2023, Vol. 24, No. 2
ISSN 1667-4545
Recuperado de https://revistas.unc.edu.ar/index.php/revaluar

Laboratorio de Evaluación Psicológica y Educativa
Facultad de Psicología - Universidad Nacional de Córdoba

Argentine Adaptation of the Counterproductive Work Behavior Checklist - Short Version

Adaptación Argentina del Counterproductive Work Behavior Checklist - Short Version

María Laura Lupano-Perugini * [1] , Melissa Patricia Fabara-Torres [2]

1 - Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Universidad de Palermo, Buenos Aires, Argentina.
2 - Universidad de Palermo, Buenos Aires, Argentina.

Introduction
Methodology
Results
Discussion
References

Recibido: 20/02/2023 **Revisado:** 24/04/2023 **Aceptado:** 18/05/2023

Abstract

Two studies were conducted within the framework of undesirable behavior in the workplace. The objective of the first study was to validate the Counterproductive Work Behavior Checklist – Short Version (CWB-C-10) for research purposes in Argentina. It was carried out with a sample of 874 workers (54.7% women, 44.6% men) from Argentina with a mean age of 37.5 years old (SD = 12.2). The analyses carried out confirmed the one-dimensional structure of the test. Likewise, the internal consistency through alpha and omega coefficients was adequate. The objective of the second study was to identify psychological and organizational variables (Dark Triad personality traits, engagement, and job satisfaction) that allow predicting the development of counterproductive work behavior. It was carried out with a sample of 103 active workers (60.9% women, 39.1% men) from Argentina with a mean age of 33 years old (SD = 10.7). As a result, it was observed that the Machiavellianism trait and the job satisfaction level were the variables with the greatest predictive power.

Keywords: *counterproductive work behavior, Dark Triad, engagement, job satisfaction, adaptation*

Resumen

Los autores realizaron dos estudios. El objetivo del primero fue validar el Counterproductive Work Behavior Checklist - Short Version (CWB-C-10) para uso en investigación en Argentina. Contó con una muestra de 874 trabajadores/as (54.7% mujeres, 44.6% varones) activos/as de Argentina con una media de edad de 37.5 años (DE = 12.2). Los análisis efectuados permitieron confirmar la estructura unidimensional de la prueba. Asimismo, la consistencia interna mediante coeficiente alfa y omega resultó adecuada. El objetivo del segundo estudio fue identificar variables psicológicas y organizacionales (rasgos de personalidad de la Tríada Oscura, engagement, y satisfacción laboral) que permiten predecir el desarrollo de comportamiento laboral contraproducente. Contó con una muestra de 103 trabajadores/as (60.9% mujeres, 39.1% varones) activos/as de Argentina con una media de edad de 33 años (DE = 10.7). Como resultado, se observó que el rasgo maquiavelismo y el nivel de satisfacción laboral resultaron las variables de mayor poder predictor.

Palabras clave: *comportamiento laboral contraproducente, Tríada Oscura, engagement, satisfacción laboral, adaptación*

***Correspondence to:** Mario Bravo 1259 (1175), Autonomous City of Buenos Aires, Argentina. E-mail: mllupano@hotmail.com

How to cite: Lupano-Perugini, L., M., & Fabara-Torres, P., M., (2024): Argentine Adaptation of the Counterproductive Work Behavior Checklist - Short Version. *Revista Evaluar, 24*(2), 39-52. Recuperado de https://revistas.unc.edu.ar/index.php/revaluar

Authors' Notes: The current study is conducted with the support of PICT-2020-SERIEA-02184 grant: "Analysis of positive and negative personality traits in the workplace. A proposal for an alternative assessment to classical models".

Participaron en la edición de este artículo: Agustina Mangieri, Pablo Carpintero, Eugenia Barrionuevo, Florencia Ruiz, Ricardo Hernandez, Jorge Bruera.

Introduction

In organizations, behaviors driven by various factors take place. When behavior undermines efficiency instead of promoting it, it is known as counterproductive work behavior (CWB), the outcome of which negatively impacts both the individuals within an organization and the organization itself (Bennett & Robinson, 2000; Spector & Fox, 2002; Spector, 2006; Spector et al., 2010).

The relevance of studying these behaviors lies in several reasons. On the one hand, they can lead to economic harm. Additionally, they can damage the company's reputation, given the spread of detrimental rumors (Vélez-Vega, 2022), potentially involving the company in legal conflicts (Morf et al., 2017). Moreover, these behaviors impact the mental health and well-being of employees who are victims of them (Bowling & Michel, 2011; Ones & Dilchert, 2013; Mercado et al., 2018; Spector, 2006), resulting in losses of productivity and resources. The reason why the study of CWB becomes complex and necessary is that these behaviors tend to occur in a concealed or secretive manner (Spector, 2001). Therefore, it is crucial to investigate them anonymously in order to identify them in workplace environments.

Originally, these behaviors were examined in isolation, encompassing phenomena such as turnover intentions, absenteeism, aggression, theft, and so forth. In the mid-1990s, Robinson and Bennett (1995) initiated a comprehensive exploration, categorizing them collectively under the umbrella term 'counterproductive work behaviors' (CWBs). Subsequently, additional attitudes were incorporated into this conceptual framework, including bullying, retaliatory behaviors, and destructive leadership, among others. Broadly speaking, CWB denotes intentional actions and behaviors by employees that yield adverse consequences for both the organizational well-being and its stakeholders (Ones & Dilchert, 2013; Spector & Fox, 2002; Spector, 2006). Concerning generational factors, empirical findings indicate a higher prevalence of these behaviors among younger employees (Ng & Feldman, 2008; Pletzer, 2021).

Spector (2006) and Spector et al. (2010) developed an instrument to measure these behaviors: The Counterproductive Work Behavior Checklist (CWB-C). There are three versions of this test. The first version, with 45 items, assesses two dimensions of CWB (toward the organization and individuals). The second version, with 32 items, consists of five subscales: abuse, production deviance, sabotage, theft, and withdrawal or absenteeism. The third version, with 10 items, was developed to obtain an overall score, although, according to the authors, half of its items are focused on the organization and the other half on the individual. In its three versions, this instrument has been translated into several languages, including Spanish, English, German, Italian, and Polish (for more information, see https://paulspector.com/assessments/pauls-no-cost-assessments/counterproductive-work-behavior-checklist-cwb-c/counterproductive-work-behavior-checklist-cwb-c-translations/). However, the instrument has been validated and adapted only in a few countries, with publications in Italy (45-item version; Barbaranelli et al., 2013) and Pakistan (32-item version; Rauf & Farooq, 2014).

In this study, we aimed to validate the 10-item version for research purposes. Additionally, we were interested in analyzing the factors that may influence the occurrence of these behaviors in work environments. Therefore, we examined the relationship between CWB and the following variables: the Dark Triad personality traits, work engagement, and job satisfaction.

The Dark Triad of personality (Paulhus & Williams, 2002), composed of the traits of Machiavellianism, narcissism, psychopathy, and later sadism (Paulhus, 2014), may provide a valid justification for the presence of undesirable behaviors in the workplace. According to a meta-analysis by O'Boyle et al. (2012) and subsequent studies (e.g., DeShong et al., 2015; Filipkowski & Derbis, 2020; Junça-Silva & Silva, 2023; Miller, 2017; Uysal et al., 2023), the Dark Triad positively correlates with CWB. For example, Rehman and Shahnawaz (2018) conducted a study on managers and determined that the Machiavellianism trait was significantly associated with CWB because individuals with this trait were less likely to adhere to common workplace norms. Similarly, Blickle and Schütte (2017) found that high levels of psychopathy, along with low interpersonal influence, led to an increase in counterproductive behaviors directed toward the organization. Given the dissimilar results regarding the traits most associated with these behaviors (Miller, 2017), it is important to provide evidence of how this relationship unfolds in samples from diverse cultural contexts.

Research suggests that work engagement, considered a psychological presence in the role that includes attention, absorption, and energy directed toward work tasks (Rothbard & Patil, 2012), is negatively associated with CWB and negatively predicts these behaviors (e.g., Bilal et al., 2020; Filipkowski & Derbis, 2020; Malik & Zahra, 2022). Additionally, some studies have highlighted the mediating/moderating role of engagement in the generation of CWB. For instance, Lebron et al. (2018) found that engagement plays a mediating role in the leader-member exchange (LMX) and the level of CWB. Similarly, Chen et al. (2020) used a mediation-moderation model and demonstrated that engagement reduces levels of CWB in individuals with high levels of emotional stability and responsibility.

Finally, job satisfaction refers to individuals' attitudes toward their work and encompasses different facets (e.g., satisfaction with the supervisor, coworkers, remuneration, promotion opportunities, and the job in general) (Medrano et al., 2018; Spector, 1997, 2022). Therefore, it tends to be a determining factor in the actions people take in their jobs. Research has shown an inverse relationship between CWB and this variable (e.g., Mercado et al., 2018; Sackett, 2002). Álvarez-Escalante et al. (2021) reported that employees experiencing low job satisfaction and immersion in stressful work situations are more likely to engage in counterproductive behaviors. Likewise, Selvarajan et al. (2019) argue that one of the reasons why employees engage in CWB is dissatisfaction with organizational responses to certain work situations that do not fulfill employees' expectations (e.g., work-family balance). Similarly, De Clercq et al. (2019) postulate that the less attention and the greater pressure employees receive, the more likely they are to express their dissatisfaction through direct or indirect actions that harm the organization. Therefore, it is particularly important to analyze the predictive role of this variable in the development of CWB.

In light of the above considerations, this research aimed to: 1) validate the Counterproductive Work Behavior Checklist – Short Version (CWB-C-10) for research purposes in Argentina; 2) analyze individual differences in psychological and organizational variables (Dark Triad personality traits, work engagement, and job satisfaction) by dividing the sample according to the level of CWB; and 3) identify psychological and organizational variables (Dark Triad personality traits, work engagement, and job satisfaction) that predict the development of CWB.

Methodology

Participants

Study 1 Sample. This study included an intentional sample of 874 workers from Argentina. The average age was 37.5 years (*SD* = 12.2, *Min.* = 18, *Max.* = 75). Regarding sex, 54.7% (*n* = 478) of the participants were women, 44.6% (*n* = 390) were men, 0.5% (*n* = 4) were non-binary, and 0.2% (*n* = 2) preferred not to respond. The place of residence was as follows: 46.6% (*n* = 407) lived in the Autonomous City of Buenos Aires, 35% (*n* = 306) in Greater Buenos Aires, and the remaining 18.4% (*n* = 161) lived in other provinces. Regarding educational level, 13.9% (*n* = 121) had completed primary and secondary education, 72.6% (*n* = 635) had completed tertiary education, and 13.5% (*n* = 118) had completed postgraduate studies. Self-perceived socio-economic status was as follows: 16.1% (*n* = 141) perceived themselves as lower-middle class, 65.8% (*n* = 575) as middle class, and 12.1% (*n* = 106) as upper-middle class.

Study 2 Sample. The intentional sample consisted of 103 workers from Argentina. Their average age was 33 years (*SD* = 10.7, *Min*. = 19, *Max*. = 68). Regarding sex, 60.9% (*n* = 63) of the participants were women and 39.1% (n = 40) were men. Regarding place of residence, 83.5% (*n* = 86) lived in the Autonomous City of Buenos Aires, 13.6% (*n* = 14) in Greater Buenos Aires, and 2.9% (*n* = 3) in other provinces. Concerning educational level, 9.8% (*n* = 10) had completed primary and secondary education, 76.5% (*n* = 79) had completed tertiary education, and 13.7% (*n* = 14) had completed postgraduate studies. Regarding self-perceived socio-economic status, 25.5% (*n* = 26) perceived themselves as lower-middle class, 58.8% (*n* = 61) as middle class, and 15.7% (*n* = 16) as upper-middle class. Concerning organizational variables, 85.1% (*n* = 88) of the employees were working in private companies and 14.9% (*n* = 15) in public companies. The size of the companies was as follows: 53.2% (*n* = 55) of the participants were working for large companies, 36.2% (*n* = 38) for medium-sized companies, and 10.6% for small companies (*n* = 10). Most participants did not have subordinates (80.9%; *n* = 83), while 19.1% (*n* = 20) held leadership positions.

Instruments

Counterproductive Work Behavior Checklist – Short Version (CWB-C-10; Spector et al., 2010). This is a short version of the CWB-C (Spector et al., 2006), designed to assess Counterproductive Work Behaviors (CWB) in work environments. Although half of the items evaluate behaviors directed toward the organization and the other half toward individuals, the authors propose the use of a global score. Therefore, in this study, the fit to a one-dimensional structure was verified through confirmatory factor analysis, which yielded adequate indices. Additionally, the internal consistency data obtained from alpha and omega coefficients exceeded .70, which also resulted in optimal values (see Results section). The test consists of 10 items answered on a five-point Likert scale ranging from *never* to *always*.

Scale of Work Engagement (EACT; Lupano-Perugini et al., 2017). This test was designed to assess work engagement, based on the theoretical proposal of Rothbard and Patil (2012). It comprises two cognitive dimensions (attention and absorption) and one physical dimension (energy). The validation process in Argentina resulted in an 11-item version (e.g., *When I am working, I often lose track of time*), with responses on a Likert scale ranging from 1 (*completely disagree*) to 5 (*totally agree*). The scale has demonstrated good internal consistency and adequate evidence of

convergent and discriminant validity. Additionally, a three-factor structure was confirmed through exploratory and confirmatory factor analyses. Only the total score was used in this study. Cronbach's alpha and omega coefficients for the total scale were calculated from the Study 2 sample: α = .91 and ω = .92, respectively.

Dark Triad Scale (DTS; Jones & Paulhus, 2014 / Argentine adaptation by Salessi & Omar, 2018). This measurement instrument consists of 24 items assessing traits of the Dark Triad of Personality (Paulhus & Williams, 2002). It comprises three dimensions: Machiavellianism (e.g., *Most people can be manipulated*); narcissism (e.g., *I demand that people treat me with the respect I deserve*); and psychopathy (e.g., *I could say anything to get what I want*). Each item is rated on a 5-point Likert scale (1 = *totally disagree* to 5 = *totally agree*). Validation studies conducted in Argentina through exploratory and confirmatory factor analyses confirmed the three-factor structure, which remained invariant across genders. Cronbach's alpha and omega coefficients estimated for Study 2 were as follows: Machiavellianism (α = .82, ω = .83), narcissism (α = .75, ω = .76), and psychopathy (α = .72, ω = .74).

In addition, two surveys were conducted to assess some of the variables considered in the second study:

Job Satisfaction Survey (Lupano-Perugini, 2017). A survey designed for a previous study (Lupano-Perugini, 2017) was employed. It consists of six items with a Likert response scale ranging from 1 (*completely dissatisfied*) to 7 (*completely satisfied*), evaluating the individuals' self-perceived satisfaction with their job in general and particular aspects, such as salary, supervisors, colleagues, workplace, and career. An example item is *How satisfied am I with the salary I receive?* The choice of areas to be assessed (e.g., salary, supervisors, colleagues) was based on aspects analyzed in previous instruments (e.g., Balzer et al., 1997). A higher score indicates a higher level of satisfaction. Cronbach's alpha and omega coefficients calculated from Study 2 were α = .89 and ω = .90, respectively.

Organizational and Individual Performance Survey (Lupano-Perugini, 2017). A survey designed for a previous study (Lupano-Perugini, 2017) was employed. This survey was designed according to the performance indicators proposed by Cameron et al. (2004) in their research on positive variables and performance (i.e., efficiency, innovation, growth, quality, employee and customer retention, satisfaction, and adaptation). The first part of the survey consists of 10 items with a Likert response scale ranging from 1 (*Little*) to 6 (*Much*), aimed at evaluating organizational performance according to employees' perceptions. The second section, intended for the assessment of individual performance, consists of six items with the same response scale (1 = *Little* to 6 = *Much*). An example item is *To what extent do you believe high-quality results were obtained?* A higher score indicates a higher level of perceived performance. In this study, only the second part aimed at evaluating individual performance was used. Cronbach's alpha and omega coefficients for this second part were α = .91 and ω = .92, respectively.

Procedure

The design was non-experimental and cross-sectional, employing a non-probabilistic sampling method. Data were collected by students conducting research practice at a private university in Buenos Aires, Argentina. The participants were volunteers who did not receive any compensation for their collaboration. Surveys were administered online using SurveyMonkey. The

survey homepage requested participant consent, ensured data anonymity, and clarified its exclusive use for research purposes. Participants were required to be over 18 years old and employed in an organization with at least 10 employees.

The data collection was supervised by a researcher. The research complied with international ethical guidelines (APA and NC3R) and those of the National Council for Scientific and Technical Research (CONICET) for ethical behavior in the Social Sciences and Humanities (Resolution No. 2857, 2006) and was approved by the corresponding ethics committees.

Data Analysis

First, permission was obtained from the original test author through personal communication (Spector, 2022). This permission granted validation of the test for research purposes and noncommercial use. Subsequently, the test was translated from English to Spanish using direct translation. The translated version was subjected to a pilot study to ensure comprehension of items and instructions and to an expert review to analyze the appropriateness of item content for the evaluated construct. Psychometric properties were estimated from a sample of 874 participants through confirmatory factor analysis, and a polychoric matrix was used because of the polytomous nature of the items (Bandalos & Finney, 2018). Various fit indices were assessed to study model fit, including the Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI), and Root Mean Square Error of Approximation (RMSEA). Expected values for CFI, NFI, and IFI indices should exceed .90 (Rial-Boubeta et al., 2006), while the RMSEA value should fall between .05 and .08 (Hu & Bentler, 1995). The regression weights for each item were also considered. The reliability of the scale was assessed using Cronbach's alpha and McDonald's Omega. Values above .70 are considered acceptable, and values surpassing .80 are deemed high (Kline, 2000). Finally, differences in psychological and organizational variables were analyzed using another sample of 103 participants and considering groups based on the level of counterproductive work behavior (CWB). Moreover, efforts were made to determine which variables included in the model could predict CBW development. Pearson's *r* test and hierarchical multiple regression were used for the analyses. Statistical analysis was conducted using EQS 6.2 and Jamovi 2.2.5 software within the *R* environment.

Results

Study 1. Validation of the Counterproductive Work Behavior Checklist – Short Version (CWB-C-10)

After permission was obtained from the author to validate the scale for research use (Spector, 2022), the translation process was initiated. The method employed was direct translation. Two researchers holding Ph.D. degrees in Psychology and having a good command of the English language participated in the process. They independently translated the original version and then compared their results. According to the translators' criteria, there were no notable differences between the two Spanish versions. Finally, adjustments were made to ensure comprehension, conceptual equivalence, and accuracy in the translation from English to Spanish. The translated version was tested with a pilot study involving 15 employees (8 women, 7 men), who suggested minor changes in the wording of some items.

The translated version was subjected to expert judgment, in which three judges assessed the content adequacy of the items. Two of the judges

held Ph.D. degrees in Psychology and the other one was in the final stages of her doctorate. All three had experience in the field of psychological assessment and psychometrics. They were asked to indicate whether each item on the scale allowed the CWB construct to be evaluated. The overall agreement level was high, exceeding 90%.

Subsequently, the construct validity and reliability of the final Spanish version of the test were estimated. For these analyses, an initial sample of 874 participants was used. To obtain evidence of construct validity, a confirmatory factor analysis was conducted using the polychoric data matrix, given the Likert-type format of the responses. The robust maximum likelihood estimation method was used, which is appropriate for this type of data. Model fit was examined with various indices that showed very good fit (Schumacker & Lomax, 2016): χ^2 = 236.021; *df* = 45; NFI = .901; CFI = .930; IFI = .930; RMSEA = .051 (90% CI = .035-.067).

All regression weights of the items (see Figure 1) were above .40 and statistically significant (p < .001) (Byrne, 2006). While the factor loadings were adequate, calculating the value of the average variance extracted (AVE) resulted in a value below .50 (AVE = .29), indicating low convergent validity according to Hair et al. (2010). Nevertheless, it should be clarified that this index is sensitive to the number of items per factor. As the number of items increases, the convergent validity measured deteriorates, while reliability increases. Therefore, more flexible criteria should be considered when many indicators per factor are involved. Moral de la Rubia (2019) suggests that for factors with more than nine items, AVE values greater than .25 can be considered acceptable as long as the factor loadings tend to exceed .50 and the omega coefficient is greater than .75 or .80, indicating acceptable convergent validity.

The internal consistency of the scale was examined through the calculation of Cronbach's alpha and McDonald's omega. The obtained values indicated that the scale is reliable: α = .75, ω = .78.

Considering the total score, the mean CWB in the sample used for validation was 14.3 (*SD* =

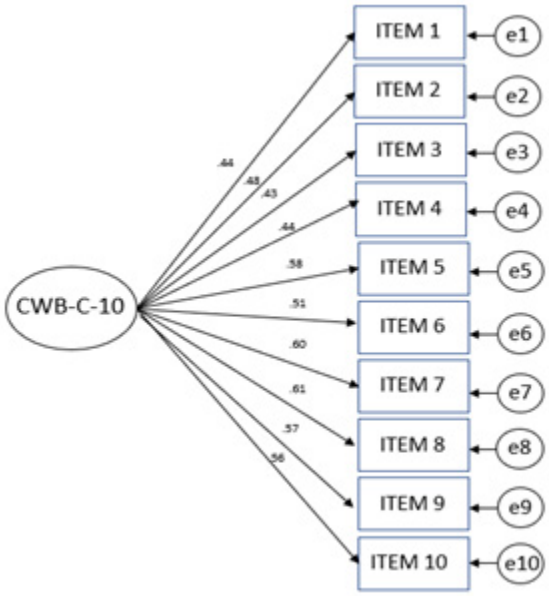

Figure 1
Confirmatory Factor Analysis of CWB-C-10.

3.7). No gender differences were observed [$t_{(866)}$ = -.815, p = .415]. A significant negative association was found between age and CWB (r = -.07, p = .046).

Study 2. Differences in Psychological Variables and Organizational Performance According to the Level of CWB. Predictors of CWB

For the second study, a sample of 103 employees was employed. Considering the total score, the mean CWB for this sample was 14.23 (SD = 3.66). No gender differences were observed [$t_{(101)}$ = .177, p = .860], and there was no relationship with age (r = -.002, p = .981). The level of CWB was also analyzed considering organizational variables. No difference was found in terms of organization size (small, medium, and large) [$F_{(11)}$ = .140, p = .871], nor was there a relationship with the employee's tenure in the organization (r = .301, p = .070). Finally, a difference in the level of CWB according to the type of organization was found, being higher in public capital organizations [$t_{(45)}$ = -2.240, p = .030; M_{Pub} = 16.4, M_{Priv} = 13.3].

Data from this sample were used to determine whether there were differences in certain psychological variables and organizational performance between employees with a low level of CWB and those with a moderate level. Subjects with a high level of CWB were not considered in the analysis because, in general, the analyzed sample, like that of the validation, did not show a mean representing a high presence of these behaviors, coinciding with international reports.

Two groups were formed according to standardized values in the total CWB score variable (cut-off score at z = 0). The group of employees with a low presence of CWB consisted of 64 subjects, while the group with a moderate level was composed of 39 subjects. Student's t-tests were calculated for these groups to determine whether there were differences in the variables included in the second study that, according to the literature, were related to the development or absence of CWB. Differences were found in negative personality traits, job satisfaction, job performance, and work engagement. As shown in Table 1, some significant differences were found, indicating that employees with a moderate level of CWB have, on the one hand, lower levels of job satisfaction and engagement, and on the other hand, higher levels of negative traits such as Machiavellianism and psychopathy in comparison with the low CWB group.

Subsequently, the psychological and organizational variables that predict the development of CWB were determined. First, correlations were calculated between CWB, negative personality traits, the level of work engagement, job satis-

Table 1
Differences according to groups configured based on the level of CWB.

	$t(gl)$	p	CWB	
			Employees with low CWB level	Employees with medium to moderate CWB level
Job satisfaction	3.29(101)	.002	4.80(1.56)	3.80(1.38)
Job performance	-1.20(101)	.232	4.30(1.15)	4.60(1.13)
Machiavellianism	-2.34(101)	.021	2.51(.59)	2.79(.57)
Psychopathy	-2.41(101)	.018	1.73(.58)	2.02(.56)
Narcissism	-1.49(101)	.147	2.56(.50)	2.70(.46)
Engagement	2.57(101)	.012	3.88(.70)	3.51(.69)

Table 2
Multiple hierarchical regression: CWB prediction.

	R^2	β *Standardized*	*p*
Block 1	.08		
engagement		-.25	.013
Block 2	.16		
engagement		-.23	.014
machiavellianism		.26	.017
psychopathy		.07	.498
Block 3	.26	.138	.006
engagement		-.09	.380
machiavellianism		.29	.006
psychopathy		-.06	.519
job satisfaction		-.36	< .001

faction, and job performance. Negative and significant correlations were found between CWB and job satisfaction (r = -.38, p < .001) and with engagement (r = .25, p = -.013). Positive and significant correlations were observed between CWB and Machiavellianism (r = .31, p = .002) and psychopathy (r = .24, p = .013). No significant correlations were found between CWB and job performance or the dark personality trait of narcissism (p > .05).

Next, a multiple hierarchical regression was calculated to identify the variables that increased the prediction of CWB. The selection criterion for introducing variables into the blocks considered the previously obtained correlations and excluded from the model those that were not significant. The overall work engagement score was entered in the first block; scores for the Dark Triad traits of Machiavellianism and psychopathy were entered in the second block; and the job satisfaction score was entered in the third block. In all cases, the tested models were statistically significant (p < .01).

Table 2 shows that the adjusted $R2$ of Block 1 was .08, [$F_{(1,101)}$ = 6.45, p = .013], with engagement being a statistically significant predictor. In Block 2, the adjusted $R2$ increased to .16, [$F_{(3,99)}$ = 6.08, p < .001], and this change was statistically significant (p < .001), representing an 8% increase in explained variance. Engagement remained a statistically significant predictor, and among the Dark Triad traits, Machiavellianism also emerged as a statistically significant predictor. Lastly, in Block 3, the adjusted R2 increased to .26, [$F_{(4,98)}$ = 8.63, p < .001], and this change was statistically significant (p < .001), indicating a 10% increase in explained variance. In this final block, engagement lost its significant predictive power. Instead, Machiavellianism and the level of job satisfaction emerged as significant predictors, with the latter being the most influential.

Discussion

One of the primary objectives of this study was to validate, for research purposes in Argentina, the Counterproductive Work Behavior Checklist – Short Version (CWB-C-10). The results of the analyses underscore that this version exhibits satisfactory psychometric properties of validity and reliability. Confirmatory factor analysis confirmed a good fit for the one-dimensional structure. In agreement with Stanek et al. (2017), examinations of various measures of counterproductive work behavior (CWB) proposed by different authors (e.g., Bennett & Robinson, 2000; Spector, 2006; Spector et al., 2010) reveal that, despite differences in item focus on CWB toward the organization and its members, these items are often highly correlated, suggesting a single-dimensional construct.

This instrument has the advantage of being a rapid and effective measure to evaluate counterproductive behaviors in workplace settings. It should be noted that, although a local test was designed in Argentina to measure such behaviors (Omar et

al., 2012), having an internationally used instrument allows cross-cultural comparisons and offers a broader scope in studying the phenomenon.

As the test is validated for research use, it aids in understanding how this phenomenon occurs in large samples and, based on that information, it also helps to shape effective practices in organizations for a healthier environment. Contributions from Positive Organizational Scholarship (POS) and the Healthy and Resilient Organizations Model (HERO; Cameron & Spreitzer, 2012; Salanova et al., 2012) provide tools to counteract the development of negative behaviors and promote healthy resources and practices.

In light of the above considerations, conducting research such as the one presented here provides insight into potential predictors of CWB. As numerous studies have already explored, negative personality traits are associated with a higher likelihood of engaging in these detrimental actions (e.g., DeShong et al., 2015; Filipkowski & Derbis, 2020; Junça-Silva & Silva, 2023; Miller, 2017; Uysal et al., 2023), but, according to the obtained results, they do not independently explain the phenomenon. One of the major predictors of CWB is apparently linked to low levels of job satisfaction. Therefore, it is necessary to examine not only individual variables but also contextual factors that may influence the development of these behaviors. A toxic environment, where employees are under dysfunctional leadership, with competitive colleagues and a high-pressure climate, can be an influential factor. A recent study by Brassey et al. (2022), encompassing 15 countries, including Argentina, demonstrated that being immersed in a toxic environment is the primary negative predictor of optimal organizational outcomes.

Hence, in practical terms, there is a need to design instruments for assessing these aspects both in the selection processes and in evaluations conducted once employees are already part of an organization and the emergence of such behaviors becomes evident. Efforts should focus on developing techniques that effectively capture these behaviors. As Spector (2001) suggests, employees tend to engage in these behaviors covertly, and they may not be willing to disclose them in personnel selection or workplace climate assessments.

Finally, there is an urgent need to advance in the technological aspects of assessment processes. The progression of Information and Communication Technologies (ICT) increasingly enables the use of technological tools for assessing psychological phenomena in applied contexts such as organizational settings (Woods et al., 2020). For example, methodologies known as gamification, through the implementation of video games and simulated situations, allow the creation of motivating, novel, and unexpected work scenarios in a virtual reality environment. These situations place the assessed candidate or employee in a position where they must make decisions, enabling experts to evaluate the fit of the candidate with the position and organization (Fetzer et al., 2017). These technologies may facilitate the covert assessment of the propensity to engage in CWB and correct the bias of self-descriptive format instruments.

Limitations and Future Directions

As previously mentioned, the use of self-report inventories may pose a challenge in evaluating behaviors, such as those investigated in this study. Additionally, the sample size in Study 2 should be noted as a potential limitation that could impact the generalizability of the obtained results.

Regarding future lines of study, apart from the implementation of technological tools for assessment, the relevance of studying how these

behaviors may manifest in new workplace environments is noteworthy. After the COVID-19 pandemic, many jobs have transitioned to virtual work, either partially or exclusively. For instance, Chong et al. (2020) observed an increase in levels of exhaustion, anxiety, and occurrences of counterproductive work behavior (CWB) in workers who engaged in telecommuting during the initial stages of the pandemic. Therefore, it is intriguing to examine whether telecommuting contributes to an escalation of such behaviors and whether they manifest differently in a virtual environment.

References

Álvarez-Escalante, J. C., Ruvalcaba-Coyaso, F. J., Romero de Loera, B. M., & Palacios-Montoya, J. C. (2021). Comportamiento antisocial en las organizaciones: Una revisión y análisis conceptual. *Revista Digital Internacional de Psicología y Ciencia Social, 7*(1), 23-41. https://doi.org/10.22402/j.rdipycs.unam.7.1.2021.330.23-41

Balzer, W. K., Kihm, J. A., Smith, P. C., Irwin, J. L., Bachiochi, P. D., Robie, C.,…Parra, L. F. (1997). User's manual for the Job Descriptive Index (JDI; 1997 Revision) and the Job in General (JIG) Scales. Bowling Green, OH: Bowling Green State University.

Bandalos, D. L., & Finney, S. J. (2018). Factor analysis: Exploratory and confirmatory. In G. R. Hancock, M. L. Stapleton & R.O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 98-122). Routledge. https://doi.org/10.4324/9781315755649

Barbaranelli, C., Fida, R., & Gualandri, M. (2013). Assessing counterproductive work behavior: A study on the dimensionality of CWB-Checklist. *Testing, Psychometrics, Methodology in Applied Psychology, 20*(3), 235-248. https://doi.org/10.4473/TPM20.3.3

Brassey, J., Coe, E., Dewhurst, M., Enomoto, K., Giarola, R., Herbig, B., & Jeffery, B. (May 27, 2022). Addressing employee burnout: Are you solving the right problem? McKinsey Health Institute. https://www.mckinsey.com

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*(3), 349-360. https://doi.org/10.1037/0021-9010.85.3.349

Bilal, A. R., Fatima, T., & Imran, M. K. (2020). Why ostracized full-time faculty should not be labeled as "low performer"? A qualitative insight from higher education in Pakistan. *Journal of Applied Research in Higher Education, 12*(5), 805-827. https://doi.org/10.1108/JARHE-12-2018-0267

Blickle, G., & Schütte, N. (2017). Trait psychopathy, task performance, and counterproductive work behavior directed toward the organization. *Personality and Individual Differences, 109*, 225-231. https://doi.org/10.1016/j.paid.2017.01.006

Bowling, N. A., & Michel, J. S. (2011). Why do you treat me badly? The role of attributions regarding the cause of abuse in subordinates' responses to abusive supervision. *Work & Stress, 25*(4), 309-320. https://doi.org/10.1080/02678373.2011.634281

Byrne, B. M. (2006). *Structural equation modeling with EQS and EQS/Windows: Basic concepts, application and programming* (2nd Ed.). Lawrence Erlbaum.

Cameron, K. S., & Spreitzer, G. M. (2012). What is positive about positive organizational scholarship? In K. S. Cameron & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 1-14). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199734610.013.0001

Cameron, K. S., Bright, D., & Caza, A. (2004). Exploring the relationships between organizational virtuousness and performance. *American Behavioral Scientist, 47*(6), 766-790. https://doi.org/10.1177/0002764203260209

Chen, H., Richard, O. C, Boncoeur, O. D., & Ford, D. L. (2020). Work engagement, emotional exhaustion, and counterproductive work behavior. *Jour-*

nal of Business Research, 114, 30-41. https://doi.org/10.1016/j.jbusres.2020.03.025

Chong, S., Huang, Y., & Chang, C. -H. (D.). (2020). Supporting interdependent telework employees: A moderated-mediation model linking daily COVID-19 task setbacks to next-day work withdrawal. *Journal of Applied Psychology, 105*(12), 1408- 1422. https://doi.org/10.1037/apl0000843

De Clercq, D., Haq, I. U., & Azeem, M. U. (2019). Why happy employees help: How meaningfulness, collectivism, and support transform job satisfaction into helping behaviours. *Personnel Review, 48*(4), 1001-1021. https://doi.org/10.1108/PR-02-2018-0052

DeShong, H. L., Grant, D. M., & Mullins-Sweatt, S. N. (2015). Comparing models of counterproductive workplace behaviors: The five-factor model and the dark triad. *Personality and Individual Differences, 74*, 55-60. https://doi.org/10.1016/j.paid.2014.10.001

Fetzer, M., McNamara, J., & Geimer, J. (2017). Gamification, serious games and personnel selection. In H. Goldstein, E. Pulakos, J. Passmore & C. Semedo (Eds.), *The Wiley Blackwell handbook of the psychology of recruitment, selection and employee retention* (pp. 293-309). Wiley. https://doi.org/10.1002/9781118972472.ch14

Filipkowski, J., & Derbis, R. (2020). The Dark Triad, goal achievement and work engagement as predictors of counterproductive work behaviors among IT employees. *Current Issues in Personality Psychology*, *8*(3), 197-210. https://doi.org/10.5114/cipp.2020.100095

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. Prentice Hall.

Hu, L., & Bentler, P. (1995). Evaluating model fit. In R. Hoyle (Ed.), *Structural equation modeling: Concepts, issues and applications* (pp. 76-99). Sage.

Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment, 21*(1), 28-41. https://doi.org/10.1177/1073191113514105

Junça-Silva, A., & Silva, D. (2023). The buffering effect of micro-daily events on the relationship between the Dark Triad traits and counterproductive work behavior. *Management Research Review, 46*(5), 667-681. https://doi.org/10.1108/MRR-12-2021-0864

Kline, P. (2000). *Handbook of psychological testing*. Routledge.

Lebron, M., Tabak, F., Shkoler, O., & Rabenu, E. (2018). Counterproductive work behaviors toward organization and leader-member exchange: The mediating roles of emotional exhaustion and work engagement. *Organization Management Journal, 15*(4). https://scholarship.shu.edu/omj

Lupano-Perugini, M. L. (2017). Virtudes organizacionales, performance y satisfacción laboral. Diferencias según variables individuales y organizacionales en empleados argentinos. *Psicodebate, 17*(1), 35-50. http://doi.org/10.18682/pd.v17i1.637

Lupano-Perugini, M. L., de la Iglesia, G., Castro-Solano, A., & Fernández-Liporace, M. (2017). Validación de una escala sobre work engagement. Perfiles asociados a alta performance y satisfacción laboral. *Ciencias Psicológicas, 11*(2), 127-137. https://doi.org/10.22235/cp.v11i2.1482

Malik, N. I., & Zahra, A. (2022). Impact of job engagement on counterproductive work behaviors: Moderating role of gender among organisational employees. *Advances in Psychology and Behavioral Studies, 1*(1), 1-8. http://www.metisjournals.com/index.php/apbs

Medrano, L. A., Ortiz, A., Flores-Kanter, P. E., Dominguez-Lara, S., & Gibelli, S. (2018). Medición de recursos personales socio-cognitivos en organizaciones: Análisis psicométricos en trabajadores argentinos. *Revista Evaluar, 18*(2), 1-16. https://doi.org/10.35670/1667-4545.v18.n2.20799

Mercado, B., Dilchert, S., Giordano, C., & Ones, D. (2018). Counterproductive work behaviors. In D. S. Ones, N. Anderson & C. Viswesvaran (Eds.), *The SAGE handbook of industrial, work and organizational psychology* (pp. 109-210). Sage. https://doi.org/10.4135/9781473914940.n7

Miller, M. (2017). *The influence of dark personality on counterproductive work behaviors*. (Tesis de Mae-

stría en Ciencias en Psicología Aplicada). University of Wisconsin-Stout, Wisconsin. https://doi.org/10.13140/RG.2.2.34488.96004

Moral de la Rubia, J. (2019). Revisión de los criterios para validez convergente estimada a través de la varianza media extraída. *Psychologia. Avances de la Disciplina, 13*(2), 25-41. https://doi.org/10.21500/19002386.4119

Morf, M., Feierabend, A., & Staffelbach, B. (2017). Variedad de tareas y comportamiento laboral contraproducente. *Revista de Psicología Gerencial, 32*(8), 581-592. https://doi.org/10.1108/jmp-02-2017-0048

Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology, 93*(2), 392-423. https://doi.org/10.1037/0021-9010.93.2.392

O'Boyle, E. H., Forsyth, D. R., Banks, G. C., & McDaniel, M. A. (2012). A meta-analysis of the Dark Triad and work behavior: A social exchange perspective. *Journal of Applied Psychology, 97*(3), 557-579. https://doi.org/10.1037/a0025679

Omar, A., Vaamonde, J., & Delgado, H. (2012). Comportamientos contraproducentes en el trabajo: Diseño y validación de una escala. *Diversitas, 8*(2), 249-265. https://doi.org/10.15332/s1794-9998.2012.0002.04

Ones, D. S., & Dilchert, S. (2013). Counterproductive work behaviors: Concepts, measurement, and nomological network. In K. F. Geisinger, B. A. Bracken, J. F. Carlson, J.-I. C. Hansen, N. R. Kuncel, S. P. Reise & M. C. Rodriguez (Eds.), *APA handbook of testing and assessment in psychology, Vol. 1. Test theory and testing and assessment in industrial and organizational psychology* (pp. 643-659). American Psychological Association. https://doi.org/10.1037/14047-035

Paulhus, D. L. (2014). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science, 23*(6), 421-426. https://doi.org/10.1177/0963721414547737

Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556-563. https://doi.org/10.1016/S0092-6566(02)00505-6

Pletzer, J. L. (2021). Why older employees engage in less counterproductive work behavior and in more organizational citizenship behavior: Examining the role of the HEXACO personality traits. *Personality and Individual Differences, 173*(1), 110550. https://doi.org/10.1016/j.paid.2020.110550

Rauf, K., & Farooq, A. (2014). Adaptation and validation of Counterproductive Work Behavior Checklist (45 and 32). *International Journal of Novel Research in Humanity and Social Sciences, 1*(1), 39-49. https://www.noveltyjournals.com/journal-details/IJNRHSS

Rehman, U., & Shahnawaz, G. (2018). Machiavellianism, job autonomy and counterproductive work behaviour among Indian managers. *Journal of Work and Organizational Psychology, 34*(2), 83-88. https://doi.org/10.5093/jwop2018a10

Rial-Boubeta, A., Varela-Mallou, J., Abalo-Piñeiro, J., & Lévy-Mangin, J. P. (2006). El análisis factorial confirmatorio. In J. P. Lévy-Mangin & J. Varela (Eds.), *Modelización con estructuras de covarianzas en ciencias sociales* (pp. 119-143). Netbiblo.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*(2), 555-572. https://doi.org/10.2307/256693

Rothbard, N., & Patil, S. (2012). Being there: Work engagement and positive organizational scholarship. In K. S. Cameron & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 57-69). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199734610.013.0005

Sackett, P. (2002). The structure of counterproductive work behaviors: Dimensionality and relationships with facets of job performance. *International Journal of Selection and Assessment, 10*(1-2), 5-11. https://doi.org/10.1111/1468-2389.00189

Salanova, M., Llorens, S., Cifre, E., & Martínez, I. M. (2012). We need a Hero! Toward a validation of the Healthy and Resilient Organization (HERO) model.

Group and Organization Management, 37(6), 785-822. https://doi.org/10.1177/1059601112470405

Salessi, S., & Omar, A. (2018). Tríada oscura de personalidad, satisfacción laboral y cinismo organizacional: Un modelo estructural. *Universitas Psychologica, 17*(3), 1-12. https://doi.org/10.11144/Javeriana.upsy17-3.tops

Schumacker, R. E., & Lomax, R. G. (2016). *A beginner's guide to structural equation modeling* (4th Ed.). Routledge.

Selvarajan, T. T., Singh, B., Cloninger, P., & Misra, K. (2019). Work–Family conflict and counterproductive work behaviors: Moderating role of regulatory focus and mediating role of affect. *Organisation Management Journal, 16*(1), 42-54. https://doi.org/10.1080/15416518.2019.1574547

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes and consequences.* Sage.

Spector, P. (2001). Research methods in industrial and organizational psychology: Data collection and data analysis with special consideration to international issues. En P. Spector (Ed.), *Handbook of industrial, work and organizational psychology - Volume 1: Personnel psychology* (pp. 10-26). Sage. https://doi.org/10.4135/9781848608320.n2

Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods, 9*(2), 221-232. https://doi.org/10.1177/1094428105284955

Spector, P. E. (2022). *Job satisfaction: From assessment to intervention*. Routledge. https://doi.org/10.4324/9781003250616

Spector, P. E., Bauer, J. A., & Fox, S. (2010). Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: Do we know what we think we know? *Journal of Applied Psychology, 95*(4), 781-790. https://dx.doi.org/10.1037/a0019477

Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review, 12*(2), 269-292. https://doi.org/10.1016/S1053-4822(02)00049-9

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior, 68*(3), 446-460. https://doi.org/10.1016/j.jvb.2005.10.005

Stanek, K. C., Ones, D. S., & McGue, M. (2017). Counterproductive behaviors: Relations across life domains, etiology, and implications for applied practice. *International Journal of Selection and Assessment, 25*(2), 111-124. https://doi.org/10.1111/ijsa.12164

Uysal, H. T., Ak, M., & Koşar, A. (2023). Counterproductive work behaviors in organizations: A research on the effect of the Dark Triad. *AGATHOS, 14*(1), 247-259. https://www.agathos-international-review.com/index.html

Vélez-Vega, A. (2022). Psychometric properties of the Office Gossip Scale in Puerto Rico. *Revista Evaluar, 22*(1), 57-72. https://doi.org/10.35670/1667-4545.v22.n1.37443

Woods, S., Ahmed, S., Nikolaou, I., Costa, A., & Anderson, N. (2020). Personnel selection in the digital age: A review of validity and applicant reactions, and future research challenges. *European Journal of Work and Organizational Psychology, 29*(1), 64-77. https://doi.org/10.1080/1359432X.2019.1681401