administrative sciences

MDPI

Article

Coping with Dark Leadership: Examination of the Impact of Psychological Capital on the Relationship between Dark Leaders and Employees' Basic Need Satisfaction in the Workplace

Alina Elbers [1,*], Stephan Kolominski [2] and Pablo Salvador Blesa Aledo [3]

[1] Facultad de Economía y Empresa, UCAM Universidad Católica de Murcia, 30107 Murcia, Spain
[2] Department of Business Psychology, FOM University of Applied Sciences, 45127 Essen, Germany
[3] Facultad de Ciencias Sociales y de la Comunicación, UCAM Universidad Católica de Murcia, 30107 Murcia, Spain
* Correspondence: alina.elbers@gmx.de

Abstract: In leadership research, the Dark Triad of personality has become a topic of great interest. This construct includes the personality traits of narcissism, Machiavellianism, and subclinical psychopathy and is associated with several negative outcomes for organizations and followers' satisfaction. In contrast, the construct of psychological capital, which includes hope, resilience, self-efficacy, and optimism, is positively related to extra-role organizational citizenship behaviors and employee performance. Therefore, the question arises whether people can benefit from psychological capital when confronted with a manager that exhibits dark personality traits. Subsequently, the purpose of this study is to examine the potential impact of psychological capital on the relationship between the Dark Triad traits of managers and the work-related basic need satisfaction of employees. Thus, a dataset of 469 employees was analyzed. Regression analyses demonstrated that the Dark Triad of personality and psychological capital both work as predictors of work-related basic need satisfaction. When controlling for mediating effects, psychological capital appeared as a partial mediator of the relationship between the managers' dark traits and the employees' basic need satisfaction in the workplace. The theoretical and practical implications of the results, as well as suggestions for future research, are discussed.

Keywords: Dark Triad of personality; leadership; psychological capital; Self-Determination Theory; basic need satisfaction

Citation: Elbers, Alina, Stephan Kolominski, and Pablo Salvador Blesa Aledo. 2023. Coping with Dark Leadership: Examination of the Impact of Psychological Capital on the Relationship between Dark Leaders and Employees' Basic Need Satisfaction in the Workplace. *Administrative Sciences* 13: 96. https://doi.org/10.3390/admsci13040096

Received: 15 January 2023
Revised: 10 March 2023
Accepted: 14 March 2023
Published: 23 March 2023

1. Introduction

So far, the Dark Triad of personality has been examined with a particular interest in its harmful effects on organizations and employees (Paulhus and Williams 2002; O'Boyle et al. 2012). It includes the three personality traits of narcissism, Machiavellianism, and subclinical psychopathy and has been an emerging field of research for two decades (Furnham et al. 2013; Paulhus and Williams 2002). As personality has been identified as one of the predictors of leadership (Hogan and Kaiser 2005), and dark traits are considered antecedents of destructive leadership (Krasikova et al. 2013), the Dark Triad of personality is often associated with negative outcomes for organizations, and potentially bright sides tend to be neglected (O'Boyle et al. 2012).

In contrast, Self-Determination Theory (SDT) deals with the satisfaction of basic needs as they specify the conditions under which humans unfold their full potential (Deci and Ryan 1985). In SDT, the needs for autonomy, competence, and relatedness have become predictors of well-being and functioning, and empirical findings have transferred those assumptions to the workplace (Van den Broeck et al. 2010).

Apart from need satisfaction, the state-like construct of psychological capital, which includes optimism, resilience, self-efficacy, and hope (Luthans et al. 2007), has also appeared to be a predictor of performance and satisfaction in the workplace (Luthans et al. 2008). Summarizing these constructs, the Dark Triad of personality appears as a predictor of unhappiness and dissatisfaction in the workplace when leaders are high in those traits; on the other hand, the satisfaction of certain needs and the construct of psychological capital provide the opposite effect. To the authors' best knowledge, research on the Dark Triad of personality and preventive measures for its detrimental effects have mainly focused on organizational aspects and have neglected employee-related factors.

Thus, the purpose of this study is not only to propose the importance of psychological capital and its potential effect as a coping mechanism in the workplace but also to broaden the existing approaches to a more employee-related approach when analyzing the effects of the Dark Triad of personality.

2. Literature Review and Hypothesis Development

2.1. The Dark Triad of Personality and Destructive Leadership

The construct of the Dark Triad of personality was first introduced in 2002 and includes the three personality traits of narcissism, Machiavellianism, and subclinical psychopathy. For the initial study, the three constructs were examined in a sample of 245 students and appeared as overlapping but distinct constructs. Despite their distinct origins, the constructs share several common features as they all show a malevolent character with tendencies towards self-promotion, emotional coldness, duplicity, and aggressiveness (Paulhus and Williams 2002).

Some of the most common behaviors of Dark Triad leaders are ridiculing and degrading employees, blaming others for their own mistakes, lying and deceptiveness, harassment, and even physical aggression (Mathieu et al. 2014).

Narcissism is often described as an individual difference marked by grandiosity, self-love, and inflated self-views (Campbell et al. 2011). In the organizational context, narcissists tend to be keenly interested in their own tasks and contributions, while overlooking those of others. Their feeling of specialness persists even when proof arises that this is not the case. They are convinced that they can operate on their own, do not need support, and deserve all the credit for their success (Stein 2013).

Machiavellians view and manipulate others for their own purpose, they lack interpersonal relationships, and there is concern with conventional morality. They are also characterized by mistrust in human nature and opportunism (Christie and Geis 1970). In experimental settings, high Machiavellian leaders appeared to be less concerned with the individuals' feelings than those who were low in Machiavellianism. They turned out as successful manipulators with a task-oriented approach, a tendency to gain control in group situations, and a resistance to attitude changes (Drory and Gluskinos 1980).

Finally, psychopaths are generally unconcerned with social obligations and the norm of reciprocity, they do not respect the right of others, and lack diligence and disdain for responsibility. Overall, their actions are not consistent with the basic principles of social exchange, which include trust and cooperation (O'Boyle et al. 2012).

Leaders with certain dispositional character traits that lead them to hostility are more likely to engage in destructive leadership (Spain et al. 2014; Kellerman 2004). To be specific, leaders with the tendency to emphasize their self-interest over the interests of others and at the expense of others are prone to engaging in destructive leadership. In this context, the Dark Triad traits are considered the most prominent dispositions reflecting the above-mentioned preoccupation with self-interest. Leaders high in narcissism are likely to counteract others' needs when setting goals, and Machiavellians tend to pursue their own goals even if they harm the organization or followers, and they make their followers achieve goals by using harmful methods of influence. Psychopaths are likely to be self-centered, manipulative, and prone to lying, thus they tend to underlie deviance and counterproductive work behavior (Krasikova et al. 2013). In a meta-analysis,

O'Boyle et al. (2012) even found evidence for an association of all the components of the Dark Triad of personality with counterproductive work behavior. At the same time, only Machiavellianism and psychopathy were associated with decreased job performance.

In summary, the harmful effects of the Dark Triad of personality have been of great interest in empirical research. Although these effects are common knowledge, those people still appear attractive in job interview situations and are hired for management positions. In those positions, they do not only harm organizations in terms of counterproductive work behavior, but also employees in terms of destructive leadership (O'Boyle et al. 2012; Kellerman 2004; Spain et al. 2014). In contrast to all of their harmful effects, dark traits often co-exist with well-developed social skills, so there is also a bright side of personality, and narcissism has even shown positive qualities (Rauthmann and Kolar 2012). This bright side often appears in job interview situations and compensates for the dark sides, at least in the short run. Unfortunately, this results in the bad sides being difficult for recruiters to detect (Hogan and Kaiser 2005).

As aforesaid, personality traits of leaders have been found to predict their leadership style (Hogan and Kaiser 2005). Overall, destructive or toxic leadership has not yet been clearly defined, but there are obvious similarities between the concepts. On a meta-analytic level, destructive leadership was summarized as "a process in which over a longer period of time the activities, experiences and/or relationships of an individual or the members of a group are repeatedly influenced by their supervisor in a way that is perceived as hostile and/or obstructive" (Schyns and Schilling 2013, p. 141). The construct of the toxic triangle takes this approach even further. According to the model, destructive leadership is a result of destructive leaders, susceptible followers, and a conducive organizational environment (Padilla et al. 2007), and other researchers have agreed that it is not a one-dimensional construct (Einarsen et al. 2007). Destructive leaders are characterized by five components within the toxic triangle, namely charisma, personalized use of power, negative life themes, an ideology of hate, and finally, narcissism. Regarding followers, passive conformers can foster destructive leaders as they are vulnerable to negative influences, and colluders support bad leaders because they want to promote themselves in an environment consistent with their own worldview. The construct is completed by conducive environments as the authors state that effective institutions will prevent destructive leaders from succeeding (Padilla et al. 2007). Regardless of the exact definition, destructive leadership has been empirically linked to lower job and life satisfaction, lower commitment, psychological distress, and other employee-related outcomes (Tepper 2000). In prior studies, results indicated that employees confronted with toxic leadership mainly reacted with coping strategies such as seeking social support, leaving the organization or taking leave, ruminating and even challenging the leader. Those responses were used as an adaptive process to reduce the psychological, emotional and physical impact of toxic leadership (Webster et al. 2016).

Findings on the negative effects of destructive leadership were recently reconfirmed by Snow et al. (2021). In their examinations, one of the subscales explicitly measured leaders' narcissism as one of the components of toxic leadership. As a result, they identified a notable emergence of toxic leadership and consequences such as decreased job satisfaction, burnout, and a negative impact on career development, as well as adverse effects on the psychological, emotional, and physical well-being of employees. Thus, they conclude that the quality of leadership appears to have a considerable impact on the health and occupational well-being of employees and should be further investigated.

2.2. Self-Determination Theory and Basic Need Satisfaction

Self-Determination Theory is an empirically based theory on human motivation, development, and well-being. The first relatively comprehensive statement of SDT was published by Deci and Ryan (1985). They report that three basic needs specify the conditions under which humans unfold their full potential.

In SDT, the psychological needs for autonomy, competence, and relatedness explain goal-directed behavior of humans. It is suggested that regulatory processes of those needs

are associated with effective functioning and well-being. Deci and Ryan (2000) state that a full understanding of goal-directed behavior, psychological development, and well-being cannot be accomplished without addressing the needs. The satisfaction of the needs of autonomy, competence, and relatedness have become predictors of individuals' optimal functioning. Autonomy is defined as the experience of a sense of volition or psychological freedom, competence is described as the feeling of being effective, and finally, relatedness is defined as the feeling of being loved or cared for (Van den Broeck et al. 2010). SDT distinguishes between different types of motivation, including both the level and quality of motivation. Overall, three major categories have been described so far, namely amotivation, intrinsic motivation, and extrinsic motivation. Amotivation is defined as the general absence of motivation toward an activity. Second, intrinsic motivation is understood as performing an activity for its own sake, and in contrast, extrinsic motivation is defined as engaging in activities for instrumental reasons such as receiving rewards, avoiding punishments or criticism, boosting self-esteem, or reaching a valued goal (Gagné et al. 2014). In this context, Howard et al. (2016) pointed out that highly motivated employees are the ones with the most positive performance and well-being outcomes.

In empirical research, work-related need satisfaction has been associated with increased overall well-being and even less ill-being, so these findings are consistent with the claim that need satisfaction increases individuals' thriving across different life domains. Baard et al. (2004) provided further support for the relevance of Self-Determination Theory in the workplace when they examined people's intrinsic needs in an occupational setting with the result that intrinsic need satisfaction is particularly met when managers are perceived as autonomy-supportive.

The psychological needs specified in SDT, as well as other theoretically derived antecedents to work motivation (such as leadership), are related to motivation. In turn, they are also related to work outcomes such as well-being and performance (Gagné et al. 2014). As aforesaid, the Dark Triad traits have been described as antecedents of destructive leadership, which in turn is related to employees' well-being, negative affectivity, and stress (Schyns and Schilling 2013). Therefore, we hypothesize:

H1. *The Dark Triad level of managers is negatively related to employees' basic need satisfaction.*

2.3. Psychological Capital

Psychological capital, as a derivative of positive organizational behavior, is mainly drawn from the theory and research in positive psychology, which is concerned with people's strengths rather than with weaknesses and dysfunctions (Luthans et al. 2008).

Hope, as one of the components of psychological capital, has been linked to employee satisfaction, performance, happiness, and commitment (Youssef and Luthans 2007), and hopeful leaders appeared as a predictor for employee satisfaction (Peterson and Luthans 2003). Second, resilience is the positive psychological capacity to rebound from negative events such as conflict or failure and to cope successfully with significant change, adversity, or risk (Luthans 2002). Regarding its impact on organizations, resilience has been linked to work-related outcomes such as organizational commitment (Youssef and Luthans 2007). Optimism is described as a positivity-oriented future expectation (Luthans 2002) and was found to have a significant impact on performance, satisfaction, and happiness. Regarding its impact on the workplace, a meta-analysis of 114 studies found a strong relationship between self-efficacy and work-related performance, whereby this relation was moderated by task complexity (Stajkovic and Luthans 1998).

Psychological capital is often described as state-like (rather than trait-like), which means it is moderately stable and can be changed by experiences and can even be developed in training (Avey et al. 2010; Luthans et al. 2008). It has been presented as an emerging higher-order construct that organizations can invest in as it can contribute to competitive advantage (Luthans et al. 2008). However, studies on the development of psychological capital have also demonstrated the effect that individuals who experience a

stressful working environment and high levels of work-family conflicts show lower levels of psychological capital (Newman et al. 2014). Additionally, on a meta-analytical level, psychological capital emerged as a reliable predictor of important employee outcomes in the organizational context, such as employee attitudes, behaviors, and performance. Employees high in psychological capital are more likely to be energized and put effort into their activities because they believe they are capable of achieving their goals, generate multiple solutions, have positive expectations about results, and respond positively when facing adversity (Avey et al. 2011).

So far, it is obvious that all of the components of psychological capital are related to performance and satisfaction in the workplace. With reference to the empirical findings on the Dark Triad of personality, the question arises whether people with higher levels in psychological capital are able to cope better with destructive leadership, and whether the increase of psychological capital can operate as a coping strategy that is more self-efficacious than externally driven.

As mentioned before, basic need satisfaction in the workplace has also demonstrated positive relations with the performance and well-being of employees. Based on these findings on the Dark Triad of personality, work-related basic need satisfaction, and psychological capital, we finally hypothesize:

H2. *Psychological capital of employees mediates the relationship between the Dark Triad level of managers and the basic need satisfaction of employees.*

3. Methods

3.1. Sample and Procedures

For the present research, an online-based quantitative survey was conducted. Data collection was realized by using Sosci-Survey, a tool for academic research. At all times, the guidelines for ethical research were met, i.e., participants took part on a voluntary basis, datasets were collected anonymously and handled confidentially, and participants declared that results may be used for scientific purposes. The target group of the study was characterized by people in permanent employment with a direct superior; thus, self-employment was an exclusion criterion. The research tool was used to create the questionnaire for the study and generated a hyperlink, which was then distributed by the authors on various channels over a period of about four weeks. The questionnaire was distributed via email in personal networks, professional networks (such as mailing distribution lists in several companies), and in occupational social media networks. Additionally, the link was published in social media groups for academic research to gather even more participants. Overall, no certain branch was targeted, but it was always ensured that participants without direct superiors were excluded. In the introductory story of the questionnaire, participants were informed that the survey deals with leadership and basic need satisfaction in the workplace. In this way, 672 participants took part in the online survey. The questionnaire started with a question on participants' status of employment and whether they had a direct superior that could be evaluated in the following. In total, 187 participants were excluded as they either had no direct superior or stopped the survey by themselves, so 485 datasets remained. The data collection tool provides a so-called relative speed index for each participant, which identifies datasets answered faster than the median value of all participants. Datasets with an index higher than 2.0 are recommended to be seen as critical as participants might have browsed through the questions too quickly and have not properly read them (Leiner 2019). Thus, another 16 datasets were eliminated. In sum, 469 datasets remained for analysis. Thus, the final sample consisted of 469 German-speaking employees in permanent positions from various branches. Furthermore, 39.9% of the sample were male, and 60.1% were female. The sample's age structure was divided as follows: 6.18% were in the age group 18–25, 40.72% were in the age group 26–35, 24.95% were in the age group 36–45, 16.63% were in the age group 46–55, another 11.30% were in the age group 56–65, and only 0.21% were older than 65 years. Overall, the age group from 26 to 35 years was most

predominantly represented. Due to the exclusion question at the start of the questionnaire, it was ensured that each participant had a direct superior to be evaluated, irrelevant of the exact job position of the participant.

3.2. Measures

Overall, the constructs of this study were measured with validated scales that were obtained from the subject-related literature. At the start of the questionnaire, participants were asked for informed consent, then the selected inventories were shown on the following pages.

3.2.1. Dark Triad of Personality

An existing measure is represented by the Dirty Dozen, which was developed by Jonason and Webster (2010) and consists of 12 items and aims to avoid participant fatigue by reducing the scale size considerably compared to standard measures for the Dark Triad traits. With 91 items in sum, the 3 standard measures appear remarkably inefficient for the measurement of the whole construct, so the need for a short scale emerged (Jonason and Webster 2010; Küfner et al. 2014). For the development of the Dirty Dozen scale, 1085 participants were involved in 4 studies to examine structural reliability, convergent and discriminant validity, and also the test-retest reliability. The standard measures and their items were used as the basis for the scale development, which are namely the Narcissistic Personality Inventory-40, the Self-Report Psychopathy Scale-III and the Mach IV. The final version of the Dirty Dozen showed reasonable psychometric properties and acceptable convergent and discriminant validity (Jonason and Webster 2010). The authors stated that such a short measure is always a compromise between precision and efficiency, but when testing for consistency, the levels of internal consistency and reliabilities for the subscales were reasonable (Jonason and Webster 2010; Jones and Paulhus 2014). At the same time, when measuring all traits with their standard scales, some items inevitably overlap as the separate constructs were not developed to measure the traits distinctively. However, the Dirty Dozen was not designed to examine all nuances of the three separate traits, but to capture their common core (Küfner et al. 2014). In this study, the Dirty Dozen was used for the others-report, as employees evaluated the Dark Triad level of their managers. The three traits within the Dark Triad were measured with four items each, and all items were measured on a 7-point Likert scale. Originally, the Dirty Dozen scale was designed as a self-report measure, but prior studies have shown evidence that it works well as a peer report where items are modified from the first person to the third person (Lee et al. 2013).

As the study was conducted with a German-speaking sample, the validated German version of the Dirty Dozen was applied. In three studies, the German set of items was empirically validated and showed moderate to high correlations with the standard measures of the three traits (Küfner et al. 2014). With a Cronbach's alpha of $\alpha = 0.95$, the Dark Triad measure appeared reliable in the present study.

3.2.2. Work-Related Basic Need Satisfaction

As stated before, Self-Determination Theory defines the satisfaction of the intrinsic needs of autonomy, competence, and relatedness as important predictors of individuals' functioning across different life domains. Until 2010, existing scales had not been formally validated and did not entirely capture the measurement of basic need satisfaction, so Van den Broeck et al. developed the so-called Work-related Basic Need Satisfaction scale (W-BNS), which fixed the lack of appropriate measures (Van den Broeck et al. 2010). Items were measured on a 7-point Likert scale. As no validated German version of the W-BNS scale exists so far, the items were translated from English into German according to the guidelines for cross-cultural research. In those guidelines, Brislin recommends a four-step process for the translation of items for scientific research. The procedure starts with the translation from the original into the target language. The target language version then has to be checked and back-translated by a third person, and finally, the first original item

and the back-translated item are controlled for meaning errors. If they exist, the procedure is repeated until no more meaning errors emerge (Brislin 1970). A pretest was conducted to ensure that all items in the questionnaire would be easily understandable and to avoid misconceptions. In this context, particular attention was given to the translated items of this W-BNS scale.

In this sample, Cronbach's alpha was $\alpha = 0.89$ for the scale, so the measure appeared reliable.

3.2.3. Psychological Capital

Researchers suggest that managing the psychological capital of managers might provide a competitive advantage when facing the growing challenges for organizations (Avey et al. 2010), but for this study, it was assumed that it is also important to consider an employee-related approach as they are the ones who might suffer from destructive leadership. In previous studies on psychological capital and performance, there was only little difference between self-reports and supervisor evaluations, or even objective measures (Avey et al. 2011). Thus, the psychological capital of participants themselves was measured by using the Compound Psychological Capital Scale. Again, as the study was conducted among German-speaking employees, the German version of the Compound Psychological Capital Scale (Lorenz et al. 2016) was used, so no translation was necessary at this point. Items were measures on a 7-point Likert scale.

For this scale, Cronbach's alpha was $\alpha = 0.86$, so again, the measure appeared appropriate for the study.

3.3. Avoidance of Common Method Bias

In order to avoid common method bias, several measures were carried out, although there is still little agreement among researchers if this really is a problem. As a procedural remedy, Podsakoff et al. recommend a cover story and clear instructions for participants. Both the cover story and instructions were provided before starting the questionnaire, and respondents were informed that their anonymity was ensured permanently. Additionally, they were asked to answer as intuitively as possible. As mentioned above, a pretest was conducted to ensure that all items would be concise and easily understandable, especially those that had to be translated into English. However, it should be noted that method bias cannot inflate quadratic or interaction effects, but it might deflate them, so this should be considered for the mediation analysis (Podsakoff et al. 2012).

4. Results

For the whole study, analyses were conducted using the IBM SPSS Statistics software (version 28) in addition to the PROCESS macro (version 4.0) by Andrew F. Hayes (Hayes 2022) for the mediation analysis. It uses ordinary least square regression, yielding unstandardized path coefficients for total, direct, and indirect effects. Effects can be deemed significant when the confidence intervals of such analyses do not include zero.

4.1. Descriptive Statistics and Correlations

For the relationship between the Dark Triad of managers, employees' psychological capital, and their work-related basic need satisfaction, descriptive statistics and correlational coefficients were analyzed (Table 1).

Table 1. Descriptive statistics, correlations, and Cronbach's alpha values (in parentheses) according to Elbers et al. (2022).

Variable	Mean	SD	1	2	3
1. Dark Triad (manager)	2.95	1.49	(0.95)		
2. Psychological capital (employee)	5.41	0.76	−0.11 *	(0.86)	
3. Work-related basic need satisfaction (employee)	5.17	0.88	−0.41 **	0.48 **	(0.89)

* $p < 0.05$, ** $p < 0.01$.

As shown, the Dark Triad of personality of leaders is negatively related to the work-related basic need satisfaction of employees ($r = -0.41$, $p < 0.01$), and also negatively related to their psychological capital ($r = -0.11$, $p < 0.05$). A positive correlation was found regarding the relationship between employees' psychological capital and their work-related basic need satisfaction ($r = 0.48$, $p < 0.01$).

Overall, all correlations appeared significant. Consistent with research on the Dark Triad of personality, the negative association of the Dark Triad of leaders and employees' basic need satisfaction in the workplace can already be reported. Detailed hypotheses testing will be executed below.

4.2. Hypotheses Testing

Before testing mediating effects with the PROCESS macro, regression analyses were conducted. Results are shown in Tables 2–4.

Table 2 shows the results of the regression analysis of the Dark Triad personality of leaders using employees' work-related basic need satisfaction as the dependent variable. With a regression coefficient of $\beta = -0.41$ and $R^2 = 0.17$ ($p < 0.001$), results demonstrate support for Hypothesis 1 that the Dark Triad of managers is negatively associated with employees' work-related basic need satisfaction. Thus, higher levels of dark personality traits of leaders correspond with lower work-related satisfaction of employees.

Table 2. Regression analysis for the Dark Triad personality of managers using employees' basic need satisfaction as the criterion variable.

Predictors	Unstandardized Coefficients		Standardized Coefficients		
	B	**SE**	**Beta (β)**	**t**	***p***
(Constant)	5.88	0.08		71.22	<0.001
Dark Triad (manager)	−0.24	0.03	−0.41	−9.68	<0.001

Note. N = 469. $R^2 = 0.17$, adj. $R^2 = 0.17$. A bootstrap of 5000 samples was used.

Table 3 shows the results of the regression analysis of the Dark Triad personality of leaders again, but in this case, the psychological capital of employees is used as the dependent variable. The regression coefficient was $\beta = -0.11$ with an $R^2 = 0.01$ ($p < 0.05$). The dark traits of managers therefore predict a slight decrease in employees' psychological capital.

Table 3. Regression analysis for the Dark Triad of managers using employees' psychological capital as the criterion variable.

Predictors	Unstandardized Coefficients		Standardized Coefficients		
	B	**SE**	**Beta (β)**	**t**	***p***
(Constant)	5.58	0.09		71.80	<0.001
Dark Triad (manager)	−0.06	0.03	−0.11	−2.45	0.04

Note. N = 469. $R^2 = 0.01$, adj. $R^2 = 0.01$. A bootstrap of 5000 samples was used.

In Table 4, the results of the regression analysis of psychological capital and employees' basic need satisfaction as the dependent variable are presented. As assumed, results show that the psychological capital of employees is positively associated with their basic need satisfaction in the workplace. The regression coefficient was $\beta = 0.48$ with $R^2 = 0.23$ ($p < 0.001$). Hence, the higher the psychological capital of employees, the higher their work-related basic need satisfaction.

Table 4. Regression analysis for psychological capital using employees' basic need satisfaction as the criterion variable.

Predictors	Unstandardized Coefficients		Standardized Coefficients		
	B	SE	Beta (β)	t	*p*
(Constant)	2.14	0.28		8.36	<0.001
Psychological capital (employee)	0.56	0.05	0.48	11.95	<0.001

Note. N = 469. R^2 = 0.23, adj. R^2 = 0.23. A bootstrap of 5000 samples was used.

Most important to this examination, support for the study's major Hypothesis 2 was found in the mediation analysis (Figure 1). As recommended by Hayes and Cai (2007), a heteroskedasticity-consistent standard error (HCSE) was used when executing the mediation analysis. In particular, the so-called HC4 was chosen as it demonstrates the most recent proposal among existing HCSE and is able to even take large leverage values into consideration (Cribari-Neto 2004).

Results indicate that the indirect effect of the Dark Triad of managers on employees' work-related basic need satisfaction is statistically significant (*CI* = (−0.06; −0.002)). Therefore, the model provides evidence for a mediating effect. Results of the mediation analysis executed with model 4 of the PROCESS macro are presented in Figure 1.

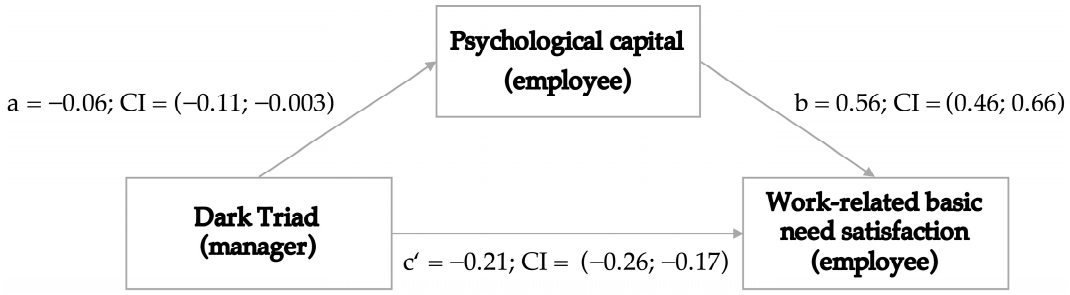

Figure 1. Results of mediation analysis (PROCESS macro Model 4) with coefficients and confidence intervals in parentheses.

Then, the total and direct effects were considered to further specify whether this mediation operates fully or partially. As presented in Figure 2, the total effect of the Dark Triad of managers on employees' basic need satisfaction is statistically significant and demonstrates its contribution to employees' well-being in the workplace. In the present model, the direct effect is statistically significant (*CI* = (−0.26, −0.17)), as shown in Figure 1, so the degree of mediation can be declared partially, which will be further discussed below.

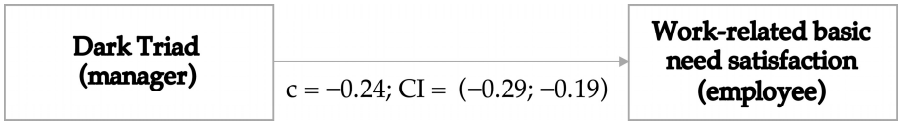

Figure 2. Total effect model with coefficient and confidence interval in parenthesis.

5. Discussion

The aim of this study was to investigate whether the emerging core construct of psychological capital plays a role in mediating the effects of a leader with a Dark Triad personality on the basic need satisfaction of employees in the workplace. Results show that leaders' Dark Triad personality is negatively related to their employees' basic need satisfaction, and also negatively related to their psychological capital. At the same time,

employees' psychological capital is positively related to their basic need satisfaction, and also the main hypothesis on the mediating effect of psychological capital was supported.

5.1. Theoretical and Practical Implications

Regarding the regression analyses, results demonstrated that the dark personality traits of leaders and the psychological capital of employees both work well as predictors of employees' well-being in terms of work-related basic need satisfaction. These results also particularly support earlier empirical findings on the negative outcomes of dark personality traits of leaders (Tepper 2000). However, the Dark Triad of leaders only had a slight but still significant impact on the psychological capital of employees. Therefore, the question arises why the effect of dark traits is so harmful for employees, but at the same time, their state-like concept of hope, optimism, resilience and self-efficacy is only slightly affected. In the present examination, we found that the relationship between leaders' Dark Triad personality and employees' basic need satisfaction is partially mediated by their psychological capital. Regarding the degree of mediation, the constructs of partial and complete (or full) mediation have been criticized by researchers. According to Hayes (2022), partial mediation implies that mechanisms through the mediator do not entirely account for the association between the independent and the dependent variable, whereas complete mediation states that the association is entirely accounted for by the indirect mechanisms. Thus, when full mediation is detected, no other mechanisms need to be proposed or investigated. In contrast, partial mediation is sometimes considered an incomplete model, although all models are wrong at a certain level. Moreover, the concepts generally appear very sample-size-dependent. Therefore, Hayes argues that those are empty concepts and the distinction of the terms should be abandoned. Additionally, Rucker et al. (2011) illustrate that a complete mediation provides no information at all about the existence or absence of other possible mediators. Furthermore, the absence of a significant direct effect should not lead to conclusions of full mediation, and complete mediation would imply that all possible mediators and suppressors have been measured without error. Subsequently, they even claim that due to the impossibility of perfect measurement, one cannot ever claim to have established complete mediation and researchers should focus more on effect sizes to talk about the magnitude of an effect.

For the organizational context, we draw two conclusions from our findings: First, our results support earlier empirical findings on the harmful effects of leaders with dark personality traits (Tepper 2000). Thus, organizations should focus more on detecting these personality traits in their recruiting processes. As stated before, they often co-exist with socially desirable skills, so they are not easy to identify (Hogan and Kaiser 2005). Second, the psychological capital of employees is only slightly affected by dark leaders, and at the same time, it is a predictor of basic need satisfaction. As stated before, psychological capital is considered state-like and can be changed and further developed by training (Luthans et al. 2008). It operates as a mediator of the relationship between dark leaders and the basic need satisfaction of employees and also as a strong predictor of basic need satisfaction, so organizations should invest in their workforce to achieve growth and subsequently improve their well-being in the workplace. Especially the fact that psychological capital is not strongly affected by leaders with dark personality traits indicates that organizations should be eager to increase employees' psychological capital, so they can cope with supervisors who are high in the dark traits. Thus, in times when the dark personality traits of leaders are hard to detect in selection processes, organizations should focus even more on the increase of their employees' psychological capital in terms of trainings or seminars. Psychological capital can operate as the competitive advantage of organizations as it enables people to rebound from negative experiences and have positive-oriented expectations (Luthans 2002; Avey et al. 2010). As leaving the organization has been presented as a coping strategy, organizations should be interested in supporting the development of the knowledge and skills to prevent employees from harmful effects before they occur (Webster et al. 2016).

Hence, we conclude that psychological capital is in fact a construct that helps organizations and employees to cope with dark leaders more easily. As people with dark personality traits appear attractive in interview situations, they will continue to occupy management positions in the future. To counteract harmful effects for employees and organizations, we highly recommend that human resource departments focus on the increase of employees' psychological capital.

5.2. Limitations and Suggestions for Future Research

Before final conclusions can be drawn, the limitations of the present study have to be considered.

First, a limitation that needs to be recognized concerns the nature of self-report data and the collection of data at a single moment. According to Podsakoff et al. (2012), those factors might lead to inflated relationships among variables. As stated before, several precautions were applied to prevent common method bias, such as ensuring anonymity, the confidential use of data, and the absence of right or wrong answers.

Second, although demonstrating statistically significant results, causal inferences that psychological capital causes basic need satisfaction cannot be made. We did find evidence on the predictors, but the direction of the relationship cannot be ultimately determined so far.

For future research, we also suggest longitudinal studies to replicate and validate our findings, especially regarding the effect of the Dark Triad of leaders on the psychological capital of employees, as this finding appears to be of great value for organizations.

As stated by Luthans et al. (2008), the four components of psychological capital have been determined to best meet the positive organizational behavior criteria, but other constructs are likely to be included in the future. Since the results described above have demonstrated a partial mediation, the inclusion of additional variables in further examinations is suggested. Recently, wisdom, courage, and forgiveness appear appropriate to be analyzed in the context of positive organizational behavior and psychological capital (Luthans et al. 2007). We found a strong negative association between the dark traits of managers and the well-being of subordinates, so there must be aspects that are strongly affected that have not been included in the model. Therefore, we recommend further research on employee-related aspects that are directly affected by the behavior of leaders and provide evidence for the decrease in well-being and satisfaction of employees. As claimed by Newman et al. (2014), the underlying mechanisms of human capital and its competitive advantages are only poorly understood, which is in line with our findings on the effect of the Dark Triad of managers on the psychological capital of followers.

Very often, research on the Dark Triad has focused on the aspects of occupational, educational, mating, and interpersonal as well as antisocial behavior (Furnham et al. 2013). Nevertheless, it has not yet provided detailed information on underlying processes that moderate or mediate those effects, so we highly recommend future research in this area.

6. Conclusions

Regression and mediation analyses were performed to analyze whether the Dark Triad level of leaders predicts their employees' work-related basic need satisfaction and whether the direct path would be mediated by employees' psychological capital. We found that the Dark Triad of leaders and employees' psychological capital operate as predictors of basic need satisfaction in the workplace. Moreover, the relationship between the Dark Triad of managers and employees' basic need satisfaction is partially mediated by employees' psychological capital.

To sum up, the present examination has provided information of great value on the effects of the Dark Triad and the role of psychological capital in the context of coping strategies and well-being in the workplace. Not only did it replicate existing findings on the detrimental effect of dark traits, but also research approaches considering the states of employees, and their added value for organizations were revealed.

Author Contributions: Conceptualization, A.E., S.K. and P.S.B.A.; Formal analysis, A.E.; Investigation, A.E.; Methodology, A.E., S.K. and P.S.B.A.; Supervision, S.K. and P.S.B.A.; Validation, S.K. and P.S.B.A.; Visualization, A.E.; Writing—original draft, A.E.; Writing—review & editing, S.K. and P.S.B.A. All authors contributed equally to this paper. The author mentioned first holds first authorship, the other authors contributed as co-authors. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data will be made available up reasonable request by contacting the first author.

Conflicts of Interest: The authors declare no conflict of interest.

References

Avey, James B., Fred Luthans, and Carolyn M. Youssef. 2010. The Additive Value of Positive Psychological Capital in Predicting Work Attitudes and Behaviors. *Journal of Management* 36: 430–52. [CrossRef]

Avey, James B., Rebecca J. Reichard, Fred Luthans, and Ketan H. Mhatre. 2011. Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes, Behaviors, and Performance. *Human Resource Development Quarterly* 22: 127–52. [CrossRef]

Baard, Paul P., Edward L. Deci, and Richard M. Ryan. 2004. Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings. *Journal of Applied Social Psychology* 34: 2045–2068.

Brislin, Richard W. 1970. Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology* 1: 185–216. [CrossRef]

Campbell, William Keith, Brian J. Hoffman, Stacy M. Campbell, and Gaia Marchisio. 2011. Narcissism in Organizational Contexts. *Human Resource Management Review* 21: 268–84. [CrossRef]

Christie, Richard, and Florence L. Geis. 1970. *Studies in Machiavellianism*. New York: Academic Press.

Cribari-Neto, Francisco. 2004. Asymptotic Inference under Heteroskedasticity of Unknown Form. *Computational Statistics and Data Analysis* 45: 215–33. [CrossRef]

Deci, Edward L., and Richard M. Ryan. 1985. *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press.

Deci, Edward L., and Richard M. Ryan. 2000. The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry* 11: 227–68. [CrossRef]

Drory, Amos, and Uri M. Gluskinos. 1980. Machiavellianism and Leadership. *Journal of Applied Psychology* 65: 81–86. [CrossRef]

Einarsen, Ståle, Merethe Schanke Aasland, and Anders Skogstad. 2007. Destructive Leadership Behaviour: A Definition and Conceptual Model. *Leadership Quarterly* 18: 207–16. [CrossRef]

Elbers, Alina, Stephan Kolominski, and Pablo Salvador Blesa Aledo. 2022. Destructive Leadership in Organizations: Studies on the Impact of the Dark Triad of Personality Using an Employee-Centered Approach. Paper presented at VIII Jornadas de Investigación y Doctorado "Ética En La Investigación Científica, Universidad Católica San Antonio de Murcia (UCAM), Murcia, Spain, June 24.

Furnham, Adrian, Steven C. Richards, and Delroy L. Paulhus. 2013. The Dark Triad of Personality: A 10 Year Review. *Social and Personality Psychology Compass* 7: 199–216. [CrossRef]

Gagné, Marylène, Jacques Forest, Maarten Vansteenkiste, Laurence Crevier-Braud, Anja Van den Broeck, Ann Kristin Aspeli, Jenny Bellerose, Charles Benabou, Emanuela Chemolli, Stefan Tomas Güntert, and et al. 2014. The Multidimensional Work Motivation Scale: Validation Evidence in Seven Languages and Nine Countries. *European Journal of Work and Organizational Psychology* 24: 178–96. [CrossRef]

Hayes, Andrew F. 2022. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 3rd ed. New York: The Guilford Press.

Hayes, Andrew F., and Li Cai. 2007. Using Heteroskedasticity-Consistent Standard Error Estimators in OLS Regression: An Introduction and Software Implementation. *Behavior Research Methods* 39: 709–22. [CrossRef] [PubMed]

Hogan, Robert, and Robert B. Kaiser. 2005. What We Know about Leadership. *Review of General Psychology* 9: 169–80. [CrossRef]

Howard, Joshua, Marylène Gagné, Alexandre J. S. Morin, and Anja Van den Broeck. 2016. Motivation Profiles at Work: A Self-Determination Theory Approach. *Journal of Vocational Behavior* 95–96: 74–89. [CrossRef]

Jonason, Peter Karl, and Gregory D. Webster. 2010. The Dirty Dozen: A Concise Measure of the Dark Triad. *Psychological Assessment* 22: 420–32. [CrossRef] [PubMed]

Jones, Daniel Nelson, and Delroy L. Paulhus. 2014. Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits. *Assessment* 21: 28–41. [CrossRef]

Kellerman, Barbara. 2004. *Bad Leadership: What It Is, How It Happens, Why It Matters*. Boston: Harvard Business School Publishing.

Krasikova, Dina V., Stephen G. Green, and James M. LeBreton. 2013. Destructive Leadership: A Theoretical Review, Integration, and Future Research Agenda. *Journal of Management* 39: 1308–38. [CrossRef]

Küfner, Albrecht C. P., Michael Dufner, and Mitja D. Back. 2014. Das Dreckige Dutzend Und Die Niederträchtigen Neun: Kurzskalen Zur Erfassung von Narzissmus, Machiavellismus Und Psychopathie. *Diagnostica* 61: 76–91. [CrossRef]

Lee, Kibeom, Michael C. Ashton, Jocelyn Wiltshire, Joshua S. Bourdage, Beth A. Visser, and Alissa Gallucci. 2013. Sex, Power, and Money: Prediction from the Dark Triad and Honesty-Humility. *European Journal of Personality* 27: 169–84. [CrossRef]
Leiner, Dominik J. 2019. Too Fast, Too Straight, Too Weird: Non-Reactive Indicators for Meaningless Data in Internet Surveys. *Survey Research Methods* 13: 229–48. [CrossRef]
Lorenz, Timo, Clemens Beer, Jan Pütz, and Kathrin Heinitz. 2016. Measuring Psychological Capital: Construction and Validation of the Compound PsyCap Scale (CPC-12). *PLoS ONE* 11: e0152892. [CrossRef] [PubMed]
Luthans, Fred. 2002. The Need for and Meaning of Positive Organizational Behavior. *Journal of Organizational Behavior* 23: 695–706. [CrossRef]
Luthans, Fred, Carolyn M. Youssef, and Bruce J. Avolio. 2007. *Psychological Capital: Developing the Human Competitive Edge*. Oxford: Oxford University Press.
Luthans, Fred, Steven M. Norman, Bruce J. Avolio, and James B. Avey. 2008. The Mediating Role of Psychological Capital in the Supportive Organizational Climate—Employee Performance Relationship. *Journal of Organizational Behavior* 29: 219–38. [CrossRef]
Mathieu, Cynthia, Craig S. Neumann, Robert D. Hare, and Paul Babiak. 2014. A Dark Side of Leadership: Corporate Psychopathy and Its Influence on Employee Well-Being and Job Satisfaction. *Personality and Individual Differences* 59: 83–88. [CrossRef]
Newman, Alexander, Deniz Ucbasaran, Fei Zhu, and Giles Hirst. 2014. Psychological Capital: A Review and Synthesis. *Journal of Organizational Behavior* 35: S120–S138. [CrossRef]
O'Boyle, Ernest Hugh, Donelson Ross Forsyth, George C. Banks, and Michael A. McDaniel. 2012. A Meta-Analysis of the Dark Triad and Work Behavior: A Social Exchange Perspective. *Journal of Applied Psychology* 97: 557–79. [CrossRef]
Padilla, Art, Robert Hogan, and Robert B. Kaiser. 2007. The Toxic Triangle: Destructive Leaders, Susceptible Followers, and Conducive Environments. *Leadership Quarterly* 18: 176–94. [CrossRef]
Paulhus, Delroy L., and Kevin M. Williams. 2002. The Dark Triad of Personality: Narcissism, Machiavellianism, and Psychopathy. *Journal of Research in Personality* 36: 556–63. [CrossRef]
Peterson, Suzanne J., and Fred Luthans. 2003. The Positive Impact and Development of Hopeful Leaders. *Leadership & Organization Development Journal* 24: 26–31. [CrossRef]
Podsakoff, Philip Michael, Scott B. MacKenzie, and Nathan P. Podsakoff. 2012. Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology* 63: 539–69. [CrossRef]
Rauthmann, John F., and Gerald P. Kolar. 2012. How 'Dark' Are the Dark Triad Traits? Examining the Perceived Darkness of Narcissism, Machiavellianism, and Psychopathy. *Personality and Individual Differences* 53: 884–89. [CrossRef]
Rucker, Derek D., Kristopher J. Preacher, Zakary L. Tormala, and Richard E. Petty. 2011. Mediation Analysis in Social Psychology: Current Practices and New Recommendations. *Social and Personality Psychology Compass* 5: 359–71. [CrossRef]
Schyns, Birgit, and Jan Schilling. 2013. How Bad Are the Effects of Bad Leaders? A Meta-Analysis of Destructive Leadership and Its Outcomes. *The Leadership Quarterly* 24: 138–58. [CrossRef]
Snow, Nicola, Niamh Hickey, Nicolaas Blom, Liam O'Mahony, and Patricia Mannix-McNamara. 2021. An Exploration of Leadership in Post-Primary Schools: The Emergence of Toxic Leadership. *Societies* 11: 54. [CrossRef]
Spain, Seth M., Peter Harms, and James M. Lebreton. 2014. The Dark Side of Personality at Work. *Journal of Organizational Behavior* 35: S41–S60. [CrossRef]
Stajkovic, Alexander D., and Fred Luthans. 1998. Self-Efficacy and Work-Related Performance: A Meta-Analysis. *Psychological Bulletin* 124: 240–61. [CrossRef]
Stein, Mark. 2013. When Does Narcissistic Leadership Become Problematic? Dick Fuld at Lehman Brothers. *Journal of Management Inquiry* 22: 282–93. [CrossRef]
Tepper, Bennett J. 2000. Consequences of Abusive Supervision. *Academy of Management Journal* 43: 178–90. [CrossRef]
Van den Broeck, Anja, Maarten Vansteenkiste, Hans de Witte, Bart Soenens, and Willy Lens. 2010. Capturing Autonomy, Competence, and Relatedness at Work: Construction and Initial Validation of the Work-Related Basic Need Satisfaction Scale. *Journal of Occupational and Organizational Psychology* 83: 981–1002. [CrossRef]
Webster, Vicki, Paula Brough, and Kathleen Daly. 2016. Fight, Flight or Freeze: Common Responses for Follower Coping with Toxic Leadership. *Stress and Health* 32: 346–54. [CrossRef]
Youssef, Carolyn M., and Fred Luthans. 2007. Positive Organizational Behavior in the Workplace: The Impact of Hope, Optimism, and Resilience. *Journal of Management* 33: 774–800. [CrossRef]