The Dark Side of Medical Staff: How Dark Traits Lead to Work Burnout

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ABSTRACT

The dark side of personality has begun to be studied extensively in the fields of social, personality, and organizational psychology in recent years but little is known about which of the Dark Triad traits is more malevolent in organizational context. Therefore, the present study aims to investigate the effects of dark triad traits on counterproductive work behavior along with the mediating role of burnout. A cross-sectional survey was used to collect data from 208 permanent employees of medical hospitals. A personality-based research model was proposed to test the hypothesis. The questionnaire consisted of a dark triad scale, a counterproductive work behavior scale, and a burnout scale. Different statistical techniques, i.e., correlation, and regression were applied to test the direct effects, and the PROCESS-macro method was applied to test indirect effects (mediation). The findings of the study revealed that dark triad traits and counterproductive work behaviors are significantly correlated ($p<0.05$). Narcissism is a significant predictor of counterproductive work behavior as compared to Machiavellianism and psychopaths ($R^2= 0.23$). Furthermore, findings reveal that emotional exhaustion significantly mediates the relationship between dark triad and counterproductive work behavior ($R^2 = 0.66$). Policymakers and higher management of public sector institutions especially focus on psychological health and organizational climate to reduce the workplace's harmful behaviors. Finally, this study theoretically enhances knowledge of personality psychology literature by explaining the negative consequences of negative personalities in the workplace.

INTRODUCTION

In recent years, there has been a significant increase in research on the dark side of personality in the social, personality, and organizational psychology domains. Currently, it is challenging for researchers to reach a definitive conclusion regarding the effects of the Dark Triad (DT) traits (narcissism, machiavellianism, and psychopathy) on organizational behavior because these traits produce varied consequences for attitudes towards work.[1] According to some scholars, machiavellianism and psychopathy are more likely than narcissism to have negative effects on work-related behaviors.[2] However, regarding their impact on attitudes towards work, narcissism is viewed more positively than psychopathy and machiavellianism, especially by scholars who argue that these latter traits are more likely to have adverse effects on organizations.[3] Due to dishonest practices, global enterprises face annual losses exceeding one trillion dollars.[4] In general, Counterproductive Work Behaviors (CWBs) are linked to undesirable or unfavorable consequences for individuals and the health of the organization. Recently, there has been a growing interest in educating people about deviant workplace behavior and strategies to manage it.

Interpersonal, organizational, and supervisory represent the three main types of CWBs. Organizational behaviors are independent actions that harm an organization's rules and structure, whereas supervisory behaviors can mitigate the detrimental effects of supervision in an organization while interpersonal behaviors are intentional actions that have a detrimental and unfavorable impact on coworkers.[5] Consequently, CWBs pose a significant concern for businesses and their stakeholders involved in organizational decision-making. The main objective of this study is to examine the relationship between experiencing DT traits and engaging in counterproductive work behavior, with burnout serving as a mediator in the relationship.

Specific research objectives include:

1. To examine the influence of Dark Triad traits on employee burnout
2. To determine the association between burnout and engagement in counterproductive work behavior.
3. To test the mediating role of burnout in the link between Dark Triad traits and CWB.
4. To identify potential mechanisms through which DT traits may lead to counterproductive work behavior, with burnout as a key mediator.

Earlier studies have supported the investigation of the potential effects of unproductive work behaviors was supported by earlier studies. Aristotle's Theory of Equity and the Trait Activation Theory (TAT) have examined the environmental and contextual factors that contribute to unproductive work behavior.[6] The big five model and other negative personality traits, such as narcissism, psychopathy, and machiavellianism, which have recently drawn attention in behavioral research, have been extensively studied in prior literature concerning CWBs.[7] However, it remains difficult to draw firm conclusions about the organizational impact of DT traits on work-related behavior due to contextual variations. Given the positive, negative, and insignificant results of earlier studies, the relationship between the DT and counterproductive work behavior remains unclear. Nevertheless, DT characteristics could serve as useful and important predictors for assessing unproductive work behavior. Furthermore, prior research suggests that future investigations should consider mediators and moderators when examining the relationship between the DT and unproductive behavior at work.[3]

Several studies have explored the broad connections between DT traits and CWBs. Previous research has recognized the DT's individual and composite dimensions and has identified a positive correlation between these traits and unproductive work habits.[8] Over the past two decades, the concept of the DT has gained increasing attention. This concept was first proposed by Paulhus and Williams (2002), who described it as a set of three undesirable personality traits: subclinical manifestations of Machiavellianism, narcissism, and psychopathy.[9] This indicates that the severity of these traits does not meet the diagnostic criteria for any personality disorder. However, individuals in the general population frequently exhibit these characteristics. The traits that form the basis of the DT have several socially undesirable things in common. According to several authors, these overlapping traits

include aggression, emotional coldness, self-centered behaviour, and a lack of honesty or sincerity.[10]

A psychopath is more likely to act impulsively than a narcissist or a Machiavellian.[11] In social settings or the workplace, violent behavior is more common among individuals with high levels of psychopathic traits. However, it is impossible to claim that this pattern applies universally. Psychopaths might be seen as "successful psychopaths" because, in some situations (such as securing promotions at work, acquiring and maintaining authority, and masking impulsive tendencies), they can be highly charming and impressive. However, they are typically violent, impulsive, and lack empathy. Previous studies have identified positive correlations between psychopathy and workplace bullying, conflict, and abusive supervision. Thus, it's anticipated that they are likely to exhibit counterproductive work behavior in their organizations.[12]

Narcissists and Machiavellians tend to be more controlled and goal-oriented than psychopaths do. When it comes to advancing personal goals, these individuals can readily employ a variety of immoral and unethical strategies. They are typically less violent than psychopaths, because they have a strong tendency to act in ways that enhance their power. Consequently, they often establish close relationships with those who hold positions of authority in the organization. However, it can be argued that a worker with strong machiavellian tendencies is more likely to harm their co-workers or the organization to achieve their objectives. For instance, Machiavellians may engage in actions such as lying, defamation, or making inappropriate jokes to harm someone's reputation. O'Boyle et al. conducted a meta-analysis and found that Machiavellianism was positively correlated with CWBs. Furthermore, Machiavellians may use numerous immoral tactics and strategies if obstacles such as events, laws, or other people block their path to achieving their goals. Prior studies have linked Machiavellianism to dishonest acts, such as lying and cheating.[13]

Self-centered narcissists relentlessly pursue positions of power and prominence. When their egos are threatened, narcissists become highly hostile. It is believed that narcissists may engage in some types of CWBs in an organization if they are unable to satisfy their egos, achieve their goals, or gain sufficient support. Narcissism has been found to be positively associated with CWBs in two meta-analyses. First, O'Boyle et al. (2011) reported a positive relationship between narcissism and CWBs (effect size: r = 0.43).[13] Second, Grijalva and Newman (2015) conducted another meta-analysis, which yielded a slightly weaker but still significant effect size (r = 0.23).[14]

Burnout at work results from persistent exposure to occupational stress. It has two main components, exhaustion and disengagement from work. Thus, workplace stress is caused by high expectations for one's performance combined with a lack of adequate resources.[15] Exhaustion is a response to severe mental, emotional, and physical fatigue caused by increased exposure to specific demands at work, while disengagement is a reaction to insufficient job resources, leading to separating oneself from one's job and adopting a negative attitude towards the workplace. Burnout at work has been linked to several negative individual and organizational effects. Employees who experience burnout are more likely to exhibit CWBs, absenteeism, negative work attitudes, and lower task and contextual job performance. Additional physiological and emotional issues, such as headaches, cardiovascular problems, insomnia, and depression, were associated with job burnout dimensions.[16]

Several previous studies have explored the close relationship between DT and job burnout. One study found that emotional exhaustion and cynicism, the two components of occupational burnout, were predicted by a high level of narcissism. In other studies, narcissism has been linked to school burnout in college students, as well as to stress responses and coping more broadly.[17] Little is known about the connection between psychopathy and occupational stress. However, some researchers have not identified a strong link between psychopathy and work stress. However, recent research suggests that psychopathy is linked to high levels of work-related stress and emotional exhaustion as well as unfavorable emotional experiences. Given that Machiavellianism is negatively associated with task-oriented coping mechanisms and positively associated with high job stress,[18] Schwarzkopf et al.'s (2016) findings suggest that DT and job burnout are positively related.[19]

CWBs are a crucial research topic because they have detrimental effects on both organizations and employees. Deviant work practices, for instance, impair internal performance and incur substantial costs due to lost productivity; these actions may also negatively affect how employers assess an employee's performance and prospects for advancement.[20] According to Spector and Fox (2005) CWBs consist of actions deliberately taken by staff members to harm the organization and its stakeholders, such as clients, coworkers, and managers. The stressor-emotion model of CWBs demonstrates the process that leads to deviant work behavior. This model contends that adverse employee reactions and a sense of powerlessness may result from stressful work conditions, which, in turn, contribute to CWBs.[21] In line with this framework, CWBs reflect employees' reactions to a stressful work environment as a means of coping with the challenges caused by work.

Numerous researchers have investigated the link between job burnout and CWBs. For instance, Mulki et al (2006) found that emotionally exhausted workers have reduced job satisfaction and lower loyalty to the organization, which results in deviant behavior.[22] However, researchers have focused only on the connection between emotional exhaustion and workplace deviance. In comparison, Liang and Hsieh (2007) studied the relationship between job burnout and unproductive behavior among Taiwanese flight attendants; their responses revealed a positive correlation between job burnout, emotional exhaustion, depersonalization, and CWBs, and a negative relationship between personal accomplishment and CWBs.[23] A similar study examined the connection between job burnout and CWBs and found that workers who reported feeling depersonalized were more likely to exhibit CWBs. They noted, however, that depleting an employee's emotional reserves might increase their perception of depersonalization, which would heighten the likelihood that the employee would engage in actions harmful to the organization.[24] In light of the detailed insights presented in the literature review, the authors propose the following hypotheses:

H1. There will be a positive relationship between the DT traits and CWBs.

H2. There will be a positive relationship between the DT traits, and burnout.

H3. There will be a positive relationship between burnout and CWBs.

H4. DT traits will have a positive effect on CWBs.

H5. Burnout will mediate the association between DT traits and CWBs.

MATERIAL AND METHOD

Drawing on previous literature, the researchers proposed a personality-based model of CWBs based on trait activation theory, with the expectation that individuals with a high predisposition to DT traits are more likely to engage in CWBs. The activation of these traits depends on the interaction between individual disposition (DT) and the situational context (burnout) (Figure 1).[25]

Procedure

A cross-sectional survey was conducted among permanent employees of Nishtar Medical Hospital, a public-sector institution in Multan, Punjab, Pakistan. The study participants included consultants, physicians, senior doctors, and medical officers. To ensure that the objectives of the study were met, data were collected through random sampling targeting individuals with relevant knowledge of the research constructs. Participants were briefed on the study's purpose prior to data collection. Of the 300 distributed questionnaires, 208 were completed fully and correctly, resulting in a response rate of 69.33%.
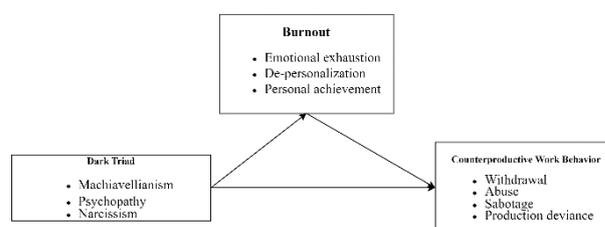
Source: Tett, R. P & Burnett, D. D, 2003

Figure 1. **Personality-based Model of Counterproductive Work Behavior**

Instruments

Dark Triad (DT) Traits

A twelve-item scale from Jonason and Webster (2010) was used to measure the DT traits.

The DT traits of narcissism, psychopathy, and Machiavellianism are characterized by a lack of empathy, manipulation of others, and an exploitative and opportunistic mindset. To measure these traits, Jonason and Webster used self-report questionnaires from the Narcissistic Personality Inventory (NPI), Psychopathic Personality Inventory (PPI), and Machiavellianism Scale. A sample item was "I tend to want others to admire me" (α = 0.85).[26] This scale was chosen for its brevity and established validity in organzational contexts, including a recent study of healthcare professionals, as well as its alignment with contemporary DT research (e.g., Duradoni et al., 2023), ensuring its relevance to our sample of hospital employees.[27] However, its reliance on self-reports may introduce social desirability bias, potentially underestimating traits such as psychopathy, especially among medical staff who are accustomed to maintaining a professional image.

Counterproductive Work Behaviors (CWBs)

This was measured using a ten-item scale from Spector et al. (2010). Participants were asked to rate how often they engaged in behaviors such as arriving late to work, taking extended breaks, and intentionally wasting time at work. Responses were provided on a 5-point Likert scale ranging from 1 (never) to 5 (very often). The items were averaged to create a composite score of counterproductive work behavior. The reliability of the scale was high in this study (Cronbach's alpha = 0.85).[28] This scale was selected for its widespread use in organizational psychology and demonstrated relevance to healthcare settings,[29] where it captured deviant behaviors among hospital employees, supported by its recent application in similar contexts Miao et al., 2023.[30] A limitation is that self-reported data may not fully reflect actual behavior, as participants, particularly in a high-stakes healthcare environment, might underreport due to fear of professional repercussions or limited self-awareness of subtle deviant acts.

Burnout

The Maslach Burnout Inventory, a twenty-two-item scale Maslach et al., 1996 was used to assess levels of burnout among participants. The items on this scale were designed to measure emotional exhaustion, depersonalization, and reduced personal accomplishment (α = 0.91).[31] This scale was chosen as the gold standard for burnout measurement, and its relevance to healthcare was validated by Poghosyan et al. (2009) in large-scale nurse surveys across eight countries, and reinforced by its frequent use in recent hospital-based studies.[32,33] However, its length may increase respondent fatigue, particularly among time-pressed medical staff, and cultural differences in interpreting burnout symptoms such as emotional exhaustion being less openly acknowledged in collectivist settings like Pakistan could limit its applicability in this context.

RESULTS

The demographic characteristics of the 208 survey participants are summarized in Table 1. Cronbach's alpha reliability for the DT traits scale was .87, for the burnout scale was .75, and for the CWBs scale was .82. Correlation analysis showed that DT traits (psychopathy, narcissism, and machiavellianism) were positively correlated with CWBs (withdrawal, sabotage, abuse, and production deviance). Similarly, DT traits (psychopathy, narcissism, and machiavellianism) and CWBs (withdrawal, sabotage, abuse, and production deviance) were positively correlated with burnout (emotional exhaustion and depersonalization), while there was a negative correlation between all these variables and personal accomplishment (Table 2).

Table 1. Characteristics of Demographic

Characteristics	n = 208	%
Gender		
Male	134	64.4
Female	74	35.6
Age (Years)		
30-40	56	26.9
41-50	62	29.8
51-60	90	43.3
Experience (Years)		
Less than 10	100	48.1
10-20	62	29.8
More than 20	46	22.1
Geographic Location		
Multan	110	52.9
Bahawalpur	40	19.2
Rajanpur	24	11.5
DG Khan	6	2.9
Sahiwal	12	5.8
Muzaffargarh	4	1.9
Vehari	4	1.9
Lahore	8	3.8

Source: This Cross-Sectional Study Was Conducted in 2024

Regression analysis revealed that narcissism (β = .59, p = 0.001) and Machiavellianism (β = .30, p = 0.05) had a significant effect on CWBs. Psychopathy (β = .15, p = 0.001), narcissism (β = .20, p = 0.001), and Machiavellianism (β = .16, p = 0.001) had a significant effect on withdrawal. Narcissism had a significant effect on abuse (β = .34, p = 0.001), psychopathy had a significant effect on production deviance (β = .07, p = 0.01), and narcissism had a significant effect on sabotage (β = .03, p < 0.05) (Table 3).

Mediation analysis indicated that emotional exhaustion significantly mediated the relationship between DT traits and CWBs, while the indirect effect between DT traits and emotional exhaustion was significant (β = 3.22, p < 0.001), and the indirect effect between emotional exhaustion and CWB was significant (β = .32, p < 0.001). In contrast, depersonalization and personal accomplishment did not mediate the association between DT traits and CWBs, as their p-values exceeded 0.05 (Table 4).

Table 2. Interco-relations among DT, CWB, and BO Domains

Variables	DT			CWB				BO		
	PS	NR	MA	WI	AB	PD	SA	EE	DP	PA
Dark Triad (DT)										
PS	-	.63**	.73**	.20**	.29**	.35**	.26**	.27**	.10	-.14
NR	-	-	.68**	.47**	.39**	.27**	.35**	.29**	.18**	.03
MA	-	-	-	.42**	.32**	.31**	.28**	.34**	.08	-.10
Counterproductive Work Behavior (CWB)										
WI	-	-	-	-	.59**	.32**	.49**	.47**	.13	-.18
AB	-	-	-	-	-	.44**	.63**	.54**	.06	-.09
PD	-	-	-	-	-	-	.31**	.53**	.16*	-.19**
SA	-	-	-	-	-	-	-	.12	-.98	.23**
Burnout (BO)										
EE	-	-	-	-	-	-	-	-	-	-.32**
DP	-	-	-	-	-	-	-	-	-	-
PA	-	-	-	-	-	-	-	-	-	-

Source: This Cross-Sectional Study Was Conducted in 2024
Dark Triad =DT, DT Global = DT-G, Psychopathy = PS, Narcissism = NR, Machiavellianism = MA, Counterproductive Work Behavior = CWB, CWB Global = CWB-G, Withdrawal = WI, Abuse = AB, Production Deviance = PD, Sabotage = SA, Burnout = BO, BO Global = BO-G, Emotional Exhaustion = EE, Depersonalization = DP, Personal Achievement = PA.
*p<0.05, **p<0.01.

Table 3. Results of Linear Regression Analysis on the Model

	Outcomes														
	CWB														
Predictors	CWB-G			WI			AB			PD			SA		
DT	β	t	Sig	β	t	sig	β	t	Sig	β	t	Sig	β	t	Sig
PS	.61	.42	.67	.15	3.95	<.001	.01	.17	.86	.07	2.41	.01	.03	.27	.78
NR	.59	4.15	<.001	.20	5.18	<.001	.34	3.55	<.001	.01	.49	.61	.03	3.06	.02
MA	.30	1.95	.05	.16	4.04	<.001	.41	.09	.88	.03	1.01	.31	.01	.68	.49
Model Summary															
R²	.23			.29			.16			.13			.12		
F	21.26			28.56			13.36			10.34			10.07		

Source: This Cross-Sectional Study Was Conducted in 2024
Dark Triad =DT, Psychopathy = PS, Narcissism = NR, Machiavellianism = MA, Counterproductive Work Behavior = CWB, Withdrawal = WI, Abuse = AB, Production Deviance = PD, Sabotage = SA, Burnout = BO, Emotional Exhaustion = EE, Depersonalization = DP, Personal Achievement = PA.
*p<0.05, **p<0.01, ***p<0.001.

Table 4. Results of Mediation Analysis on the Model

Effects	Paths	B	SD	Indirect Effects	Total Effects	VAF	t	R^2	Sig	Decision
					DT →EE→ CWB					
Direct Effect	DT→CWB	3.22	.43				7.34		p<0.001	
Indirect Effects	DT→EE	3.82	.72				5.25	.34	p<0.001	Partial mediation
	EE→CWB	.32	.32	1.22	3.19	.39	9.27		p<0.001	
	DT→CWB	1.97	.39			(39%)	5.00	.66	p<0.001	
					DT →DP→ CWB					
Direct Effect	DT→CWB	3.22	.43				7.34		p<0.001	
Indirect Effects	DT→DP	1.27	.03				2.01	.02	0.04*	No mediation
	DP→CWB	.04	.04	.05	3.21	.01	.09		.36	
	DT→CWB	3.16	.44			(1.5%)	7.16	.21	p<0.001	
					DT →PA→ CWB					
Direct Effect	DT→CWB	3.22	.43				7.34		*p*<0.001	
Indirect Effects	DT→PA	-.86	.74				-1.15	.01	.25	No mediation
	PA→CWB	-.04	.04	.03	3.21	.00	-1.17		.24	
	DT→CWB	3.18	.44			(0%)	7.22	.21	p<0.001	

Source: This Cross-Sectional Study Was Conducted in 2024
Dark Triad = DT, Counterproductive Work Behavior = CWB, Emotional Exhaustion = EE, Personal Achievement = PA, Depersonalization = DP, Variance Accounted For = VAF.
*p<0.05, **p<0.01, ***p<0.001.

DISCUSSION

This study significantly advances our understanding of how DT traits influence CWBs in healthcare settings, offering actionable insights for managing personality-driven workplace deviance. Regarding personality traits, CWBs were positively correlated with narcissism, Machiavellianism, and psychopathy in the current study, although narcissism emerged as a stronger predictor of CWBs. Consequently, dark personality traits must be carefully considered and managed by organizations. However, this is challenging because of several key factors. During job interviews, individuals with dark personality traits leverage their strengths, making it easier for them to secure jobs and advance to higher positions within organizations.[7] Developing strategies and techniques to address negative personality traits in organizations remains difficult. Traditional personality tests are not the most effective approach because they are susceptible to the manipulation of self-reported scores.

First, the link between psychopathy traits and CWBs is supported by research.[3] Psychopathy, characterized by high impulsivity, thrill-seeking, lack of empathy, and a tendency toward exploitation, distinctly contributes to CWBs by fostering behaviors that disregard moral, social, and legal norms. It is associated with potentially harmful outcomes in an organizational setting. High impulsivity, thrill-seeking, lack of empathy, guilt, and propensity for arrogance, exploitation, and manipulation of others are among the characteristics of psychopaths. To them, the moral, social, and legal standards governing society are irrelevant. Individuals who score high on psychopathy tend to be more emotionally detached, leading to reduced stress, anxiety, and emotional exhaustion.[34] Due to their impulsivity, callousness, aggression, and lack of empathy, they may find it easier to engage in various crimes and CWBs within their organizations. This finding was anticipated because according to a recent study,[3] psychopathy is the most harmful dark personality trait. However, another study reported mixed results regarding personality traits and CWBs, revealing a positive correlation between Machiavellianism and CWBs, no correlation with psychopathy, and a negative correlation with narcissism.[35]

These variations in findings from earlier studies may stem from cultural or professional differences. Given the current empirical findings, it is not possible to determine which DT traits affect CWBs more strongly because the data are inconsistent. A more nuanced conclusion, supported by recent literature, is that the distinct influence of psychopathy on CWBs may arise from its association with callous affect and low agreeableness, traits that distinguish it from narcissism and machiavellianism.[27] A recent meta-analysis by Miao et al. (2023) identified the three strongest predictors of CWBs as psychopathy (ρ = 0.477), machiavellianism (ρ = 0.463),

and honesty-humility (ρ = −0.403), suggesting that psychopathy and machiavellianism exert robust effects across contexts, whereas our study's emphasis on narcissism (β = .59, p < 0.001) may reflect healthcare-specific dynamics.[30] A broader conclusion is that it is prudent to explore various motivational and burnout strategies across work settings when assessing DT. Although previous studies have indicated that individuals who scored high on DT traits tend to motivate themselves through external rewards, the specific environment influenced the emergence of different forms of motivation, particularly among those who score high on psychopathy and machiavellianism.[36]

Second, the connection between narcissistic personality traits and CWBs is supported by the theory of threatened egotism and aggression. According to this theory, narcissistic individuals are more likely to encounter information or circumstances that challenge their positive self-perception. These individuals are associated with a higher likelihood of developing negative emotions, such as rage, irritation, or hostility, in response to challenges or ego threats, which are linked to aggression. Based on this theory and earlier research, several possibilities have emerged, including workers with high narcissism who may express contempt for their co-workers. Other researchers have identified a link between narcissism and bullying behavior in the workplace. According to Schwarzkopf et al. (2016) target behavior mechanism, highly narcissistic employees can be bothersome, discouraging, and even contravene societal standards of courteous and cordial interaction due to their specific tendencies and immoral behavior.[19] Employees with strong narcissistic personalities frequently exhibit excessive pride, self-interest, and inflated self-image. When they believe that their coworkers may hinder their goals, they tend to feel disrespect for them. Consequently, before becoming targets of workplace bullying, they can easily cause difficulties, obstruct others, and even violate social norms of polite and friendly behavior.[7]

Third, the links between machiavellianism personality traits and CWBs were explained in a study by Kessler et al. (2010). Machiavellianism, defined by strategic manipulation, cynicism, and a focus on power, exerts a distinct influence on CWBs, primarily through calculated manipulative behaviors rather than overt aggression or impulsivity. According to this study the three components of Machiavellianism are manipulative behavior, harsh management methods, and maintaining power.[37] The results demonstrated that two of the three Machiavellianism components had no discernible impact on CWBs; the component that influenced CWBs was manipulative behavior. This suggests that machiavellianism's influence on CWBs is not uniformly strong but context-dependent, aligning with findings that its effect is significant only when risks are low or rewards are attainable.[27] Unlike the factors that improved outcomes, most factors did not contribute to an increase in unproductive workplace behavior. Palmer et al. (2017) confirmed this finding and found that machiavellianism had no significant impact on counterproductive work behavior. This suggests that employees who use deceitful tactics deliberately work carefully or perform duties in accordance with their rights and obligations. This could be their way of maximizing their contributions and achieving their work objectives.[38] Thus, while Machiavellianism can drive CWBs through manipulative tendencies, its weaker or inconsistent influence compared to psychopathy or narcissism may reflect its strategic nature, which avoids reckless exposure to consequences. Additionally, Machiavellians tend to be motivated primarily by instrumental motivation and exhibit more signs of exhaustion than narcissists. However, it is worth noting that what sets them apart from the other two DT categories is that higher levels of instrumental motivation result in higher levels of exhaustion. Machiavellians, therefore, immerse themselves in work (accepting more projects and tasks) because of instrumental motivation, which causes higher exhaustion as they work harder than others to obtain rewards. However, this process does not increase the level of job disengagement.

Emotional exhaustion was tested as a mediator between DT traits and CWBs. When individuals experience stress or burnout, they act in unusual ways to protect their limited resources; in doing so, they might ignore clients or customers, refuse to complete tasks, or take longer breaks than allowed.[22] According to Conservation of Resources (COR) Theory Hobfoll (2011), passive

CWBs may help preserve one's remaining resources by distancing oneself from work demands. For instance, consciously putting little effort into working slowly can serve as a defense mechanism for individuals with depleted resources.[39] The mediation analysis revealed that emotional exhaustion partially mediates the relationship between DT traits and CWBs, with a Variance Accounted For (VAF) of 42%, indicating that 42% of the effect of DT traits on CWBs is explained through emotional exhaustion. This partial mediation suggests that while burnout significantly contributes to the expression of CWBs among individuals with DT traits, other direct pathways (e.g., intentional malice or opportunism inherent to DT traits) also play a role. However, the mediation effect was not full, implying that emotional exhaustion does not entirely account for the link between DT traits and CWBs.

This finding has practical implications for workplace interventions. Organizations could implement burnout reduction strategies, such as offering stress management training or workload adjustments, to mitigate CWBs linked to DT traits. However, since the mediation is partial, additional measures addressing the proactive and manipulative tendencies of DT traits (e.g., stricter oversight or ethics training) may be necessary to completely address these behaviors. For example, an exhausted office assistant might misplace an important file to delay a demanding task, reflecting burnout-driven CWBs, whereas an assembly line worker installing a part incorrectly could stem from either burnout or a deliberate act tied to psychopathy. These examples highlight the need for tailored interventions that address both burnout and the unique behavioral tendencies of DT traits.

Although these actions may be detrimental to the organization, they illustrate how individuals with limited resources respond to emotional exhaustion. However, it is possible that the aforementioned actions do not fully capture the range of behavioral reactions accompanying burnout. When individuals lack resources to cope with emotional fatigue, they may respond in more proactive ways that align with their remaining capacity.

Despite these valuable insights, several limitations should be noted. Not all instances of counterproductive work behavior can be attributed solely to DT personality traits, as the relationship between personality and behavior is complex and influenced by various environmental and organizational factors. Moreover, the cross-sectional design limits the ability to draw causal inferences or to examine how the dynamics among DT traits, CWBs, and burnout may evolve over time. Data were collected exclusively from the health sector of South Punjab, Pakistan, which restricts the generalizability of the findings. Further research is therefore required, as studies in this area remain limited. Future research should extend to diverse sectors and populations to obtain more universally applicable findings, and longitudinal approaches are encouraged to capture the temporal dynamics of these relationships. Additionally, the impact of proactive and DT personality traits on unproductive work behavior could be explored in greater depth. To better comprehend the roles of contextual elements in shaping the effects of DT traits, future investigations may also examine potential moderating or mediating variables, such as psychological capital, turnover intention, and organizational cynicism.

CONCLUSION AND RECOMMENDATION

This study explored the relationship between dark personality traits narcissism, machiavellianism, and psychopathy and CWBs, revealing nuanced findings. Narcissism emerged as the most significant predictor of CWBs, reflecting its disruptive influence on workplace harmony. However, Machiavellianism and psychopathy play complex roles. Employees high in Machiavellianism demonstrated interpersonal adaptability, which reduced the impact of role conflict and emotional exhaustion on CWBs, while psychopathy was linked to a drive for job satisfaction that, in certain contexts, lessened CWBs. Emotional exhaustion was a critical mediator, with stressed employees resorting to CWBs as a coping mechanism, aligning with conservation of resources theory.

To address these findings, organizations should use psychological assessments and struc-

tured interviews during recruitment to better identify traits that influence workplace behavior. Training programs on emotional regulation and resource management can help employees manage stress and reduce burnout-related CWBs. Policies fostering inclusivity, ethical behavior, and clear performance evaluations are essential for mitigating the negative effects of narcissistic and Machiavellian tendencies. Future research should explore cultural and contextual factors affecting these dynamics, while organizations can develop tailored motivational strategies, such as ethical leadership to manage narcissistic tendencies and intrinsic rewards to leverage Machiavellian traits. By integrating these approaches, organizations can reduce CWBs and promote a healthier, more productive workplace.

AUTHOR CONTRIBUTIONS

Conceived and designed the experiments by RSB; HB performed the experiments; ZZ and RSB analyzed the data; HA contributed reagents/materials/analysis tools, and wrote the manuscript. The authors have read and approved the final manuscript. ZZ = Zeinab Zaremohzzabieh; RSB = Ruqia Safdar Bajwa; HA = Haslinda Abdullah; HB = Huma Batool.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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