative experiences.

The mean score on the NAQ-R was 37 ($SD = 8.1$) with a range from 23 to 68. According to Einarsen et al. (2009), a mean score scale between 0 and 32 indicates no experience of bullying victimization; 33–44 indicates medium bullying victimization; and 45 or more indicates the experience of severe bullying victimization. In this study, these cut off mean score values were present in 25.6%, 67.4%, and 7% of the participants, respectively.

Part 2 of the NAQ-R consists of one question, Item 23, which relates to whether the respondent has been the victim of bullying at the workplace

Table 1

Description of participants in each occupational category with respect to demographic background variables.

Variable	Occupational group				Chi^2/ F	p
	So (n = 77)	E (n = 52)	R (n = 38)	Se (n = 5)		
Sex (n, women)	64	7	28	0	72.8	<.001
Age [years, M (SD)]	43.2 (11.2)	40.6 (10.7)	40.5 (11.7)	46.2 (9.0)	1.0	.384
Marital status (n, married/ cohabiting)	43	27	21	4	6.8	.344
Education level					29.4	<.001
Elementary/Middle school	3	8	1	1		
High school/ Occupational education	14	18	15	3		
College/University (<3 years)	30	14	19	1		
Bachelor's degree or higher (≥3 years)	30	12	3	0		
Managerial responsibility (n, no)	68	41	31	4	5.2	.525
Seniority in the current workplace [year, M (SD)]	5.6 (3.7)	6.9 (6.1)	4.2 (3.8)	15.2 (10.2)	7.6	<.001
Size of the work group (n)	19	17	13	10		<.001

Note: So = Social workers; E = Technical workers; R = Restaurant employees; Se = Security personnel.

and sets out a definition of bullying (subjective measurement of bullying). The definition was the following: "We define bullying differently: Bullying (e.g., harassment, social isolation or hurtful jokes) occurs when a person is repeatedly exposed to unpleasant, degrading or peculiar treatment at work. To be able to call something 'bullying', the situation must have lasted for a certain period of time, and the person being bullied must have experienced difficulty in defending him- or herself. It is not bullying when two equally 'strong' people come into conflict or when the event is a one-off situation." The question (Item 23) was: "Have you been bullied at your workplace?" The result shows that 8.7% of the participants labeled themselves as being victims of bullying at work at least once a week as per the provided definition.

2.2.2. Measuring the use of bullying tactics using the NAQ-P

The Negative Acts Questionnaire-Perpetrators (NAQ-P) (Escartin et al., 2009; Escartín et al., 2012, Appendix), was used to measure the use of bullying tactics (self-report measure of being a perpetrator). The Swedish version of the NAQ-P (Appendix B), translated and adopted by Dåderman and Ragnestål-Impola, was used. The NAQ-P consists of seven items dealing with various negative behaviors that can occur in the workplace. High self-reported values signal that the respondent subjects others to bullying (i.e., is a bully). Escartín et al. (2012) suggested that the NAQ-P consists of two factors: work-related bullying and personal bullying. Preliminary factor analysis of the Swedish version has shown that this scale is unidimensional, i.e. it provides the best results when all items comprise only one factor, reflecting an overall use of bullying tactics in the workplace, explaining 54.8% of the variance. In this study, Cronbach's alpha of the NAQ-P total score was .86.

We used the same response format as for the NAQ-R, i.e. 1 (*never*) to 5 (*every day*). The mean score of the NAQ-P was 9.99 ($SD = 3.11$) with a range from 7 to 20. Item 6 ("I have controlled or supervised others in an extreme way") had the lowest item mean (1.2) and Item 7 ("I have exposed others to impossible workload to carry out") had the highest (1.6).

2.3. Measures of personality

2.3.1. Measuring the Dark Triad using the SD3 scales

The Short Dark Triad (SD3) scales, which measure three socially aversive personality traits (the Dark Triad) (Jones and Paulhus, 2014), were used because they make it possible to measure socially aversive personalities in a non-clinical population. The Swedish language version of SD3 (Appendix C), translated and adopted by Lindén and Dåderman, was used. Each of the three scales comprises nine items presented in the same order. The participants are asked to rate their agreement with each of the 27 items. The response format ranges from 1 (*strongly disagree*) to 5 (*strongly agree*).

Table 2 below provides descriptions of people with high scores on the SD3 scales, examples of items, intercorrelations, and measures of the internal consistency of the scales. Furthermore, the table shows that the internal consistencies of the scales were high, and that the effect sizes of the correlations between the SD3 scales were large.

2.3.2. Measuring the HEXACO dimensions using the Mini-IPIP6

The Mini-International Personality Item Pool 6 (Mini-IPIP6) scales (Donnellan et al., 2006; Sibley et al., 2011; Sibley, 2012), measuring the six HEXACO dimensions Openness to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism, and Honesty-Humility, with four items each, were used. The Swedish language version of the Mini-IPIP6 scales (Appendix D), translated by Bäckström (2010) and adopted by Dåderman, was used. The items measuring Honesty-Humility were constructed by Sibley, while the remaining items are derived from the items found in the International Personality Item Pool (Goldberg, 1999). Table 3 below provides descriptions of people with high scores on the HEXACO scales, their intercorrelations, and measures of the internal consistency of the scale items.

2.4. Statistics

Standard descriptive statistics were used to summarize the data. The exact *p*-values for both significant and non-significant results were reported. The analyses were performed using version 25 of the Statistical Package for the Social Sciences (SPSS) software. The distributions of the variables were checked for severe deviations from normality. When the number of alternatives in a scale is below 8, Cronbach's alpha values may be an inappropriate measure of reliability. Consequently, we calculated a measure of mean inter-item correlation, which should be at least .20 (Briggs and Cheek, 1986).

The preliminary hierarchical regressions comprised all personality variables as independent variables. When scores from two well-established instruments were used in the same analysis suppressor effects occurred. Consequently, separate hierarchical regression analyses were performed, one for the SD3 scales and one for the Mini-IPIP6 scales. Regarding the multiple regression analyses, we present bootstrap results, based on 1,000 bootstrap samples.

The moderation analysis was conducted using the PROCESS macro (Hayes, 2018) in SPSS version 25. This macro uses an ordinary least squares approach and a bootstrap method (with 5,000 bootstrap samples) to estimate the conditional (moderated) effects. Standardized scores (*z*-scores) were used. We also calculated Cohen's f^2 coefficient for hierarchical regression to indicate how strongly the effect size is explained by moderation (Cohen, 1988; Soper, 2019). The moderated effect was visualized in a graph created with the Interaction software tool for graphing and analyzing statistical interactions, developed by Daniel S. Soper (https://www.danielsoper.com/Interaction/).

3. Results

3.1. The use of bullying tactics and the Dark Triad

In accordance with our prediction, the scores on the NAQ-P scale

were positively and significantly (*ps* < .001) correlated with the scores on the Machiavellianism (*r* = .60), Psychopathy (*r* = .58), and Narcissism (*r* = .54) scales. These high correlations correspond to large effect sizes.

The scores on the NAQ-P scale were regressed on the SD3 scales; 42% of the variability in NAQ-P was accounted for by the Dark Triad (R^2 = .42, *p* < .001). Confirming Hypothesis 1, Machiavellianism (β = .32, *p* < .001) and Psychopathy (β = .25, *p* = .008), but not Narcissism (β = .15, *p* = .085), were significant predictors of NAQ-P. Thus, the SD3 scales showed good relevance in predicting workplace bullying despite the high intercorrelations between the scales.

3.2. The use of bullying tactics and the HEXACO model

In accordance with our prediction, the scores on the NAQ-P scale were significantly (*ps* < .001) negatively correlated with Honesty-Humility (*r* = -.29) and Agreeableness (*r* = -.34), and positively correlated with Extraversion (*r* = .28, *p* < .001).

To test Hypothesis 2, which says that, in terms of the HEXACO model, Honesty-Humility, Agreeableness and Extraversion predict the use of bullying tactics, the scores on the NAQ-P scale were regressed on Agreeableness, Honesty-Humility and Extraversion; 17% of the variability in the NAQ-P was accounted for by these three (out of six) HEXACO dimensions (R^2 = .17, *p* < .001). Agreeableness (β = -.27, *p* = .001) and Extraversion (β = .19, *p* = .018), but not Honesty-Humility (β = -.08, *p* = .379), were significant predictors of the use of bullying tactics. Thus, Hypothesis 2 was only partially confirmed. Following Oh et al. (2011), who found that Honesty-Humility and Extraversion interact to increase the relevance of the prediction of organizational deviance in terms of counterproductive workplace behaviors, we performed an additional analysis. The results showed that both Honesty-Humility (β = -.57, *p* = .028) and Extraversion (β = .53, *p* = .043) were significant predictors of the use of bullying tactics, but that they did not interact with each other to increase the relevance of the prediction of the use of bullying tactics.

3.3. The victims of workplace bullying may also use bullying tactics

We predicted that the scores on the scale measuring the experience of being bullied (NAQ-R) would be positively correlated with the scores on the scale measuring the use of bullying tactics (NAQ-P). Our analysis found that the NAQ-R scale was significantly positively correlated with the NAQ-P scale (*r* = .27, *p* < .001), indicating that those who bully may to some degree also be victims (and vice versa), which is in line with past research.

3.4. No Dark Triad in the victims

The scores on the NAQ-R scale were not correlated with the scores on the Machiavellianism scale (*r* = .00, *p* = .999), thus contradicting Linton and Power's (2013) results and being in line with those of Pilch and Turska (2015). The NAQ-R scale was not significantly correlated with the scores on the Psychopathy (*r* = .01, *p* = .859) or Narcissism scales (*r* = -.14, *p* = .078).

3.5. HEXACO dimensions in the victims

Based on past research we predicted significant correlations between the experience of being bullied and low Extraversion, low Conscientiousness, low Agreeableness, low Openness and high Neuroticism. The scores on the NAQ-R scale were significantly negatively correlated with Extraversion (*r* = -.22, *p* = .004), Conscientiousness (*r* = -.16, *p* = .032), Openness (*r* = -.19, *p* = .012), but positively with Neuroticism (*r* = .27, *p* < .001). These correlations correspond to low effect sizes. Thus, with one exception, the results were in line with our prediction. The only exception was the lack of significant correlation between low Agreeableness (*r* = -.05 *p* = .532) and the NAQ-R scale.

The scores on the NAQ-R scale were regressed on Extraversion,

Table 2

Pearson correlations between the SD3 scales, and descriptive statistics ($N = 172$).

Scale	Description of high scores	Example of items	Psych	Narc	M (SD)	α
Machiavellianism	Cynicism and manipulative tactics	"It's not wise to tell your secrets"	.71	.67	2.79 (0.54)	.85
Psychopathy	Impulsivity, callous manipulation, and antisocial behavior	"I like to get revenge on authorities"		.70	2.11 (0.65)	.86
Narcissism	Self-centeredness and grandiosity	"People see me as a natural leader"			3.09 (0.62)	.86

Note. α = Cronbach's alpha.

Table 3

Pearson correlations between HEXACO dimensions, measured by the Mini-IPIP6 scales, and descriptive statistics ($N = 172$).

Scale	Description of high scores	Example of items	C	E	A	N	H–H	M (SD)	α	M_{iic}
O	Curiosity, imaginativeness	"I have a vivid imagination"	.34	.45	.06	-.24	-.31	4.93 (0.64)	.55	.24
C	Organization, attention to detail	"I like order"		.24	.17	-.07	-.16	5.91 (0.93)	.82	.53
E	Sociability, exhibition	"I'm the life of the party"			-.20	-.09	-.49	4.46 (1.08)	.84	.57
A	Tolerance, forgiveness	"I sympathize with other people's feelings"				.02	.42	4.91 (0.80)	.68	.35
N	Anxiety, insecurity	"I have frequent mood swings"					.25	3.07 (0.81)	.62	.29
H–H	Fairness, sincerity	"I deserve more things in life" (R)						4.04 (1.14)	.85	.58

Note. α = Cronbach's alpha; M_{iic} = mean interitem correlation; R = reversed; O = Openness; C = Conscientiousness; E = Extraversion; A = Agreeableness; N = Neuroticism; H–H = Honesty-Humility.

Conscientiousness, Openness and Neuroticism, and 12% of the variability in being a bullying victim was accounted for by these four (out of six) HEXACO dimensions ($R^2 = .12$, $p < .001$). Only low Extraversion (β = -.17, $p = .044$) and high Neuroticism (β = .25, $p = .001$) were significant predictors of being a bullying victim in the workplace.

3.6. Testing Honesty-Humility as a moderator

To test Hypothesis 3, which says that Honesty-Humility moderates the association between the use of bullying tactics and Machiavellianism, we performed a moderation analysis. We remind the reader that Machiavellianism predicts the use of bullying tactics, whereas Honesty-Humility does not predict such tactics, and that we hypothesized that Honesty-Humility interacts with Machiavellianism in predicting the presence of bullying.

The model with Honesty-Humility as a moderator accounted for 39.4% of the variance in the use of bullying tactics, $F(3, 168) = 36.42$, $p < .001$. There was a significant effect of Machiavellianism ($p < .001$) and a non-significant effect of Honesty-Humility ($p = .187$), but a significant interaction effect that explained an additional 2% of the variation, $F(1, 168) = 5.75$, $p = .016$. The effect of the interaction was small ($f^2 = 0.035$). The unstandardized slope coefficients were 0.74 ($p = .006$) for low and -0.80 ($p = .822$) for high Honesty-Humility, indicating that the relationship between the use of bullying tactics and Machiavellianism was stronger when Honesty-Humility decreased (Fig. 1). The use of bullying tactics was significantly correlated with Honesty-Humility when the standardized value of Machiavellianism was -0.36 or lower.
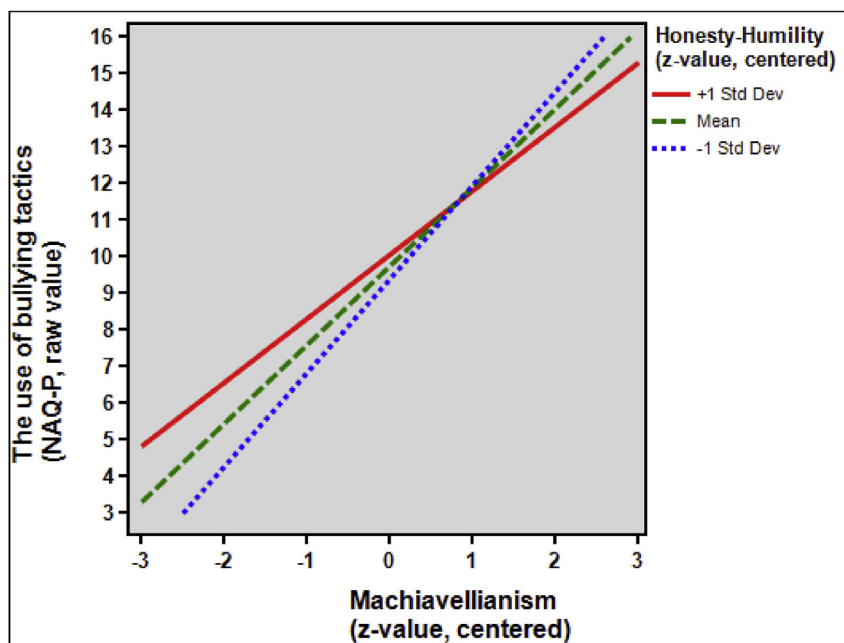

Fig. 1. Graphical representation of the moderation effect of Honesty-Humility on the relationship between the use of bullying tactics in the workplace and Machiavellianism indicating that Machiavellians scoring low in Honesty-Humility are more likely to bully.

4. Discussion

The aim of this study was to find out what characterizes the personalities of workplace bullies and their victims, and to investigate the relationship between the Dark Triad, HEXACO and workplace bullying. We have replicated most of past research and, with one exception, confirmed our three hypotheses. The exception was Hypothesis 2, which was only partially confirmed (see below). In line with past research, we have shown that workplace bullying may be predicted by possessing high levels of the personality traits comprising the Dark Triad and Extraversion, and low values of Honesty-Humility and Agreeableness. Bullies perceived themselves as (a) calculating social manipulators (Machiavellians); (b) callous impulsive manipulators who lack empathy (psychopaths); (c) intolerant, selfish and lacking empathy (not agreeable); and (d) as being sociable, talkative, and assertive (extravert). We have extended the literature with a finding that Machiavellians scoring low on Honesty-Humility are the biggest bullies of all.

In contrast with the findings of Linton and Power (2013), and despite the fact that bullying victims may sometimes bully others, as reflected by a positive correlation ($r = .27$) between the NAQ-R and NAQ-P scales, we did not find that bullies share their dark personality traits with their victims. Our results are almost identical to those of Pilch and Turska (2015) regarding zero association between being the victim of bullying and Machiavellianism. We could not establish Linton and Power's results as being sufficiently theoretically sound to predict a positive association between victimization and Machiavellianism.

Overall, our predictions regarding the correlations between the Dark Triad scales and the use of bullying tactics were supported. The highest correlations with the NAQ-P scale were found for Machiavellianism and Psychopathy, followed by Narcissism. This is not surprising, as only Machiavellianism and Psychopathy were significant predictors of NAQ-P, accounting together for 40% of the variance in bullying in the workplace. Boddy (2011) found a high correlation between workplace bullying and leaders' Psychopathy, and Baughman et al. (2012) found that Psychopathy was the most strongly related to bullying, followed by Machiavellianism, and Narcissism. Boddy focused on Psychopathy in leaders only, and Pilch and Turska (2015) on Machiavellianism only, and they all measured these constructs with non-SD3 instruments. Our results are in line with those of Pilch and Turska regarding a similar (positive) direction of the correlation between the use of bullying tactics against others and Machiavellianism; actually, the positive correlation found in the present study was twice as strong as the correlation found by Pilch and Turska. Baughman et al. assessed bullying in adults (not necessarily in a working population) and used non-NAQ-P instruments. Our study adds to this research body by examining the Dark Triad in a heterogeneous sample of Swedish full-time employees and, in contrast to past research, shows that Machiavellianism predicted the use of bullying tactics better than did Psychopathy.

Also our predictions regarding the correlations between the scales comprising the HEXACO model and the use of bullying tactics were supported. We replicated most of past research performed in adolescents (e.g., Book et al., 2012; Tani et al., 2003; Volk et al., 2018) showing that the scores on the Honesty-Humility and Agreeableness scales are negatively correlated with the use of bullying tactics, whereas those on the Extraversion scale are positively correlated with the use of bullying tactics. We have extended this research by showing that this correlation is valid also in the working population. Thus, despite its modest number of items (only four) per dimension, the used measure of HEXACO was relevant.

Applying multiple regression analysis, Hypothesis 2 was only partially confirmed. It seems that Agreeableness 'outcompeted' Honesty-Humility when Extraversion was entered as the predictor. A better explanation may be that Agreeableness correlated weaker than Honesty-Humility with Extraversion (see Table 3), and therefore contained more new information than Extraversion. In addition, Agreeableness correlated stronger than Honesty-Humility with the NAQ-P scale. In order to

enhance our understanding of this result, we performed an additional test, despite it not being our aim to investigate the interaction effect of Extraversion with the other traits on the use of bullying tactics. In our sample, Extraversion predicted the use of bullying tactics, but did not interact with Honesty-Humility, thus contradicting Oh et al.'s (2011) results from their Australian and Canadian samples, but supporting their results from their Dutch sample. We believe that the use of bullying tactics differs from workplace deviance in terms of counterproductive workplace behaviors, such as theft, vandalism, unexcused absenteeism, and alcohol use or influence, by being more visible, more easily observed, and more harmful; consequently, the explanation of the results of the predictive relevance of the HEXACO model's dimensions requires more research.

Lastly, we also replicated the results of previous research regarding the personality of the victims of workplace bullying. The NAQ-R scale was positively correlated with the Neuroticism scale, and negatively with the Extraversion, Openness, and Conscientiousness scales, which is in line with past research (e.g., Glasø et al., 2007; Nielsen et al., 2017). In our study, most of the variation in the NAQ-R scale was explained by high Neuroticism and low Extraversion.

4.1. Theoretical implications

Past research on the relationships between Honesty-Humility and bullying was performed on adolescents. We have investigated this relationship in a heterogeneous sample of Swedish employees. Our study has extended the limited literature on bullying perpetration by using a reliable measure (the NAQ-P scale) of the use of bullying tactics in the workplace. Some of our results may have important theoretical implications.

First, the measure used (the SD3 scales) is based on the theoretical assumption that it is well suited to distinguish between the personality traits comprising the Dark Triad. However, several researchers have suggested that the concepts of Machiavellianism and Psychopathy may overlap significantly (Murris et al., 2017) and, consequently, should be examined as one concept (Persson, 2019). In our study, we could show different relationships between the use of bullying tactics in the workplace and the Dark Triad traits. Our findings may strengthen the view that Machiavellianism and Psychopathy, despite the high correlation between them, are indeed two different concepts. At least, our study has showed that Machiavellians, compared with employees possessing other personalities, are the most motivated to use bullying against their co-workers in the workplace. This is in line with Castille, Kuyumcu, and Bennet's (2017) research showing that Machiavellians undermine their co-workers in order to promote their own career success within organizations.

Second, Jones and Paulhus (2014) initially developed the SD3 scales based on a student sample. Subsequently, they applied the measure to samples recruited from the Mechanical Turk (MTurk) online 'labor market'. Being a specialized online job site, MTurk is not representative of all populations of employees, which may explain why Jones and Paulhus did not find any strong correlations between the SD3 scales. In contrast, in our study, which was performed on a broader sample of employees (see Table 1), we found high correlations between the SD3 scales, indicating a possible lack of distinction between the concepts operationalized by the items in the respective SD3 scales. It is possible that SD3 behaves differently in different populations, showing moderate or strong correlations between the scales. If this is the case, it may be difficult to find patterns of mean score differences in SD3 scales between specific subgroups (in our case between workplace bullies and their victims).

Third, we have examined a specific topic: workplace bullying. To bully 'effectively' requires possessing characteristics that are common to both psychopaths and Machiavellians (see Table 3). It is therefore not surprising that we have found high correlations between the SD3 scales. In order to bully effectively, bullies must manipulate their co-workers in

a strategic way, have callous affect and a strategic-calculating orientation, which are typical characteristics of Machiavellians according to the SD3 definition, but also of psychopaths as defined by Cleckley (1976).

To summarize this discussion on the theoretical implications of our study as regards the Dark Triad, our study adds to the theory behind the construction of the SD3 scales, and we hope that it adds to the ongoing discussion pertaining to the psychometric properties and practical applications of short measures of the Dark Triad.

4.2. Practical implications

Our findings show that personality is a good predictor of workplace bullying, which entails several important practical implications. First, we suggest that applicants for a job, particularly a managerial position, should be screened in terms of their personality because applicants possessing high values in Machiavellianism and low values in Honesty-Humility are more likely to use bullying tactics in the workplace.

Second, managers in general, and Human Resources personnel in particular, should carefully monitor employees who may possess this personality profile, especially when a victim of workplace bullying has identified the perpetrator(s). Managers and HR personnel should be aware that employees with these characteristics, i.e. high Machiavellianism combined with low Honesty-Humility, are capable of long-term strategic planning and coalition-building for the sake of developing and protecting their good reputation. They are instrumental, manipulative, and possess a cynical worldview focusing on the realization of their own goals by every possible means with high priority given to money, power, and competition. They lack morality and tend to engage in unethical behavior at work. They do not resort to open aggression, instead they display hostile feelings and behavior. Finally, they are willing to exploit others by lying, being selfish, unethical, haughty, hypocritical, fraudulent and cunning. It is therefore important to be aware that any control and limitation of exploitative and manipulative workplace bullies, who possess the above-mentioned characteristics, requires strong and supportive leadership in order to protect the victims of workplace bullying.

4.3. Suggestions for further studies

Further studies on the matter of workplace bullying could include additional personality characteristics of the people resorting to bullying tactics and focus on organizational factors that may influence the occurrence and escalation of bullying. Our regression analysis explained only about 40% of the variance in self-reported bullying perpetration, suggesting that a substantial part of the variance is explained by other variables that may be important for predicting workplace bullying. Further research could also endeavor to formulate hypotheses regarding possible moderating effects of other personality traits when predicting workplace bullying.

4.4. Conclusions

Machiavellians and psychopaths, and those who are extravert and low in Agreeableness, are major perpetrators of workplace bullying. It should be noted that Machiavellianism explained most of the variance in bullying perpetration.

Almost anyone can become a victim of workplace bullying, but those who are introvert and neurotic are more likely to become bullying victims of those who possess the characteristics of Machiavellians and psychopaths, as well as those who are high in Extraversion and low in Agreeableness. By examining the personality of employees who have been bullied, as well as the personality of those who have bullied, this study may lead to a better understanding of bullying and of the organizational changes needed within workplaces to reduce bullying. Managers and HR personnel should identify workplace bullies, challenge and question them about their bullying behavior, take appropriate actions to protect the employees who experience workplace bullying victimization, and try to develop and strengthen employees' capacities for better 'surviving' in today's competitive workplace environments.

Declaration

References

Aquino, K., Lamertz, K., 2004. A relational model of workplace victimization: social roles and patterns of victimization in dyadic relationships. J. Appl. Psychol. 89, 1023–1034.

Ashton, M.C., Lee, K., 2007. Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. Personal. Soc. Psychol. Rev. 11, 150–166.

Ashton, M.C., Lee, K., 2008. The HEXACO model of personality structure and the importance of the H factor. Soc. Pers. Psychol. Compass 2, 1952–1962.

Baughman, H.M., Dearing, S., Giammarco, E., Vernon, P.A., 2012. Relationships between bullying behaviours and the Dark Triad: a study with adults. Personal. Individ. Differ. 52, 571–575.

Boddy, C.R., 2011. Corporate psychopaths, bullying and unfair supervision in the workplace. J. Bus. Ethics 100, 367–379.

Book, A., Visser, B.A., Volk, A.A., 2015. Unpacking "evil": claiming the core of the dark triad. Personal. Individ. Differ. 73, 29–38.

Book, A.S., Volk, A.A., Hosker, A., 2012. Adolescent bullying and personality: an adaptive approach. Personal. Individ. Differ. 52, 218–223.

Bowling, N.A., Beehr, T.A., 2006. Workplace harassment from the victim's perspective: a theoretical model and meta-analysis. J. Appl. Psychol. 91, 998–1012.

Briggs, S.R., Cheek, J.M., 1986. The role of factor analysis in the development and evaluation of personality scales. J. Personal. 54, 106–147.

Buckels, E.E., Trapnell, P.D., Paulhus, D.L., 2014. Trolls just want to have fun. Personal. Individ. Differ. 67, 97–102.

Bäckström, M., 2010. IPIP-NEO Manual. Lund University, Department of Psychology, Lund, Sweden. Unpublished manuscript.

Castille, C.M., Kuyumcu, D., Bennet, R.J., 2017. Prevailing to the peers' detriment: organizational constraints motivate Machiavellians to undermine their peers. Personal. Individ. Differ. 104, 29–36.

Christie, R., Geis, F., 1970. Studies in Machiavellianism. Academic Press, New York, NY.

Cleckley, H., 1976. The Mask of Sanity, fifth ed. Mosby, St. Louis, MO, USA.

Cohen, J., 1988. Statistical Power Analysis for the Behavioral Sciences, second ed. Lawrence Earlbaum Associates, Hillsdale, NJ.

Dåderman, A.M., Kristiansson, M., 2004. Psychopathy-related personality traits in male juvenile delinquents: an application of a person-oriented approach. Int. J. Law Psychiatry 27, 45–64.

Donnellan, M.B., Oswald, F.L., Baird, B.M., Lucas, R.E., 2006. The mini-IPIP scales: tiny-yet-effective measures of the Big Five factors of personality. Psychol. Assess. 18, 192–302.

Einarsen, S., 2000. Harassment and bullying at work: a review of the Scandinavian approach. Aggress. Violent Behav. 5, 379–401.

Einarsen, S., Hoel, H., Notelaers, G., 2009. Measuring exposure to bullying and harassment at work: validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. Work Stress 23, 24–44.

Eriksson, T.G., Masche-No, J.G., Dåderman, A.M., 2017. Personality traits of prisoners as compared to general populations: signs of adjustment to the situation? Personal. Individ. Differ. 107, 237–245.

Escartín, J., Sora, B., Rodríguez-Muñoz, A., Rodríguez-Carballeira, Á., 2012. Adaptación y validación de la versión Española de la escala de Conductas Negativas en el Trabajo Realizadas por Acosadores: NAQ-Perpetrators [Assessing negative acts performed by bullies at work: Spanish validation and adaptation of the NAQ-Perpetrators Questionnaire]. Rev. Psicol. Del Trab. Las Organ. 28, 157–170.

Escartin, J., Rodriguez-Carballeira, A., Porrua, C., Martın-Peña, J., 2009. Perceived severity of various bullying behaviours at work and the relevance of exposure to bullying. Rev. Psicol. Soc. 23, 191–205.

Glambek, M., Skogstad, A., Einarsen, S., 2018. Workplace bullying, the development of job insecurity and the role of laissez-faire leadership: a two-wave moderated mediation study. Work Stress 32, 297–312.

Glasø, L., Matthiesen, S.B., Nielsen, M.B., Einarsen, S., 2007. Do targets of workplace bullying portray a general victim personality profile? Scand. J. Psychol. 48, 313–319.

Goldberg, L.R., 1999. A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In: Mervielde, I., Deary, I., De Fruyt, F., Ostendorf, F. (Eds.), Personality Psychology in Europe, 7. Tilburg University Press, Tilburg, The Netherlands, pp. 7–28.

Graziano, W.G., Eisenberg, N., 1997. Agreeableness; a dimension of personality (1997). In: Hogan, R., Briggs, S., Johnson, J. (Eds.), Handbook of Personality Psychology. Academic Press, San Diego, CA.

Hare, R.D., 2003. Hare PCL-R. In: Technical Manual, second ed. Multi-Health Systems, Toronto.

Hayes, A.F., 2018. Partial, conditional, and moderated mediation: quantification, inference, and interpretation. Commun. Monogr. 85, 4–40.

Jones, D.N., Neria, A.L., 2015. The Dark Triad and dispositional aggression. Personal. Individ. Differ. 86, 360–364.

Jones, D.N., Paulhus, D.L., 2011. The role of impulsivity in the Dark Triad of personality. Personal. Individ. Differ. 51, 679–682.

Jones, D.N., Paulhus, D.L., 2014. Introducing the Short Dark Triad (SD3): a brief measure of dark personality traits. Assessment 21, 28–41.

Lee, K., Ashton, M.C., 2005. Psychopathy, Machiavellianism, and narcissism in the Five-Factor Model and the HEXACO model of personality structure. Personal. Individ. Differ. 38, 1571–1582.

Lee, K., Ashton, M.C., 2006. Further assessment of the HEXACO personality inventory: two new facet scales and an observer report form. Psychol. Assess. 18, 182–191.

Lee, K., Ashton, M.C., 2012. Getting mad and getting even: Agreeableness and Honesty-Humility as predictors of revenge intentions. Personal. Individ. Differ. 52, 596–600.

Linton, D.K., Power, J.I., 2013. The personality traits of workplace bullies are often shared by their victims: is there a dark side to victims? Personal. Individ. Differ. 54, 738–743.

Matthiesen, S.B., Einarsen, S., 2007. Perpetrators and targets of bullying at work: role stress and individual differences. Violence Vict. 22, 735–753.

Murris, P., Merckelbach, H., Otgaar, H., Meijer, E., 2017. The malevolent side of human nature: a meta-analysis and critical review of the literature on the dark triad (narcissism, Machiavellianism, and psychopathy). Perspect. Psychol. Sci. 12, 183–204.

Niedl, K., 1996. Mobbing and well-being: economic and personnel development implications. Eur. J. Work Organ. Psychol. 5, 239–249.

Nielsen, M., Einarsen, S.V., 2012. Outcomes of workplace bullying: a meta-analytic review. Work Stress 26, 309–332.

Nielsen, M., Einarsen, S.V., 2018. What we know, what we do not know, and what we should and could have known about workplace bullying: an overview of the literature and agenda for future research. Aggress. Violent Behav. 42, 71–83.

Nielsen, M.B., Glasø, L., Einarsen, S., 2017. Exposure to workplace harassment and the Five Factor Model of personality: a meta-analysis. Personal. Individ. Differ. 104, 195–206.

O'Boyle, E.H., Forsyth, D.R., Banks, G.C., Story, P.A., White, C.D., 2015. A meta-analytic test of redundancy and relative importance of the Dark Triad and the Five-Factor model of personality. J. Personal. 83, 644–664.

Oh, I.-S., Lee, K., Ashton, M.C., de Vries, R.E., 2011. Are dishonest extraverts more harmful than dishonest introverts? The interaction effects of Honesty-Humility and Extraversion in predicting workplace deviance. Appl. Psychol.: Int. Rev. 60, 496–516.

Patrick, C.J. (Ed.), 2018. Handbook of Psychopathy, second ed. Guilford Press, New York, NY.

Paulhus, D.L., 2014. Towards a taxonomy of dark personalities. Curr. Dir. Psychol. Sci. 23, 421–426.

Paulhus, D.L., Williams, K.M., 2002. The dark triad of personality: narcissism, Machiavellianism, and psychopathy. J. Res. Personal. 36, 556–563.

Persson, B.N., 2019. Searching for Machiavelli but finding psychopathy and narcissism. Personal. Disord.: Theory Res. Treat. 10, 235–245.

Pilch, I., Turska, E., 2015. Relationships between Machiavellianism, organisational culture, and workplace bullying: emotional abuse from the target's and the perpetrator's perspective. J. Bus. Ethics 128, 83–93.

Roberts, B.W., Kuncel, N.R., Shiner, R., Caspi, A., Goldberg, L.R., 2007. The power of personality: the comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. Perspect. Psychol. Sci. 2, 313–345.

Ronningstam, E., Weinberg, I., 2013. Narcissistic personality disorder: progress in recognition and treatment. J. Lifelong Learn. Psychiatr. XI, 167–177.

Salgado, J.F., 2002. The Big Five personality dimensions and counterproductive behaviour. Int. J. Sel. Assess. 10, 117–318.

Seigne, E., Coyne, I., Randall, P., Parker, J., 2007. Personality traits of bullies as a contributory factor in workplace bullying: an exploratory study. Int. J. Organ. Theory Behav. 10, 118–132.

Shimotsukasa, T., Oshio, A., Tani, M., Yamaki, M., 2019. Big Five personality traits in inmates and normal adults in Japan. Personal. Individ. Differ. 141, 81–85.

Sibley, C.G., 2012. The Mini-IPIP6: item Response Theory analysis of a short measure of the big-six factors of personality in New Zealand. N. Z. J. Psychol. 41, 21–31.

Sibley, C.G., Luyten, N., Purnomo, M., Mobberley, A., Wootton, L.W., Hammond, M.D.,, et al., 2011. The Mini-IPIP6: validation and extension of a short measure of the Big-Six factors of personality in New Zealand. N. Z. J. Psychol. 40, 142–159.

Soper, D.S., 2019. Effect size calculator for hierarchical multiple regression [Software]. Available from. http://www.danielsoper.com/statcalc.

Stickle, T.R., Kirkpatrick, N.M., Brush, L.N., 2009. Callous-unemotional traits and social information processing: multiple risk-factor models for understanding aggressive behavior in antisocial youth. Law Hum. Behav. 33, 515–529.

Tani, F., Greenman, P.S., Schneider, B.H., Fregoso, M., 2003. Bullying and the Big Five: the study of childhood personality and participant roles in bullying incidents. Sch. Psychol. Int. 24, 131–146.

Theorell, T., Hammarström, A., Aronsson, G., Träskman Bendz, L., Grape, T., Hogstedt, C.,, et al., 2015. A systematic review including meta-analysis of work environment and depressive symptoms. BMC Public Health 15, 738.

Turner, P., Ireland, J.L., 2010. Do personality characteristics and beliefs predict intra-group bullying between prisoners? Aggress. Behav. 36, 261–270.

Valentine, S., Fleischman, G., 2017. From schoolyard to workplace: the impact of bullying on sales and business employees' machiavellianism, job satisfaction, and perceived importance of an ethical issue. Hum. Resour. Manag. 57, 293–305.

Verkuil, B., Atasayi, S., Molendijk, M.L., 2015. Workplace bullying and mental health: a meta-analysis on cross-sectional and longitudinal data. PLoS One 10 (8), e0135225.

Volk, A.A., Schiralli, K., Xia, X., Zhao, J., Dane, A.V., 2018. Adolescent bullying and personality: a cross-cultural approach. Personal. Individ. Differ. 125, 126–132.