When do the 'dark personalities' become less counterproductive? The moderating role of job control and social support

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Introduction. The objective of the study is to examine how job resources modify the relationship between the Dark Triad (DT) and counterproductive work behavior (CWB). Specifically the study examined: (a) the direct link between DT and CWB; (b) the moderation effects of two kinds of job resources (job control and social support); (c) the moderated moderation effect of the job resources (job control × social support) on the DT–CWB link. Moreover, the effect of social approval on CWB was controlled. *Method*. Data were collected among 659 white-collar and blue-collar workers. The hypotheses were tested by means of the PROCESS method. *Results*. As expected in the hypotheses, a high DT level was found to be directly related to high CWB, and job control moderated (intensified) the link. Social support did not moderate the DT–CWB link. The moderated moderation effect was supported. Social support increases the moderation effect of job control on the DT–CWB link. The lowest level of CWB is observed when job control was low and social support was high.

Keywords: Dark Triad; counterproductive work behavior; job control; social support; moderated moderation effect

1. Introduction

Studies on counterproductive work behavior (CWB) show that personality traits constitute an important factor in its development (in addition to job stressors [1]). Most of these studies took mainly into account the traits within the Big Five. It was found that CWB is related to high neuroticism, low agreeableness and low conscientiousness [2,3]. In recent years, the interests of researchers have turned toward the 'dark traits' of personality, treated as complementary to the traits belonging to the Big Five [4]. Most researchers of the 'dark side of personality' concentrate on the so-called Dark Triad (DT), a constellation of three personality traits – narcissism, Machiavellianism and psychopathy. Numerous studies confirm the strong positive correlation between the DT and various forms of CWB [5–8]. In addition to studying the direct effect of the DT on CWB, some researchers also tested the role of psychosocial factors as a moderator of this relationship, e.g., level of organizational transparency, organizational policies, organizational climate [9], authority and in-group collectivism [4] as well as type of leadership [10]. To the best of my knowledge, the studies conducted to date have not taken into account the role of job resources as moderators of DT–CWB relations. Does a high level of job resources, e.g., high social support from supervisors and coworkers, as well as high job control make employees with the DT traits work more effectively and engage less frequently in activities detrimental to the organization? Or is the opposite

true, namely that they use the provided resources to implement dysfunctional behaviors in agreement with their 'dark nature' and engage in counterproductive activities even more? The objective of the presented study is the determination of the potential direct link between the DT and CWB, as well as testing whether and how job control and social support moderate this link. The two-way interactional effects (DT × job control and DT × social support) and the three-way interactional effect (DT × job control × social support) is tested in the study (Figure 1).

1.1. Counterproductive work behavior

CWB is defined as a set of voluntary activities which is detrimental or is intended to be detrimental to the organization or persons related to the organization, e.g., supervisors, coworkers and consumers. Four primary features of such behaviors can be distinguished: organizational damage, intentionality of the behavior, voluntary engagement and justification of the action from the employee's perspective [11]. Various terms are used in the literature to identify such types of actions, e.g., organizational aggression [12], antisocial behavior [13], deviance [14], organizational retaliatory behavior [15], revenge [16] as well as mobbing or bullying [17]. The differences in terminology reflect the differences in the theoretical approaches of individual researchers. For instance, Neuman and Baron [12] are inspired by research on aggression, Robinson and
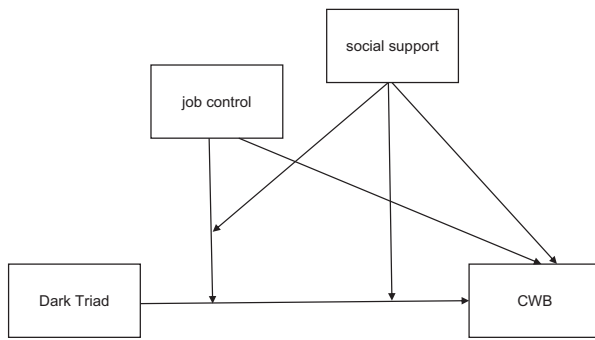

Figure 1. Theoretical model. Expected direct effect of the Dark Triad and moderation effects of job control and social support on CWB.
Note: CWB = counterproductive work behavior.

Bennett [14] focus on breaking organizational rules and norms, while Skarlicki and Folger [15] refer to the theory of organizational justice. Despite the differences, these activities are listed as examples of the broader category of negative organizational behaviors, also known as counterproductive work behavior. This construct is an umbrella term [1] containing all of the aforementioned types of behaviors.

One of the first CWB typologies was developed by Hollinger [18]. This distinguished between two general categories – property deviance (e.g., theft, property damage and privilege abuse) and production deviance (e.g., intentionally delaying work, slow work, alcohol consumption in the workplace, decreasing productivity). Later, Robinson and Bennett [14] extended this typology by including an additional category of negative behavior toward supervisors and coworkers. Using advanced statistical methods, the authors distinguished between two dimensions of CWB. The first dimension is related to the direction of the counterproductive behavior. On the one hand, there are counterproductive behaviors aimed at the organization as a whole, and on the other, behaviors are focused on persons affiliated with the organization. The second dimension is related to the degree of damage caused by the counterproductive behavior. A spectrum shows the severity of the behaviors. This results in creating a matrix that contains four groups of CWB: production deviation, property deviation, political deviation and personal aggression. One of the more recent classifications is the one proposed by American researchers led by Spector and Fox. Based on the literature review, as well as the results of their own research, the authors identified five categories of CWB – abuse, sabotage, production deviance, theft and withdrawal [19]. This typology of CWB is used in the current study.

Abuse includes behaviors intended to exert physical or mental harm on people related to the organization. It includes different forms of violent behavior, such as physical aggression, bullying, harassment, threats, offensive comments, obscene gestures and mobbing [19]. Sabotage is purposefully harming, disturbing or boycotting organization activities in order to achieve one's personal objectives. Sabotage covers both mild forms of behavior, such as ignoring one's supervisor's comments, intended delays in doing one's work, making one's workplace dirty and propagating a negative image of the company, as well as more drastic forms, which include damaging property owned by the employer, damaging equipment, breaking rules and regulations, failing to observe plans, abusing equipment or objects and using more materials than necessary [19]. Thefts include behaviors involving the appropriation of objects or goods belonging to the organization (e.g., money, devices, small items). Production deviance is the purposeful failure to perform job tasks effectively the way they are supposed to be performed. Withdrawal, in turn, involves taking conscious actions aimed at reducing the amount of time spent on doing one's professional duties, as well as limiting the amount of energy devoted to doing one's work. Such behavior includes being intentionally late for work, reducing one's working time, extending breaks, abandoning one's work station, intentionally reducing productivity, taking days off in an unauthorized manner and faking illness [19]. Several studies found that these behaviors strongly correlate with each other, and therefore researchers suggest that they can be combined into one theoretical construct, called CWB [1,11,14,19]. This is how they were treated in the presented research.

1.2. The Dark Triad

According to Big Five theory, personality includes five comprehensive traits: neuroticism, extraversion, openness to experience, conscientiousness and agreeableness [20]. Despite the fact that the Big Five theory is still popular among organization researchers, it has also been subject to criticism [4]. Some of the objections include its atheoreticity and the fact that its classification of personal traits does not focus enough on negative categories. As is commonly known, the basis for creating the Big Five was not a theoretical model, but the so-called lexical hypothesis formulated by Cattell. This assumes that the most crucial – for the survival of the species – individual differences are encoded in natural language during the course of human evolution. The more important a trait is, the more descriptions it contains in the language and the wider it is represented. Due to the fact that the lexicon of the English language contains more adjectives for 'positive' human personality traits, the concept of the Big Five reflects a strong dominance of 'positive' traits, compared to 'negative' ones [6]. Many authors, however, underline the importance of researching both the 'bright' and 'dark' sides of human nature [5,9]. This even more so, in light of the fact that the Big Five, according to Wu and LeBreton [8], describes only 5–10% of the variances of CWB. The traits of the so-called Dark Triad constitute a kind of a supplement to the Big Five.

Some studies found a positive correlation between the DT and two traits of the Big Five – low conscientiousness and low agreeableness [21].

The DT term was introduced into the literature by two American psychologists – Delroy Paulhus and Kevin Williams – as a description of three correlated mental dispositions – narcissism, Machiavellianism and psychopathy [21]. Some researchers claim that the DT is a constellation of three traits, theoretically separate but related to each other [22]. Amalgamating these traits into one personality dimension is, therefore, according to these authors, not fully valid. Other researchers suggest that the study of the 'dark side' of personality requires a comprehensive methodology, not individual measurements of traits, treated as isolated factors [4,8,9]. These researchers treat the DT as a group of theoretically consistent traits, contributing to a specific personality profile and showing the degree of narcissism, Machiavellianism and psychopathy in a person. Each of these traits is considered to act to the detriment of other persons, as well as being related to the tendency to be thick-skinned, selfish and malicious toward others. The components of the DT are, therefore, of an essentially anti-social nature. In addition to similarities in the description, the traits of the DT are also regularly confirmed to be positively correlated with each other. Correlations within the triad vary depending on the group and the questionnaires used, reaching values of $r = 0.61$ for Machiavellianism and narcissism, $r = 0.67$ for Machiavellianism and psychopathy and $r = 0.61$ for narcissism and psychopathy [22].

Despite the facts that the traits of the DT originate in clinical psychology and that two of them (i.e., narcissism and psychopathy) are related to personality disorder included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), the authors of the concept do not incorporate them in the categories of maladjustment and pathology, but rather describe them as a symptom of 'normal' variability within the scope of personality [21]. They distinguish them from pathological forms, which prevent persons from correctly functioning within society. The authors of the concept, therefore, discard the categorical, clinical description of narcissism and psychopathy – which classifies individuals as psychopathic or non-psychopathic – and apply the quantitative, subclinical approach, according to which each individual displays a degree of these traits. This recognizes these traits as socially aversive and undesired, driven by two main motives: increasing self-worth and harming others [21].

1.3. The link between the traits of the Dark Triad and counterproductive work behavior

Based on theories from the field of criminalistics, researchers assume that the 'dark traits' of personality may be partially responsible for CWB [4]. Some more recent studies confirm the correlation between the DT and the frequency of engaging in CWB [5,6,8]. In one of the meta-analyses, including 245 studies on a total of 43,907 subjects, researchers supported a strong correlation between the DT and CWB. In the meta-analysis, these traits explained, in total, 28% of CWB variances [4]. All single traits within the DT were correlated positively with CWB. Based on the present research, a positive relation between the DT and CWB is expected for hypothesis 1 (H_1). In the current study, both general DT as well as the three single 'dark' traits were taken into consideration in the analysis. The three traits – Machiavellianism, narcissism and psychopathy – are now described together with a presentation of the mechanisms linking particular traits to CWB.

1.3.1. Machiavellianism

Four general properties displayed by persons with Machiavellian traits are defined [22]. The first is a lack of empathy and trust toward others. This trait is manifested in the lack of care for other persons, excessive suspiciousness and projecting hostile intentions on others, as well as a negative view of the world and human nature. The second trait is limited affectivity, manifested as difficulties in expressing and identifying one's own emotional state, as well as an inability to form meaningful relationships with others, based on engagement. The third trait is an understanding of moral norms in a manner different to what is socially acceptable. This is demonstrated in frequent engagement in unethical activities and immoral behaviors, which break social conventions. The last trait is manifested in excessive concentration on achieving one's own goals, often at the expense of others. This is related to slyness, the tendency to exploit and manipulate other persons by deceit, lies and opportunism for personal gain [6]. The central motive of Machiavellianism is a strong need for power and control. Machiavellian individuals often display a suppressed need for aggression, cynicism and criticism. These persons are also more likely to search retribution for any suffered wrongs, as well as to use lies in their relationships with others [4].

Despite seeming interested in company matters, Machiavellian individuals are in reality more interested in using the organization to fulfill their own agenda, and are not particularly engaged in activities for the good of the team. They approach their duties as employees and their relationships with other employees in a calculated and self-interested manner. They seldom engage in tasks spontaneously, but rather do a 'cold' calculation of the balance between effort and gain. They also tend to expect reciprocity more frequently [8]. Studies show a negative correlation between Machiavellianism and organizational citizenship behavior [23], and a positive correlation with sabotage at the workplace [13], workplace bullying [24] and workplace aggression [14]. In

two meta-analyses, the corrected value of the correlation between Machiavellianism and CWB amounted to $\rho = 0.25$ [4] and $\rho = 0.27$ [25] respectively.

1.3.2. Narcissism

The definition of narcissism is to be absorbed by oneself, having a feeling of self-importance and uniqueness, and the requirement to be admired and better than others. Narcissists are also characterized by a demanding attitude, arrogance, excessive ambitions, tendency to dominate, lack of empathy, the feeling of being owed certain rights as well as an inability to see issues from other people's perspectives [22,26]. Due to their increased self-awareness, narcissists may at first appear friendly and charming; in the long term, however, they have trouble in building lasting, close social relations. They treat other persons instrumentally, usually as a 'tool' for increasing their self-esteem and maintaining an unrealistic self-image. The researchers underline that the self-esteem of narcissistic persons may be high or low, but the most characteristic feature is the low stability of their self-esteem [27]. The volatility of self-esteem combined with the need to be admired and the requirement to maintain the feeling of superiority result in the particular susceptibility of narcissists to critique and other ego-threatening information, manifested in their reactions of strong frustration and anger [27]. In consequence, narcissists are more likely to engage in aggressive behavior. Aggression may be a form of channeling negative emotions, a method of punishing the person 'damaging' the greatness of their egos, as well as a way of demonstrating their dominance and power in order to re-establish a damaged self-image in the eyes of others and their own.

Several studies confirm the positive correlation between narcissism as an individual trait and CWB. The values of this correlation in individual studies are $r = 0.27$ [27], $r = 0.16$ [28] and $r = 0.29$ [29]. In two meta-analyses, the corrected value of the correlation is higher and amounted to $\rho = 0.43$ [4] and $\rho = 0.23$ [30] respectively.

1.3.3. Psychopathy

According to the hierarchical model developed by Cooke and Michie [31], psychopathy includes three general properties. The first is an arrogant and deceitful interpersonal style, characterized by hostility and suspiciousness. Psychopathic individuals usually value their particular interests higher than the interests of society in general. They are convinced of their uniqueness and demand special treatment from others. According to their beliefs, ethical norms and social behavior standards apply to them to a lesser degree. The second feature is an emotional deficit, manifested in a low level of anxiety and empathy, as well as emotional coldness in relationships. This is accompanied by a lack of shame, guilt and self-reproach for any harm done to others. The third property includes impulsiveness and social maladjustment. These are related to the tendency to seek strong experiences, as well as a decreased level of self-control, resulting in impulsive, rash and often anti-social behaviors [22,31].

As for the functioning of highly psychopathic individuals in organizations, a number of studies show that they are much more likely to display dysfunctional behaviors. For instance, Cooke and Michie [31] observed that psychopathic individuals more frequently engage in aggressive behaviors in the workplace. In other studies, employees with a high level of psychopathy more frequently engaged in both interpersonal and organizational CWB [7]. In the meta-analysis of 27 studies, the correlation between psychopathy and CWB was not particularly strong ($\rho = 0.06$); however, it showed statistical tendencies [4].

1.4. The moderation function of job control and social support

Both job control and social support are among the most frequently studied resources in the workplace. Job control is defined as the degree to which employees have the possibility of freely planning and completing work assignments, as well as influencing work conditions [32,33]. Job control consists of two components: the autonomy of act and inclusion in the decision-making process. Autonomy means the degree to which work assignments enable the employee to make decisions, test new solutions and take responsibility for the results. Decision participation is defined as a situation in which employees have at least some level of impact on decisions regarding the broader aspects of the workplace, not only their own duties [32,33]. Social support in the workplace is treated as a basic social need of individuals, and is defined in the categories of social relationships, participation in social networks in the work environment, integration with other employees and attachment. Social support is not only limited to difficult or stressful situations in the workplace, but rather is viewed as the constant availability of interpersonal relations beneficial for adjustment and health. In the most general sense, social support in the workplace consists of support from coworkers and from supervisors [34].

The positive function of the resources is especially emphasized in the demand–control support model [32,33]. According to the model, having high job control and high social support has a beneficial effect on the health of employees, even under the conditions of high job demands. Thus, employees working in jobs characterized by high job demands (e.g., pace of work), together with low job control and social support, experience the highest level of job strain [32,33]. The role of job control and social support was, however, tested primarily in the context of job demands – the physical and mental health link – not in the context of the relation between the DT and CWB. Theoretical models that can rationalize the mod-

eration effect of social support and job control in this context are the social exchange theory [35] and the person–organization fit theory [36].

According to the social exchange theory, human relations are approached as an exchange of material goods (e.g., money) and non-material goods (e.g., symbols of approval and prestige) between participants of an interaction [35]. Organizations, by extent, operate as exchange networks between employees – the needs of a particular employee are satisfied by the actions of other employees in the same organization. It is assumed that participants of an interaction will strive for its continuation only when, according to their subjective assessment, the interaction benefits prevail over its costs. The resources satisfy the essential needs of an employee, e.g., a sense of job control and operating freedom satisfy the need for autonomy, while social support from supervisors and coworkers satisfies the need for affiliation. The fulfillment of such needs fosters the development of a sense of commitment to the organization [37].

Previous studies have shown that narcissistic, Machiavellian and psychopathic persons vary in their needs and may respond aggressively in different situations [21]. Individuals high in narcissism respond more aggressively to ego threats, whereas psychopaths respond more aggressively to provocation. In Machiavellian personalities, aggression is intensified when individuals are unable to fulfill their own objectives. More recent studies have revealed that social support in the workplace can satisfy those needs to a certain extent [38]. For instance, social support may enhance a narcissist's sense of self-importance and reduce ego threats. It can also contribute to the perception of the organization as a friendlier place and the behavior of coworkers as less provocative. The assistance of coworkers and supervisors can also facilitate the pursuit of one's goals and aspirations. This is why hypothesis 2 (H_2) introduces an expectation that high levels of social support buffer dysfunctional behaviors in the organization among employees with a high DT score.

According to the person–environment fit theory [36], people look for a work environment that will meet their needs, desires and preferences, as well as one that will remain in line with their values system. It can be assumed that certain types of work environment and organizational culture are particularly attractive for 'dark personalities' and that these attract them more strongly than other people. As noted by Cohen [9], employees with the DT feel more comfortable in a work setting that had much to offer them in terms of their need for prestige, resources and independence. They also sought out organizations where the probability of them being caught was lower because of the absence of clear policies and standards, as well as control mechanisms. To a large extent, this has been confirmed empirically [4,9,30]. For example, Cohen [9] found that the link between the DT and CWB is mediated by perceptions of organizational politics and moderated, among other things, by organizational transparency. It may be expected that employees scoring high on the DT felt more comfortable in a workplace where they have the ability to influence their work environment, and where they have access to decision-making and autonomy of action. In other words, the manifestation of 'dark traits' should be stronger in organizations where employees have a higher level of job control. Based on the studies cited, it may be expected in hypothesis 3 (H_3) that high job control increases the negative effect of the DT on CWB. Hypothesis 4 (H_4) refers to three-way interaction effect (DT × job control × social support). Job control and social support are expected to be mutually interacting and to collectively moderate the DT–CWB link in such a way that, in conditions of low job control and high social support, employees high in the DT engage the least in deviance behavior.

1.5. The control effect of the need for social approval

With regard to the fact that data concerning both 'dark personality traits' and non-ethical behavior constitute information that people do not confess to, one should expect a strong fear of assessment and the related self-presentation motivation [39]. This is why the social approval effect was controlled in the presented study. The need for social approval applies to the self-presentation tendencies of the studied population to present themselves favorably. There can be several causes accounting for the trend, such as lack of self-reflection, conformism or pure inclination to lying and 'pretending to be better' [40]. The self-presentation issues usually apply to two kinds of deformations. Firstly, members of the studied population may intentionally deny their weaknesses and vices, even if they are common in society. Secondly, they can attribute to themselves some advantages or virtues which are very rare in society, making it highly unlikely for them to possess them [40]. The role of using social approval inventories, then, controls the degree to which the studied person gives a positive answer aimed at making a positive impression, while avoiding answers which describe the person just as she/he is.

2. Method

2.1. Study population

The study was conducted among white-collar and blue-collar workers ($N = 659$), such as civil servants, public administration officials, customer service employees, office personnel, production staff and accountants. The questionnaires were distributed at randomly selected state-owned ($n = 364$; 55%) and private ($n = 295$; 45%) companies in six regions. A significant proportion of the participants ($n = 267$; 40%) were employed in managerial positions, while the rest ($n = 392$; 60%) were employed as executive workers.

Potential respondents received a hard copy of the questionnaires along with a letter, which explained the purpose of the study. Full confidentiality of data and anonymity were secured. Those who provided informed consent were asked to fill out the questionnaires and seal them in envelopes, which were subsequently collected by the research assistants. Out of 800 distributed questionnaires, 718 (90%) were returned and 659 (82% of the original pool) were filled out at least 75%. These were subsequently used for the data analysis. The analyzed group consisted of 397 (60%) women and 262 (40%) men, aged 20–69 years of age (M 37.24, SD 8.79), with work experience ranging from 1 to 40 years (M 14.43, SD 7.62).

2.2. Instruments

2.2.1. The Dark Triad

To measure for the DT, the dirty dozen scale was used [41]. This is composed of 12 items (4 items per subscale). Participants were asked to what extent they agreed (1 = *strongly disagree* to 5 = *strongly agree*) with the given statements. Corresponding items were averaged to create indexes for narcissism ($\alpha = 0.83$), Machiavellianism ($\alpha = 0.79$) and psychopathy ($\alpha = 0.81$) along with a composite of all 12 items ($\alpha = 0.83$).

2.2.2. Job control

Job control was measured with the subscale of the job content questionnaire [42]. This includes 9 items, of which 6 are related to skill discretion and 3 are related to decision authority. Each item on the subscale is evaluated on a 5-point response scale ranging from 1 = *totally disagree* to 5 = *totally agree*. The aggregated index of job control was taken into account in this study. Good internal reliability of the tools was shown with Cronbach's $\alpha = 0.77$ for job control.

2.2.3. Social support

This resource was measured with the social support subscale derived from the job content questionnaire [42]. The subscale consists of 9 items evaluated on a 4-point response scale ranging from 1 = *totally disagree* to 4 = *totally agree*. Four items of the subscale measure support from the supervisor, with the remaining five items assessing support from coworkers. Social support from both sources constitutes one scale which was used for further analysis. In our study, Cronbach's $\alpha = 0.73$.

2.2.4. Counterproductive work behaviors

CWB were measured with the short version of the counterproductive work behavior checklist (CWB-C) [19]. The CWB-C consists of 32 items, which refer to five types of harmful behavior (subscales): abuse (e.g., harmful behaviors that affect other people), sabotage (e.g., destroying the physical environment), production deviance (e.g., the purposeful failure to perform job tasks effectively), theft (e.g., appropriation of property) and withdrawal (e.g., avoiding work by being absent or late). The general index of the CWB-C (Cronbach's $\alpha = 0.90$) was used in this study.

2.2.5. Social approval

Social approval was measured with the social approval questionnaire [43]. The questionnaire is based on a classical lie scale, taking into account socially non-approved but very common patterns of behavior, not considered pathological (e.g., 'There were instances when I cheated somebody'), as well as socially desired but very unlikely behavior (e.g., 'When I make a mistake I am always ready to admit it'). The questionnaire consists of 29 statements with two possible answers (1 = *true*, 2 = *false*). High results indicate a strong need for social approval. The tool reliability amounted to $\alpha = 0.79$ in minor studies.

2.3. Analytical procedure

All variables were z-standardized. The missing data pattern was analyzed using Little's missing completely at random (MCAR) test, which confirmed that data were missing completely at random, $\chi^2 (34) = 38.23$, $p = 0.436$. The research model was tested by means of regression analysis with bootstrapping, using the PROCESS macros [44]. Model 3 was applied (the three-way interaction effect). Through the application of bootstrapping (1000 samples), PROCESS calculates direct, two-way interaction and three-way interaction effects for low (-1 SD), mean (M) and high ($+1$ SD) levels of the moderators, as well as their confidence intervals (CIs). This means that CWB was regressed on the DT, job control and social support (direct effects), and then on interactional effects: (a) DT $\times$ job control; (b) DT $\times$ social support; (c) job control $\times$ social support; (d) DT $\times$ job control $\times$ social support. The analyses were conducted for DT and for the single dark traits separately. The test of slope differences was performed if the interaction was significant [45]. The effects of age, gender and social approval were controlled in the regression model.

3. Results

3.1. Descriptive statistics

Means, standard deviations, Cronbach's α coefficients and Pearson's correlations are presented in Table 1. Age was shown to correlate negatively with the DT and CWB. Gender was found to be positively related to the DT and CWB, and negatively related to job control, with men displaying higher DT ($t = -6.77$; $p < 0.001$), more often CWB ($t = -2.44$; $p < 0.05$) and lower job control

Table 1. Descriptive statistics, reliability and correlations for study variables.

	1	2	3	(a)	(b)	(c)	4	5	6	M	SD	α
1 Age	—									38.82	8.73	—
2 Gender	−0.02	—								—	—	—
3 Dark Triad	−0.12**	0.25***	—							23.71	8.66	0.91
(a) Machiavellianism	−0.09*	0.24***	0.91***	—						7.30	3.31	0.89
(b) Narcissism	−0.11**	0.18***	0.84***	0.64***	—					8.84	3.46	0.91
(c) Psychopathy	−0.14***	0.23***	0.86***	0.74***	0.53***	—				7.60	3.16	0.87
4 Job control	−0.01	−0.09*	−0.09*	−0.16	0.02	−0.08*	—			34.07	4.94	0.79
5 Social support	0.04	0.06	0.08*	0.07	0.09*	0.04	0.15***	—		22.98	4.04	0.73
6 CWB	−0.11**	0.10**	0.40***	0.39***	0.32***	0.35***	−0.07	−0.12*	—	37.80	7.57	0.90
7 Approval	0.13***	−0.04	−0.28***	−0.28***	−0.25***	−0.20***	0.07	−0.04	−0.22***	40.50	4.75	0.71

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$ (two-tailed test significance).
Note: CWB = counterproductive work behavior.

($t = 2.98$; $p < 0.01$) than women. Social approval correlated negatively with the DT and CWB. The DT was connected with low job control as well as with high social support and CWB. CWB was related to low social support but not to job control. Job control and social support were associated positively with each other. When it comes to differences in the levels of the DT and CWB in relation to the employment sector (public vs private), job position (managerial vs non-managerial) and type of work (manual vs knowledge), the analysis shows that employees in the private sector show higher levels of the DT ($t = −4.45$; $p < 0.001$) and higher frequency of CWB ($t = −3.81$; $p < 0.001$). The remaining variables do not seem to impact the DT and CWB significantly.

3.2. Testing hypotheses

Figure 2 displays the results of regression analyses testing the direct effect of the DT, job control and social support on CWB, as well as the two-way and three-way interactional effects. In these analyses the effect of age, gender and social approval was controlled. The findings showed that a high level of the DT ($B = 0.33$; $p < 0.001$) and a low level of social support ($B = −0.11$; $p < 0.005$) are predictors of CWB. Job control did not predict CWB. Age ($B = −0.06$; *ns*) and gender ($B = 0.05$; *ns*) were not predictors of CWB, while social approval predicted these behaviors ($B = 0.19$; $p < 0.001$). Job control was found to moderate the negative effect of the DT on CWB ($B = 0.15$; $p < 0.005$). More specifically, the higher the level of the DT, the higher the level of CWB, but mainly when job control was high (Figure 3). The moderation effect of social support turned out to be insignificant ($B = −0.01$; *ns*).

It was expected that low job control in concert with high social support buffers the DT–CWB relationship. The results indicate that a three-way interaction between the DT, job control and social support predicted CWB. Social support intensified the moderation effect of job control on the DT–CWB link ($B = 0.10$; $p < 0.05$). The three-way interactional effect was confirmed by means of F test for significant change in R^2 values, $F(1, 657) = 6.47$; $p < 0.05$; $\Delta R^2 = 0.01$. Figure 4 shows that CWB increased along with the increase of the DT but the effect turned out to be the weakest when job control was low and social support was high. The test of slope differences [45] indicated that in conditions of high the DT, CWB was less frequent for individuals with low job control and high social support compared with individuals with high job control and high social support ($t = 2.137$; $p < 0.05$). Between the remaining pair of slopes the test did not show statistically significant differences.

Some additional analyses have been performed using individual DT characteristics – Machiavellianism, narcissism and psychopathy – as a predictor introduced into the model. The results of these analyses are presented in
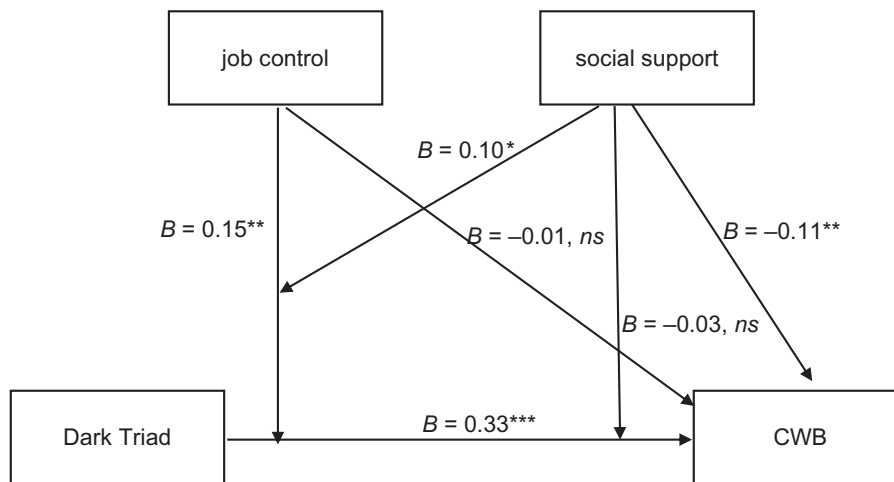
Figure 2.   Moderation effect of job control and social support on the DT–CWB relation.
$*p < 0.05$; $**p < 0.01$; $***p < 0.001$.
Note: $F(8, 647) = 22.49$; $R^2 = 0.22$; $p < 0.01$. CWB = counterproductive work behavior; DT = Dark Triad.
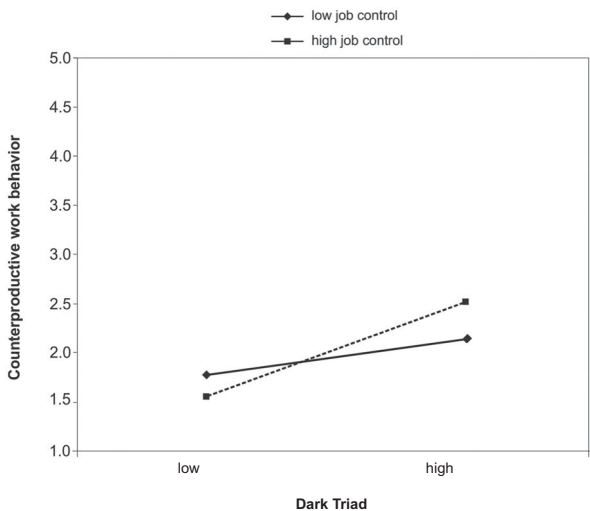

Figure 3.   Two-way interaction effect of the Dark Triad and job control on the DT–CWB link.
Note: CWB measured on a scale ranging from $1 = never$ to $5 = every\ day$. CWB = counterproductive work behavior; DT = Dark Triad.
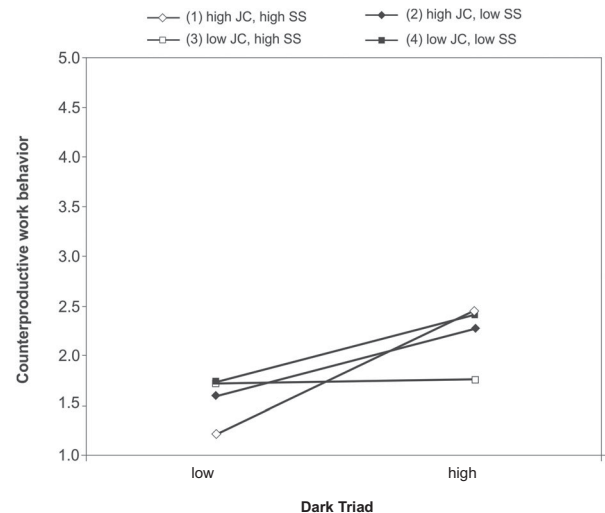

Figure 4.   Three-way interaction effect of the Dark Triad, job control and social support on the DT–CWB link.
Note: CWB measured on a scale ranging from $1 = never$ to $5 = every\ day$. CWB = counterproductive work behavior; DT = Dark Triad; JC = job control; SS = social support.

Table 2. Based on the table, it can be inferred that high levels of narcissism ($B = 0.25$; $p < 0.001$), Machiavellianism ($B = 0.33$; $p < 0.001$) and psychopathy ($B = 0.32$; $p < 0.001$) are predictors of high CWB. As for the effects of moderation, the analysis confirmed that job control moderates a negative impact of Machiavellianism ($B = 0.12$; $p < 0.01$), narcissism ($B = 0.09$; $p < 0.05$) and psychopathy ($B = 0.14$; $p < 0.01$) on CWB, meaning that as job control increases, so does the relationship between the 'dark traits' and CWB. More specifically, employees with high intensity of these characteristics and a high level of job control tend to be involved in CWB more often. When it comes to the moderating function of social support, the analysis revealed that it did not moderate relationships between the three characteristics of the DT and CWB. The

obtained results fully confirmed H_1 and H_3 but did not support H_2.

Analyses related to a three-way interaction effect rendered various results. The three-way interaction effect was observed only for the relationship between psychopathy and CWB ($B = 0.09$; $p < 0.05$) but it did not occur for the relationships between narcissism and CWB *($B = 0.03$; ns)* or between Machiavellianism and CWB ($B = 0.03$; *ns*). Hence, a low level of job control and a high level of social support weaken the impact of psychopathy (but not narcissism or Machiavellianism) on CWB. The findings confirmed the three-way interaction effect to some extent; therefore, H_4 may be considered partially supported.

Table 2. Results of regression analyses: job control and social support as moderators of the relationship between the three Dark Triad traits and CWB.

	CWB								
	Machiavellianism			Narcissism			Psychopathy		
Variable	B	SE	95% CI	B	SE	95% CI	B	SE	95% CI
Constant	0.10*	0.09	[0.01, 0.19]	0.09*	0.08	[0.01, 0.18]	0.12*	0.10	[0.03, 0.20]
Age	−0.03	0.03	[−0.09, 0.04]	−0.03	0.03	[−0.09, 0.04]	−0.01	0.03	[−0.07, 0.06]
Gender	0.02	0.07	[−0.10, 0.14]	0.01	0.06	[−0.11, 0.16]	0.05	0.06	[−0.02, 0.12]
Social approval	0.19***	0.04	[0.12, 0.26]	0.21***	0.03	[0.10, 0.28]	0.19***	0.03	[0.12, 0.26]
Dark Triad (DT)	0.33***	0.04	[0.26, 0.39]	0.25***	0.04	[0.18, 0.31]	0.32***	0.04	[0.185, 0.39]
Job control (JC)	0.01	0.04	[−0.08, 0.09]	−0.05	0.04	[−0.12, 0.02]	−0.01	0.04	[−0.08, 0.06]
Social support (SS)	−0.09*	0.04	[−0.16, −0.02]	−0.10*	0.04	[−0.17, −0.03]	−0.10*	0.04	[−0.17, −0.03]
DT × JC	0.12**	0.04	[0.05, 0.18]	0.09*	0.04	[0.02, 0.15]	0.14**	0.04	[0.07, 0.21]
DT × SS	−0.04	0.03	[−0.10, 0.03]	−0.05	0.04	[−0.12, 0.02]	−0.04	0.04	[−0.10, 0.03]
JC × SS	0.06	0.03	[−0.02, 0.14]	0.04	0.04	[−0.03, 0.11]	0.05	0.04	[−0.02, 0.12]
DT × JC × SS	0.03	0.02	[−0.03, 0.09]	0.04	0.03	[−0.03, 0.09]	0.09*	0.03	[0.03, 0.15]

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.
Note: CI = confidence interval; CWB = counterproductive work behavior.

4. Discussion

The research was focused on finding a direct link between the dark traits of personality and CWB, as well as establishing the moderation effect of two kinds of job resources – job control and social support – on this link. The primary problem addressed by the study was whether high levels of job control and social support among employees with 'dark personality' traits result in inhibiting their antisocial predispositions and preventing them from engaging in counterproductive activities – abuse, sabotage, theft and withdrawal – or whether the opportunities related to high job control (e.g., higher degree of freedom of operation, lower control by supervisors) and high social support (e.g., less sanctions in case of being caught) will increase the feeling of impunity and willful behaviors of employees with dark traits, resulting in their higher engagement in detrimental activities.

The research has found that employees with high levels of the DT engage in CWB more frequently. The findings confirm some previous studies [4,6,9]. Additional analyses show the strongest correlations between CWB and Machiavellianism ($r = 0.33$) and between CWB and psychopathy ($r = 0.32$), and a slightly weaker correlation with narcissism ($r = 0.25$). The mechanisms underlying these relationships are probably different for each of the dark traits. In the case of narcissism, persons with this trait are more likely to see themselves as victims. They also tend to accuse others of negative intentions in interpersonal relations and are more sensitive to meanness and depreciative signals from others. These tendencies increase the probability of negative emotions, e.g., hostility and anger, which may result in an increase in detrimental behaviors [8].

In the case of Machiavellian individuals, the dominant feature is the tendency to reach goals at any cost, often at the expense of others. It can, therefore, be assumed that in the case of difficulties or obstructions on the way to reaching these goals, they will react with stronger frustration than other employees [8]. Studies show that, when making decisions related to their own behavior, Machiavellian individuals tend to show symptoms of moral disengagement much more often than other persons [46]. Moral disengagement temporarily weakens moral standards and norms, which results in a much 'easier' engagement of Machiavellian individuals in unethical behaviors.

In the case of psychopathy, studies suggest that individuals with a high level of this trait derive satisfaction from harming others, and tend to use aggression to reach their goals and obtain personal profits [47]. They are also characterized by a decreased level of social awareness, resulting in deficiencies in anxiety and shame, as well as weaker feelings of guilt. This can be conducive to sabotage, as well as destructive behaviors (e.g., property damage). Tendencies for impulsive behavior and a penchant for risk-taking may be causes of rash behavior and failure to abide by health and safety regulations.

In the case of psychopathic individuals, the risk of aggression is higher in confrontation situations (e.g., conflicts, physical attacks), whereas for narcissists the risk is particularly high when their self-esteem is threatened [21]. Machiavellian individuals tend to be more careful and 'subtle' in their actions, as they are more mindful of their effects than psychopaths. As indicated by Jonason et al. [5], persons with these traits also use different methods of exercising influence in organizations. Employees with psychopathic tendencies are more likely to use 'hard' manipulation tactics (e.g., confrontation, assertive behavior, direct manipulation), while narcissistic employees choose 'soft' tactics (e.g., ingratiation). Employees with high levels of Machiavellianism use both groups of influence tactics, depending on the situation. These results support that, in social contacts, they function as 'social

chameleons' [4], adjusting behavior to the expectations of others for personal gain.

As for the moderating function of job resources, the conducted study shows that job control moderates the effect of the DT on CWB. In accordance with expectations, employees with the DT traits and a high sense of job control tend to engage in detrimental behaviors more frequently. The data show that having high job control – treated in many theoretical models (e.g., demand–control–support model) as a factor facilitating the response to stress, with a beneficial effect on employees – may in some cases result in negative effects for the organization. The person–environment fit theory can be invoked to explain the results [36]. In the light of this theory, people look for work environments that are compatible with their preferred values, goals and personality traits. The factors that draw employees with high levels of DT traits to an organization are high salaries, prestige, the possibility of being in control and access to resources [9]. A high level of job control facilitates disruptive behavior for people with a high DT level at least in two ways. First and foremost, high autonomy and freedom of action mean that they rarely have to consult with their supervisors regarding any of their decisions. As such, actions are not ordinarily monitored by supervisors, which makes them more difficult to sanction. Moreover, high decision-making authorization means more opportunities for people with a high DT level to present such deviant behavior. Studies show that the career development of employees with high levels of DT traits depends on organizational factors – e.g., the type of organization, as well as organizational culture, structure and leadership [4,9]. For instance, the DT traits are most visible in cultures based on individualistic values, in organizations with weak structures where the levels of job autonomy and freedom of operation are high, while control systems and the potential consequences of unethical behaviors are less significant [9,30].

The obtained results partly correspond to previous studies on the moderating role of job control in the context of deviant behavior. Previous studies showed that in some situations (e.g., under stress) job control can have negative effects for the organization [48–50]. For instance, employees experiencing strong interpersonal conflicts more often resort to deviant acts when they enjoy a high level of job control [48]. Similar findings were obtained in a cross-lagged study on soldiers performing a peace mission. Soldiers who perceived job control as high, after 6 months of increasing work overload exhibited high levels of indiscipline [49]. In relation to the social exchange theory [35], it was expected that support from coworkers and supervisors would weaken the relationship between DT and CWB. Since the assistance obtained from coworkers and supervisors facilitates the attainment of employee objectives and satisfies their need for affiliation, it was expected that they would requite with loyalty toward the organization

and avoid harmful actions. Studies have not confirmed this assumption. It turned out that employees with high levels of Machiavellianism, narcissism and psychopathy were involved in counter-productive actions, regardless of the social support they had received. Most probably, the non-observance of the rule of reciprocity results from the mental predispositions of people with the DT – demanding attitude, arrogance, tendency to dominate, lack of empathy and conviction that they deserve special rights [21].

The most interesting part of the study is related to the three way-interaction effect of job control and social support on the DT–CWB relation. The results show that social support facilitates the moderation effects of job control on the DT–CWB link. Specifically, in situations of low job control and high social support, employees with high levels of the DT traits are the least likely to engage in deviance behaviors. More detailed analyses show that the three way-interaction effect is only viable in the case of psychopathy and does not seem to be a factor for the two remaining DT traits – Machiavellianism and narcissism. It is likely that low levels of job control and high levels of social support create a particular situation in the organization, which makes it 'difficult' for psychopathic individuals to display counterproductive behaviors. First of all, a lower sense of job control can be linked to higher organizational constraints and a lower leeway for action, which creates fewer opportunities for engagement in CWB and increases the risk that such behavior will be detected and punished [51]. Secondly, high social support is probably linked to regular contact with supervisors and coworkers; therefore, transparency of employee behavior is higher in these conditions. Moreover, high support from coworkers and supervisors helps to meet the needs of employees and facilitates the implementation of their goals and aspirations, making the workplace a friendly place.

It should be highlighted that the social approval effect was controlled in the conducted analyses. An analysis of the correlation indicated that social approval is negatively related to CWB, as are the DT features. This means that the more the studied population was concerned about their image, the more rarely they admitted to performing organizationally harmful actions, and the less prone they were to admit having personality traits socially perceived as undesirable. One can then suspect that the relationship between the DT and CWB is partly modified by the impact of variable social approval. Conversely, despite the existence of a direct relationship between the need for social approval and counterproductive behavior, upon introducing to the model the index of the need for social approval (as a controlled variable), the direct relationships between the DT and CWB, as well as the moderation effects, became statistically significant.

One should pay attention to some practical implications of the studies performed. These suggest that in the case of employees with the DT, a high level of job resources

does not always foster high job performance. This applies in particular to excessive job control. A situation of high autonomy, freedom of action and high authorization may foster the intensification of actions that are detrimental to the organization, e.g., abuse, theft or sabotage. Such results are interesting because they partly contradict the common conviction that high job control contributes to 'better' functioning employees [37]. From the point of view of the subjective well-being of employees, numerous studies have revealed that, indeed, job control is a factor that weakens the level of stress under high job demands [32,33,37], contributing to the heightened well-being of employees, improved physical and mental health and greater job satisfaction. These results are in compliance with the demands–control–support model [32,33]. Some studies pertaining to organizational behavior, however, show that employees with too much job control may bring negative results to an organization [48,49]. According to the presented studies, this mainly applies to employees with a high DT level. DT traits combined with strong job control may boost counter-productivity. Providing employees high in DT and job control with other job resources can be a form of CWB counteraction. Such resources may include social support, coaching and a favorable organizational climate. It is possible that, owing to the 'richness' of job resources, people will activate other, more productive methods of coping with stress, e.g., focusing on their tasks.

4.1. Limitations and future directions

To conclude, it is worth mentioning the limitations of the current study. The first involves the measurement method. The self-reporting tool has been repeatedly criticized for measuring declarations rather than concrete behavior or, to be more precise, the frequency with which respondents admit to engaging in CWB. Respondent declarations are affected by many variables [52].

Researchers also point out that the mean levels obtained for most items in CWB questionnaires tend to be low. The reason for this is that respondents are unlikely to admit that they engage in such behavior [52]. Certain CWBs (e.g., theft) are regulated by law and employees tend to deny them for fear of punishment; in other cases, however, they simply find it difficult to admit to wrongdoing, even to themselves. To do so would probably involve the rise of negative thoughts about themselves and, as a consequence, the experience of various unpleasant emotions.

Conversely, the alternative CWB measurement method, based on reports by superiors and colleagues, also has its limitations. As stated by Fox et al. [53], superiors and colleagues are likely to detect only some counterproductive acts, since these are mostly carried out in secret. In a meta-analysis study, Berry et al. [54] compared CWB data obtained from self-reports and evaluations by superiors and colleagues. The mean corrected correlation coefficient for CWBs measured by these two methods was shown to be high at $\rho = 0.38$. In addition, mean values for CWBs measured by self-reporting scales were higher than those reported by other employees [53]. This seems to suggest that superiors and colleagues tend to underestimate the occurrence of CWB. The figures can be treated as an argument to support the greater validity of self-reporting as compared to external evaluation.

Another limitation has to do with the fact that the analysis of moderation in the current study was based on cross-sectional surveys, rather than longitudinal research or the experimental model. Negative organizational behaviors are very dynamic and emerge as a result of long-term job stressors, resources and the emotions that they engender. Longitudinal research is needed to capture that dynamic, and a break of at least several months is recommended between individual measurements. Such studies would be particularly called for in any future research into the mechanisms behind the development of CWB. In future research, it would be useful to investigate also which kinds of CWB are performed by employees with high levels of the DT and job resources. It is thought to be likely that they will engage more in active forms of CWB (e.g., abuse, sabotage and theft) than passive ones (e.g., withdrawal).

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