



Bad Behaviors at Work: Spanish Adaptation of the Workplace Deviance Scale

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Abstract

Counterproductive work behaviors (CWBs) refers to a set of negative intentional behaviors that harm organizational outcomes. Despite their consequences, their measurement is a debatable issue. The present study is aimed to validate the Spanish version of one of the most commonly used scales of CWBs, the Workplace Deviance Scale, and to provide further evidence about the reliability and validity of the test scores. Four hundred and thirty-two employees from different organizations participated in the study. They completed a self-report questionnaire with the measures of interest (sociodemographic data, the Workplace Deviance Scale, and scales of organizational citizenship behavior, organizational justice, integrity, and conscientiousness). Descriptive, exploratory structural equation modeling and correlational analyses were performed. Results have shown that the internal structure does not fully reproduce the original one, but the two theoretically expected factors remain. Furthermore, the pattern of associations is barely influenced by the scoring scheme used (factor vs. observed scores), and the associations with other constructs are in line with previous research. On the whole, this study contributes to the analysis of the dimensionality of CWBs, at least in Western countries.

Keywords Counterproductive work behaviors · Organizational deviance · Interpersonal deviance · Job performance

Introduction

Job performance, i.e., individual contribution to organizational goals, is considered the ‘ultimate dependent variable’ in human resource management (Organ and Paine 1999). After all, job performance is considered in most Human Resources’ decisions, including personnel selection, training, and firing employees.

Although job performance has been traditionally concerned with task performance, i.e., behaviors directly related to job duties, it is now recognized that it should include other domains such as behaviors that go beyond job-specific activities and processes (Borman and Motowidlo 1997). These domains comprise different behaviors that have an impact on the organization, but are not included in job duties, such as: (1) *organizational citizenship behaviors* (OCBs), which comprises all the positive behaviors carried out intentionally

by employees (Organ 1997); (2) *counterproductive work behaviors* (CWBs), a set of voluntary and negative intentional behaviors, such as theft, sabotage or inappropriate physical actions, which harm the well-being of the organization or their members (Sackett and DeVore 2001); (3) *creative and innovative performance*, behaviors related to the development and application of new ideas in the work role, group, or organization (Janssen 2000); (4) *safety performance*, behaviors displayed to promote health and safety at work (Burke et al. 2002); and, (5) *adaptive performance*, behaviors that allow workers to adapt successfully to the changing environment (Pulakos et al. 2000).

Although all of the aforementioned performance domains have received support, only two of them are always considered in modern conceptualizations of job performance in addition to task performance: OCBs, and CWBs (Rotundo and Sackett 2002). In Spain, we can find two different validated scales to measure OCBs (Dávila and Finkelstein 2010; Díaz-Vilela et al. 2012), but none to measure CWBs. Thus, the present paper is focused on contributing to filling this gap, introducing the validation in a different country and language of one of the most widely used measures of CWBs, the *Workplace Deviance Scale* (Bennett and Robinson 2000).

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Relevance of Counterproductive Work Behaviors

CWBs, the ‘dark side’ of performance, constitute a serious problem in organizations. It is estimated that between 50% and 75% of employees have engaged in some type of deviant behaviors (Bennett and Marasi 2016), leading to negative economic (Robinson 2008), personal (Aubé et al. 2009) and organizational (Rogers and Kelloway 1997) consequences. For instance, Coffin (2003) reported that employee theft and fraud in the United States (i.e., white-collar crime) cost \$50 billion per year. Workplace deviance negatively affects organizational effectiveness due to the loss of productivity, poor quality of work, damage to the organization’s public reputation, loss of customers, etc. (Bowling and Gruys 2010). Other dysfunctional behaviors at work, such as harassment, backstabbing, or physical aggression, affect the well-being of both individual employees and their organizations (Bowling and Beehr 2006).

Taking into account these negative consequences, there have been keen efforts to understand workplace deviance. Unfortunately, data about base rates of CWBs come from the United States or European countries other than Spain (e.g., Harris and Ogbonna 2006). Empirical studies about CWBs in Spanish organizations and their impact on personnel and on organizations are very scarce. To our knowledge, only two studies have dealt with CWBs in Spain (i.e., González-Navarro et al. 2018; Salgado 2002).

Dimensionality of Counterproductive Work Behaviors

A number of researchers have formulated a variety of conceptual approaches to understand the dimensionality of deviant behaviors in organizations (Griffin and Lopez 2005) and to classify them in categories. Although it seems reasonable think that OCBs and CWBs are part of a single continuum, empirical research has shown that they are different constructs (Sackett et al. 2006). In this sense, the meta-analytic study performed by Dalal (2005) found a modest negative relationship ($\rho = -.32$) between OCBs and CWBs, so CWBs should be conceived as a domain with its own identity. Nevertheless, several dimensions can be found within CWBs.

Among the first proposals, Hollinger (1986) divided deviant work behaviors into property deviance (i.e., organization-targeted acts and misuse of employer assets, such as theft or property damage) and production deviance (i.e., violation of norms about how work should be carried out, such as not being on the job in working hours or too lengthy breaks). However, interpersonal forms of deviance, such as sexual harassment, were not included in his two-category framework. In contrast, Robinson and Bennett’s (1995) typology of employee deviance took into account deviant behavior directed toward individuals. In this sense, there is a broad consensus about the bidimensional structure of CWBs (Sackett and DeVore 2001): one dimension related to behaviors toward

the organization (*organizational deviance*) and the other related to behaviors aimed at other organizational members (*interpersonal deviance*). Subsequently, the meta-analysis of Berry et al. (2007) showed that these two dimensions, although highly correlated ($\rho = .62$), can be separated and show a differential pattern of correlations with external constructs.

Antecedents of Counterproductive Work Behaviors

Given the consequences of CWBs, researchers have focused on its prevention, seeking to determine the antecedents of these behaviors. Concretely, in terms of predicting CWBs, individual and situational factors have been identified.

Personal antecedents of CWBs include personality-based variables and sociodemographic characteristics. Regarding personality-based variables, previous research has found a strong relationship between CWBs and the ‘Big Five’ personality traits (Sackett and DeVore 2001; Salgado 2002), with conscientiousness being its main predictor (Berry et al. 2007), followed by emotional stability and agreeableness (Salgado et al. 2013). Focusing on conscientiousness, meta-analytic studies support its relationship with CWBs: Salgado (2002) found a relationship of $\rho = -.26$ between CWBs and conscientiousness; in greater depth, Sackett et al. (2006) and Berry et al. (2007) reported a relationship of $\rho = -.26$ and $\rho = -.23$, respectively, with interpersonal deviance, and $\rho = -.49$ and $\rho = -.33$ with organizational deviance. Moreover, Fine et al. (2010) found that serious CWBs (i.e., theft, drug use) were consistently low when employees’ integrity was high ($r = -.35$).

Other person-based characteristics, such as self-esteem (Whelpley and McDaniel 2016), self-efficacy (Salgado and Moscoso 2000), self-control (Bazzy and Woehr 2017), trait anger (Hershcovis et al. 2007), positive and negative affectivity (Kaplan et al. 2010), negative emotions (Spector and Fox 2002), emotional intelligence (Miao et al. 2017), locus of control (Ng et al. 2006), or cognitive ability (Dilchert et al. 2007) have been identified as antecedents of CWBs, although their relevance is lower compared with that of personality (Salgado et al. 2013).

Regarding demographics, gender, age, and tenure have been detected as individual variables related to deviant behaviors in organizations. The meta-analysis by Berry et al. (2007) found a higher association between CWBs and being male (interpersonal deviance: $\rho = .15$, organizational deviance: $\rho = .12$) and young (interpersonal deviance: $\rho = -.06$, organizational deviance: $\rho = -.10$). Primary studies have also found that young males who are new to the organization are more likely to engage in workplace deviance (e.g., Fine et al. 2010; Ng et al. 2016). Recently, Fine and Edward (2017) found that over-qualification was related to CWBs toward the organization.

Situational antecedents must also be considered in the CWBs domain. According to Kelloway et al. (2010), CWBs could be viewed as a form of protest within organizations due to, for example, perceived injustice by the employee. However, CWBs have differential relationships with different types of organizational justice. Berry et al. (2007) found that interactional and procedural justice had moderate negative correlations with interpersonal and organizational deviance ($-.20$ to $-.25$), whereas distributive and interpersonal justice showed weaker correlations ($-.07$ to $-.17$). Moreover, the situation-based perspective includes other antecedents of workplace deviance. For instance, job satisfaction and organizational commitment (Harrison et al. 2006), abusive supervision (Zhang and Liao 2015), boredom (Bruursema et al. 2011), and work demand stressors, such as role ambiguity, role conflict, role overload, job insecurity, etc. (Gilboa et al. 2008), or family interference with work (Mercado and Dilchert 2017) have also been identified as situational antecedents of CWBs.

Measurement of Counterproductive Work Behaviors

Despite the interest in CWBs, its measurement is still open to debate. The most critical issue is how to assess these behaviors (i.e., using generic vs. situation-specific CWBs measures) and who should do it (i.e., source of ratings). One strategy comes from ratings made by significant others (e.g., supervisors, coworkers) of the degree to which individuals engage in this type of behaviors. However, as Sackett et al. (2006) have noted, direct observation is difficult because some CWBs are not public (e.g., theft, sabotage), and supervisors or coworkers' judgment could be affected by some bias such as the halo effect. In this sense, as Salgado et al. (2013) pointed out, "this makes it harder to assess CWBs than more positive work behaviors" (p. 611).

So, even though the objective measurement of each form of CWBs would be ideal, it seems entirely impossible. In that sense, self-report of the rate of occurrence is an alternative although these measures can be affected by social desirability in responding (Sackett and DeVore 2001). Due to the essence of these behaviors in the workplace (intentional, negative, and contrary to the legitimate interests of the organization), it seems difficult for participants admit engaging in socially unacceptable behaviors, especially in some cases (e.g., using an illegal drug or consuming alcohol on the job, falsifying a receipt to get reimbursed for more money). In addition, we should take into account that some CWBs are specific to certain work settings, so some employees might never have had the opportunity to engage in some of the behaviors (e.g., one cannot falsify a receipt to get reimbursed for more money than one spent on business expenses if one does not have job where this is possible). Nonetheless, although many have viewed self-reports of CWBs with skepticism, the meta-analysis of Berry et al. (2012) support their use as a viable alternative to other-reports in CWBs research.

The Workplace Deviance Scale, developed by Bennett and Robinson (2000), is one of the most utilized self-report measures for CWBs worldwide (e.g., Lee and Allen 2002; Meier and Spector 2013; Zhang et al. 2016). As meta-analytic evidence has pointed out (Berry et al. 2007), this self-report measure is based on the most popular structure of workplace deviance, i.e. the two-factor model proposed by Robinson and Bennett (1995). Moreover, it has been widely applied to a range of organizational contexts and occupations and has shown good psychometric properties, in terms of reliability ($\alpha = .81$, and $\alpha = .78$ for organizational and interpersonal deviance, respectively, in the original study of Bennett and Robinson), and construct validity. Bennett and Robinson initially developed a scale with 58 items and two factors (*Organizational* and *Interpersonal Deviance*). In a first refinement stage ($n = 226$), items with variances below 1.5 and those that were not clearly defined by a single factor in an exploratory factor analysis were eliminated, leading to a version with 24 items, 16 for *Organizational Deviance* and eight for *Interpersonal Deviance*. In the final refinement stage ($n = 143$), five items were removed in order to improve fit indices in a confirmatory factor analysis, which led to a proposed questionnaire of 19 items, 12 for *Organizational* and seven for *Interpersonal Deviance*.

As Bennett and Robinson (2000) noted, the results of their study were "a first step, suggesting evidence of the construct validity of these scales. However, future research is necessary to lend additional support to this conclusion" (p. 357). As far as we know, no further analysis of the psychometric properties of the scale has been undertaken since then.

Cross-Cultural Invariance of Counterproductive Work Behaviors

The culture in which the employee is embedded influences work behavior. Taras et al. (2010) showed the influence of culture on many work outcomes, including job performance. The existence of cross-cultural differences in the conceptualization of CWBs has been taken into account more than two decades ago. For instance, Murphy (1994) or Munene (1995) suggested different attitudes to workplace deviance behaviors related to the country of origin (i.e., United States, Asia, or West and East African countries). However, it was not until the recent study of Coyne et al. (2013) that the cross-cultural invariance of the construct was investigated. Focusing on the European context, they surveyed employees in the United Kingdom ($n = 105$), The Netherlands ($n = 203$), Turkey ($n = 185$), and Greece ($n = 70$). They found more cultural convergence than divergence, supporting the distinction between OCBs and CWBs, also between organizational and interpersonal dimensions in the four countries.

Although Coyne et al. (2013) support the idea of cross-cultural invariance of CWBs, the limitations of their study

encourage continuing with primary studies in other countries. On the one hand, the scarce sample size hinders the study of structural invariance among countries. On the other hand, demographic factors are not controlled, so cultural differences may be due to other factors than country culture. Research reporting the effect of demographic factors may further efforts to examine cross-cultural invariance (e.g., meta-analytic studies).

Research on CWBs in Spanish employees is very limited. Salgado performed meta-analyses on European samples comprising Spanish workers (e.g., Salgado 2002), but his results are not disaggregated among countries. Recently, González-Navarro et al. (2018) investigated the moderating role of Leader Member Exchange (LMX) in the relationship between envy and CWBs in 225 Spanish employees from public and private organizations. However, they only assessed interpersonal CWBs.

Taking into account all the aforementioned, it is still necessary to analyze CWBs in different countries, including Spain. In this sense, the availability of appropriate instruments, successfully adapted to different languages and cultures may help to develop further cross-cultural studies. Aimed at filling this gap, we propose an adaptation into Spanish of the CWBs scale of Bennett and Robinson (2000).

The Present Study

The goals of this study were twofold: first, to validate the Spanish version of the Workplace Deviance Scale (Bennett and Robinson 2000) in order to obtain a reliable and valid instrument to assess workplace deviance behaviors in our country; second, to provide further evidence of the reliability and validity of the test scores of this scale.

Several reasons justify the need for the present study. First, we do not have a reliable and valid scale to measure CWBs in Spain and, consequently, we cannot estimate the direct and indirect costs associated with these behaviors. Second, the high prevalence of CWBs among employees and their consequences show the need for validated instruments for its assessment. Currently, measuring instruments and research on CWBs outside of North America are scarce, which hinders determining the impact that culture may have on these behaviors (Coyne et al. 2013). Due to the absence of a well-established measure in Spanish and the fact that the Workplace Deviance Scale by Bennett and Robinson (2000) is the most widely used self-report to assess CWBs, we decided to adapt and validate it in Spain. More validations of Bennett and Robinson's measure are needed to verify its properties and gain insight into the functioning of this performance dimension in different countries. Additionally, we tested the measurement invariance of the scale as a function of sex. To our knowledge, no previous research had evaluated this aspect of the questionnaire.

Materials and Methods

Procedure and Participants

Data were collected with non-probability sampling. Authors requested their undergraduate and postgraduate students to collaborate, distributing the questionnaire to people working in any kind of job. Students who collaborated in recruiting participants received training in questionnaire completion to provide any necessary guidance to those they recruited. Five hundred questionnaires were distributed, and four hundred and thirty-two questionnaires (86.4%) were successfully completed and returned.

The participants voluntarily agreed to fill out the questionnaire with the variables of interest. They were informed about the research objectives of this survey, and about the confidentiality and anonymity of their responses. Thus, our sample was composed by four hundred and thirty-two employees (52.3% women, 47.7% men), aged between 18 and 64 years ($M_{\text{age}} = 40.55$, $SD = 12.39$), from different organizations. Concerning employment, 0.9% of the participants worked in the primary sector, 17.1% in the secondary sector, and 81.9% in the tertiary sector. Their average job tenure was 9.3 years ($SD = 10.09$), and their organizational tenure was 11.9 years ($SD = 11.69$).

Measures

Sociodemographic and Work Behavior Questionnaire We asked participants about their sex, age, job tenure, organizational tenure, job experience, activity of their organization, and their jobs there.

Counterproductive Workplace Behaviors (CWBs) The Workplace Deviance Scale has been described in the Introduction. Through a back-translation procedure (Hambleton et al. 2005), the Spanish version of the scale was obtained from the 24-item version of Bennett and Robinson (2000). Considering that the final refinement stage of the scale was performed with a relatively small sample size and a very restrictive analytical technique (a confirmatory factor analysis where all the secondary loadings were fixed to zero), we decided to go one step back and use the 24-item version instead of the final 19-item version. In our case, two native Spanish-speakers translated the scale, and another two native English-speakers made the back translation into English. Then, the authors revised the translation and agreed on a single version of the scale. We kept the response options, ranging from 1 = *never* to 7 = *daily*. Spanish translation of items is reported in the Appendix. Total scores were computed as the sum of the scores of each item.

Organizational Citizenship Behavior We used the scale of Lee and Allen (2002) adapted to a Spanish population (Dávila and

Finkelstein 2010). The scale comprises 16 items with a 5-point Likert type response format, ranging from 1 = *never* to 5 = *always*. The instrument assesses two dimensions, OCBs aimed at the organization ($\alpha = .91$; all the reported Cronbach alpha values correspond to those in the present sample), and OCBs aimed at individuals ($\alpha = .95$). Total scores were computed as the average of the scores of each item.

Organizational Justice We applied the scale of Moliner et al. (2008). It is a 12-item instrument rated on a 7-point Likert scale, ranging from 1 = *strongly disagree* to 7 = *strongly agree*. This measure reflects the concepts of distributive ($\alpha = .91$), procedural ($\alpha = .84$), and interactional justice ($\alpha = .87$). Higher scores indicate greater organizational justice. Total scores were computed as the average of the scores of each item.

Integrity Employee integrity was assessed with the situational judgment test of Becker (2005), which has been translated into Spanish by Lievens et al. (2015). It comprises 19 items, each of one involving a potential workplace dilemma ($\alpha = .41$). It is commonly accepted that internal consistency is not the key indicator to assess the quality of a situational judgment test and the reported Cronbach's alphas for this kind of measures tend to be low (Catano et al. 2012). Higher scores indicate greater integrity. Total scores were computed as the sum of the scores of each item.

Conscientiousness This domain was assessed by the 12 items ($\alpha = .82$) included into the Spanish version of the NEO-FFI (Costa Jr. and McCrae 2008). The items are rated on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Higher scores indicate greater conscientiousness. Total scores are computed as the sum of the scores of each item.

Data Analyses

Firstly, we computed the descriptives of the CWBs items: mean, standard deviation, skewness, kurtosis, and percentage of participants who engaged at least once in the different behaviors in the last year (responses ≥ 2).

Secondly, we analyzed the internal structure of the CWBs by means of exploratory structural equation modeling (ESEM). Given the expected floor effect for several of the CWBs items, which implies a high departure from normality (e.g., “Used an illegal drug or consumed alcohol on the job”), we treated the responses as categorical (ULSMV estimator in *Mplus*). ULSMV appears to be the advisable method in these cases, in particular for small to medium sample sizes (e.g., Forero et al. 2009). Goodness-of-fit of all the derived models was assessed with the common cut-off values for the fit indices (Hu and Bentler 1999): CFI and TLI with values greater than .95 and RMSEA less than .06 were indicative of a

satisfactory fit. We will consider that an item presents problematic loadings if (a) it presents no loading over $|0.30|$ on any of the factors, (b) it presents more than a single loading over $|0.30|$, or (c) the difference between the maximum unsigned loading and the next one in value is lower than 0.20.

Third, we carried out a factor invariance study, splitting the sample by sex. To test invariance, the equality (or minimal difference) of the fit between consecutive models is evaluated. As a first step, we tested the equality of form. In the context of ESEM, this involves fixing the number of factors and pairs of correlated uniqueness (if any). As a second step, we tested the equality of thresholds and factor loadings across groups. We considered these restrictions to be satisfactorily met if the decrease in CFI was lower than .01 and RMSEA increased by less than .015 (Chen 2007; Cheung and Rensvold 2002).

Finally, the association of the CWBs scales and the other variables were assessed with Pearson correlations for numerical variables and with Cohen's *d* for dichotomous variables (only sex, in this case). Given that the factor solution was not very simple (see below), we computed the relations between variables with three approaches. In the first one, we used the factor scores of the first tested model (without splitting by sex), as factor scores use information from all the available items with empirically derived weights; in the second one, we used observed scores, considering only the 19 items of the final version of Bennett and Robinson (2000), with the theoretical distribution of items to dimensions described by the authors; in the third one, we used observed scores, considering the 16 items that we could consider as non-problematic. By doing so, we could compare whether the scoring system commonly employed –observed scores of the Bennett and Robinson version– leads to the same conclusions as the other two scoring techniques. If the scores from the three scoring schemes are highly correlated and present a very similar pattern of correlations with external variables, this will imply that the selection of the scoring method is a minor problem.

For handling missing values, we applied listwise deletion for two reasons. First, percentage of missing data was very small for all the considered variables (maximum of 4.1% of missing values in years of job experience), except for years of organizational tenure (14.5%). Second, the variables with higher presence of missing data were not the key variables of our analyses. The available sample size for each variable can be seen in Table 2. The analyses were performed with *Mplus* 7.4 and *R* 3.5.1.

Results

Item Descriptives

The descriptives of the items can be seen in Table 1. As expected, the items presented low means ($M_{\text{mean}} = 1.44$, range

Table 1 Item descriptives and factor loadings of the workplace deviance scale

	Descriptives					Loadings	
	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>K</i>	% Part	<i>Organ</i>	<i>Interp</i>
1. Worked on a personal matter instead of work for your employer	2.41	1.54	0.82	-0.24	58.00	0.51	0.10
2. Taken property from work without permission	1.24	0.77	4.05	18.46	12.59	0.53	0.11
3. Spent too much time fantasizing or daydreaming instead of working	1.81	1.39	1.87	2.90	34.97	0.77	-0.01
4. Made fun of someone at work*	1.44	1.16	3.19	10.34	18.41	0.33	0.55
5. Falsified a receipt to get reimbursed for more money than you spent on business expenses*	1.02	0.30	18.39	353.48	0.46	-	-
6. Said something hurtful to someone at work	1.35	0.95	3.47	13.41	17.36	0.09	0.78
7. Taken an additional or a longer break than is acceptable at your workplace	2.16	1.52	1.29	1.06	48.49	0.57	0.12
8. Made an ethnic, religious, or racial remark or joke at work	1.29	0.83	3.31	11.82	14.58	-0.06	0.66
9. Come in late to work without permission*	1.37	0.83	2.56	6.82	21.53	0.32	0.33
10. Littered your work environment*	1.80	1.39	1.90	3.00	33.64	0.28	0.24
11. Cursed at someone at work	1.16	0.66	5.31	32.13	7.42	-0.06	0.85
12. Told someone about the lousy place where you work	1.68	1.17	1.89	3.27	32.95	0.59	-0.07
13. Lost your temper while at work*	2.33	1.47	0.94	0.10	58.41	0.32	0.30
14. Neglected to follow your boss's instructions	1.45	1.02	2.73	7.99	22.97	0.61	0.17
15. Intentionally worked slower than you could have worked	1.53	1.16	2.61	7.05	24.07	0.55	0.07
16. Discussed confidential company information with an unauthorized person	1.15	0.59	4.86	27.73	8.33	0.63	-0.11
17. Left work early without permission	1.21	0.73	4.31	20.87	10.21	0.49	0.13
18. Played a mean prank on someone at work	1.20	0.68	4.51	24.43	10.93	0.09	0.72
19. Left your work for someone else to finish*	1.26	0.74	3.40	12.60	14.39	0.37	0.25
20. Acted rudely toward someone at work	1.22	0.70	3.90	16.26	12.04	0.01	0.79
21. Used an illegal drug or consumed alcohol on the job*	1.06	0.37	7.62	62.30	2.78	0.26	0.45
22. Put little effort into your work	1.32	0.82	3.12	10.56	18.06	0.77	-0.13
23. Publicly embarrassed someone at work	1.07	0.45	7.88	67.60	3.24	-0.05	0.77
24. Dragged out work in order to get overtime*	1.07	0.49	8.32	77.72	2.55	0.34	0.36

M mean, *SD* standard deviation, *Sk* skewness, *K* kurtosis. % *Part* percentage of respondents who indicated that they had participated in the behavior at least once in the last year, *Organ* Organizational Deviance, *Interp* Interpersonal Deviance

Items with italicized wording indicate items not included in the 19-items version of the scale. Items with asterisk corresponds to problematic items. Shaded cells indicate the factor where the item theoretically belongs. Bold loadings indicate loadings over |0.30|. The correlation between factors was .46

[1.02, 2.41]), low standard deviations ($M_{SD} = 0.91$, range [0.30, 1.54]), large skewness ($M_{Sk} = 4.26$, range [0.82, 18.39]), and even larger kurtosis ($M_K = 32.99$, range [-0.24, 353.48]). The proportion of respondents that had engaged in each of the behaviors ranged from 0.46% (Item 5: “Falsified a receipt to get reimbursed for more money than you spent on business”) to 58.00% (Item 1: “Worked on a personal matter instead of work for your employer”). Most participants

(87.56%) were involved in some of the listed behaviors at least once in the last year. The most frequent behaviors (a rate of 33% or higher) were “Lost your temper while at work” (57.9%), “Worked on a personal matter instead of work for your employer” (57.9%), “Taken an additional or a longer break than is acceptable at your workplace” (48.4%), “Told someone about the lousy place where you work” (32.9%), “Spent too much time fantasizing or daydreaming instead of

working” (34.7%), and “Littered your work environment” (33.6%). The less frequent behaviors (below 10%) were “Used an illegal drug or consumed alcohol on the job” (2.8%), “Cursed at someone at work” (7.4%), and “Discussed confidential company information with an unauthorized person” (8.3%).

We want to stress the high conscientiousness displayed by the participants ($M = 49.12$, $SD = 5.85$). They were over two standard deviations above normative data ($M = 36.01$, $SD = 6.02$).

Internal Structure

Given the extremely low variability of Item 5 (only two participants had responses different from 1), we discarded its responses in the analysis of the internal structure. For the remaining 23 items, the model fit was satisfactory, although with a TLI value slightly lower than the .95 threshold, $\chi^2(208) = 287.6$, $p < .001$, $CFI = .953$, $TLI = .942$, $RMSEA = .030$. The maximum modification index was 12.00, suggesting the appropriateness of correlating the uniquenesses of Item 9 and Item 17, both related to modifying the working hours without permission. For the sake of parsimony, we did not include that new parameter in the model.

Although model fit was satisfactory, the pattern of loadings was far from simple. According to our defined criteria, 7 out of 23 items were marked as problematic: (a) one for both loadings below $|0.30|$, (b) three for both loadings over $|0.30|$, and (c) three for differences between the primary and the secondary loading smaller than 0.20. Of the items removed from the 24-item version in the 19-item version by Bennett and Robinson (2000), three out of five were not marked as problematic in the present sample. In other words, five out of seven items marked by us as problematic were retained in the final version of the Workplace Deviance Scale. Item loadings can be found in Table 1.

Although the matrix pattern was not simple, the two factors could be easily interpreted. The first one corresponded to organizational deviance (the item with the highest loading, “Put little effort into your work”, $\lambda = 0.77$), with 10 items, whereas the second one corresponded to interpersonal deviance (the item with the highest loading, “Cursed someone at work”, $\lambda = 0.85$), with six items. Both factors showed a medium-large correlation, $r = .46$.

Measurement Invariance by Sex

We tested the measurement invariance of the scale without Item 5, for the same reasons as described above. As we were now splitting the sample into two groups and, given the low variance of some items, we had some response options chosen by very few participants in each group. For this reason, we

dichotomized the responses to all the items as 0 = *never* or 1 = any valid response different from *never*. With this scoring, we could correctly estimate the two required models. In the first model, we tested equality of form, with satisfactory fit, $\chi^2(416) = 422.0$, $p = .409$, $CFI = .991$, $TLI = .989$, $RMSEA = .008$. In the second model, we imposed equality of item intercepts and loadings, with satisfactory fit, $\chi^2(456) = 467.6$, $p = .343$, $CFI = .983$, $TLI = .981$, $RMSEA = .011$. The change in model fit between the two consecutive models ($\Delta CFI = -.008$, $\Delta TLI = -.008$, $\Delta RMSEA = .003$) was below the considered threshold.

Associations with Other Variables

The associations with the measured variables can be seen in Table 2. We found that the different scoring schemes (one based on factor scores, and two based on summed scores) presented very large correlations. For *Organizational Deviance*, those correlations were in the range of $[.88, .93]$; for *Interpersonal Deviance*, in the range of $[.78, .97]$. The sizes of the associations with the different variables were practically the same when computed with factor scores, $M_{|r|} = .15$, with observed scores based on Bennett and Robinson (2000), $M_{|r|} = .12$, or with the version of 16 items, $M_{|r|} = .12$. In the rest of this section, we will describe the associations based on factor scores.

In general, all the associations between variables were small. Both kinds of deviance showed small-medium sized negative correlations with OCBs, $M_r = -.25$. Whereas both kinds of deviance showed very small correlations with distributive organizational justice, $M_r = -.03$, they were slightly more closely related to procedural and interactional justice, $M_r = -.16$. The associations with integrity were also very small, $M_r = -.15$. The largest associations were found with conscientiousness, $M_r = -.30$. Whereas work deviance was unrelated to organizational tenure and job experience, $M_r = .00$, both dimensions showed larger (although still very small) relations with job experience and age, $M_r = -.12$. The correlations were slightly larger for organizational deviance, $M_{|r|} = .19$, than for interpersonal deviance, $M_{|r|} = .11$. Whereas men and women did not present statistically significant differences in organizational deviance, $d = -0.11$, men showed a statistically significant higher mean in interpersonal deviance, $d = -0.43$.

Discussion

CWBs are an important domain of job performance, with impact on organizations and workers, and important consequences in organizational outcomes. This paper reports an adaptation of the Workplace Deviance Scale into Spanish. There are four main results of this study. First, the internal

Table 2 Descriptive statistics and bivariate relations of the different variables

	Descriptives				Associations					
	<i>M</i>	<i>SD</i>	Alpha	<i>n</i>	1	2	3	4	5	6
					Pearson Correlations					
1. CWBs Organizational – Factor scores	.00	1.00		432						
2. CWBs Organizational – Bennett and Robinson	16.96	5.79	.72	423	.88					
3. CWBs Organizational – Present version	15.92	6.36	.77	422	.91	.93				
4. CWBs Interpersonal – Factor scores	.00	1.00		432	.65	.60	.53			
5. CWBs Interpersonal – Bennett and Robinson	8.63	3.60	.78	426	.40	.47	.41	.79		
6. CWBs Interpersonal – Present version	7.24	2.88	.76	429	.33	.42	.35	.78	.97	
7. OCBs Interpersonal	4.11	.64	.95	421	-.27	-.28	-.26	-.22	-.13	-.12
8. OCBs Organizational	4.00	.70	.91	425	-.36	-.32	-.34	-.16	-.10	-.07
9. OJ Distributive	4.28	1.74	.91	426	-.06	-.02	-.07	.00	.02	.03
10. OJ Procedural	4.20	1.63	.84	431	-.15	-.10	-.16	-.07	-.03	-.01
11. OJ Interactional	5.17	1.56	.87	429	-.22	-.17	-.21	-.18	-.16	-.16
12. Integrity	9.31	3.63	.41	422	-.19	-.24	-.23	-.11	-.12	-.13
13. Conscientiousness	49.12	5.85	.82	417	-.36	-.35	-.31	-.23	-.12	-.11
14. Job tenure (years)	9.29	10.09		422	-.06	-.05	-.02	.07	.05	.08
15. Organizational tenure (years)	11.90	11.69		371	-.03	-.04	.00	.04	.00	.03
16. Job experience (years)	18.08	12.50		414	-.16	-.14	-.09	-.03	-.04	.00
17. Age (years)	40.55	12.39		428	-.20	-.16	-.12	-.08	-.06	-.02
					Cohen's <i>d</i>					
18. Sex (Men = 0, Women = 1)	.52	.50		432	-.011	-.024	-.015	-.043	-.044	-.041

CWBs Counterproductive Work Behaviors, OCBs Organizational Citizenship Behaviors, OJ Organizational Justice

Bold values correspond to statistically significant associations, *p* < .05. Underlined values correspond to the correlations comparing the different scoring schemes for the CWBs

structure found does not fully reproduce that reported by Bennett and Robinson (2000). Some items that were discarded by those authors now presented appropriate loadings; some items that were retained in their final version were marked as problematic by us. Second, despite these differences, the two theoretically expected factors were recovered, one tapping organizational deviance and the other interpersonal deviance. Third, the pattern of associations is barely influenced by the scoring scheme used, factor vs. observed scores. Fourth, the associations of these factors are small and in line with previously reported correlations.

With the available data, it is not possible to point to a clear explanation for the differences between the factor analysis by Bennett and Robinson (2000) and our analysis. As Hirschfeld et al. (2014) and Garrido et al. (2018) have noted, in factor analysis and in some conditions, thousands of participants would be required to obtain stable loading patterns. Given the sample sizes used by Bennett and Robinson and also by us, is not surprising that some inconsistencies are found. Alternative explanations may be differences due to the language or cultural background of the participants, as in the cross-cultural study by Coyne et al. (2013). In any case, these

differences point to the appropriateness of replicating studies of the psychometric properties of commonly used instruments.

Given the presence of eight problematic items out of 24, some of them already discarded by Bennett and Robinson (2000) and others retained in their final version, the resemblance between the relations with additional variables with the three scoring schemes considered should be stressed. This indicates that, although the specific items that should be used to assess the two kinds of work deviance are not completely clear, the correlations with other variables are robust to the version used and method to compute participants' scores. We have shown that factor scores had slightly higher associations, probably due to lower measurement error, as this scoring method uses more information. If comparability between different studies is relevant, a good option would be to use the version and scoring described by Bennett and Robinson. We want to highlight that this point, although not completely closed, does not seem to be a relevant issue.

Regarding CWBs dimensionality, we want to outline results of their relationship with OCBs and about the internal

structure itself. Regarding CWBs and OCBs, our study found negative correlations between both domains of job performance. This result is in accordance with prior studies (Dalal 2005; Sackett et al. 2006) and supports the idea of differentiating between the two types of behaviors at work, rather than understanding the two domains as reflecting a single continuum. With respect to the dimensionality of CWBs, our data offer evidence about the separability of organizational and interpersonal deviance. The two dimensions have different correlations with personal and situational factors. For instance, organizational deviance correlated more strongly with conscientiousness than with interpersonal deviance (Berry et al. 2007; Sackett et al. 2006). In line with previous literature, procedural and interactional justice exhibited low to moderate negative correlations with CWBs (Berry et al. 2007).

The association between CWBs and conscientiousness is also interesting. People who score high in conscientiousness are compliant, confident, and reliable. Thus, they tend to display fewer CWBs. Our study was developed with workers who are substantially more conscientious than the Spanish adult population (Costa and McCrae 2008). This may affect our results in two ways: (1) it is less probable that they are faking their responses, i.e., decreasing the prevalence and frequency of CWBs (Peterson et al. 2009); (2) the prevalence of CWBs in Spanish population should be greater than in our study, and are an indicator that these behaviors may be more present in the Spanish organizations than we know so far.

Regarding demographics, findings are consistent with prior workplace studies and meta-analyses. Males are more likely to score high on CWBs targeting individuals (Ng et al. 2016). Young and new employees have been associated with CWBs targeted at organization, as in past research (e.g., Berry et al. 2007). These results could be related to changes in generational values (generation X, Y, Z, Millennials, etc.) or with lower status and lower paying jobs associated with lower commitment and job satisfaction. These attitudes could be associated with a higher probability of exhibiting CWBs.

We also want to stress the relevance of the study of CWBs in Spain. As we stated before, most participants (87.56%) were involved in some of the listed behaviors at least once in the last year, a higher rate than in prior studies (Bennett and Marasi 2016). It is true that behaviors that can be considered more harmful are infrequent in our sample (e.g., using an illegal drug or consuming alcohol on the job), but the most frequently reported behaviors are those related to time banditry, which has a considerable impact on organizational results (Martin et al. 2010). For example, in the United States, time banditry costs organizations \$5720 per employee annually

(Malachowski 2005). This information leads us to propose further research about how to prevent this kind of behavior at the workplace.

Last but not least, there is no doubt that this study has shortcomings that require further examination and additional research in the assessment of CWBs. We acknowledge that a self-report measure may not be the ideal way to assess these types of behaviors in organizational settings. Authors like Stanek et al. (2017) propose an alternative: the use of school and non-work counterproductivity due to the consistency of individuals' behaviors across different domains. This proposal also has limitations, like the difficulty teachers would have observing counterproductive behaviors and maturation over time of the individual. As self-reports are consistently used by researchers and considered the most appropriate way to measure these behaviors at work (Coyne et al. 2013), we encourage researchers to continue with them. Performing research on CWBs with self-reports may be not the best way, but it is the best we have so far. Another limitation is that our sampling method is not representative of the Spanish working population, as occurs in other studies performed in this country (e.g., González-Navarro et al. 2018) and in other countries (e.g., Aubé et al. 2009; Bruursema et al. 2011). Nevertheless, we believe that this is a minor issue according to our objectives (i.e., the assessment of the internal structure of the questionnaire and the relationship of CWBs with other variables).

We also want to stress some ideas for further research. First, we believe that more cross-cultural research on CWBs is needed. Coyne et al.'s (2013) study is the first step towards demonstrating the universality of CWBs, but it has some limitations to overcome. Now that the Workplace Deviance Scale is available in Spanish, it would be easier to extend the research about CWBs from North America and promote further cross-cultural studies. Second, we also believe that it may be interesting to develop new measures of CWBs based on different raters, like supervisors. Thirdly, additional measurement invariance studies with respect to other relevant variables such as type of contract or economic sector should be considered. Fourth, as we outlined in the beginning, research on job performance is evolving. Now we have performance domains beyond task performance, such as creative and innovative performance, safety performance, and adaptive performance, which also need attention. At this moment, there are no instruments available in Spanish to measure these constructs. We encourage researchers to develop adaptations or new measures of these performance dimensions.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Appendix

Spanish translation of the Workplace Deviance Scale.

A continuación encontrará una serie de comportamientos. Por favor, para cada uno de ellos indique, de acuerdo con la siguiente escala, con qué frecuencia los ha realizado en el último año:

- 1- Nunca.
 - 2- Una vez al año.
 - 3- Dos veces al año.
 - 4- Varias veces al año.
 - 5- Mensualmente.
 - 6- Semanalmente.
 - 7- A diario.
1. Ocuparse de un asunto personal en lugar de hacer su trabajo.
 2. Llevarse algún bien de la empresa sin permiso.
 3. Pasar demasiado tiempo fantaseando o soñando despierto en lugar de trabajar.
 4. Burlarse de alguien en el trabajo.
 5. Falsificar un recibo para que le devuelvan más dinero del que gastó en algún asunto de la empresa.
 6. Decir algo hiriente a alguien en el trabajo.
 7. Hacer una pausa más larga o más pausas de las que son aceptables en su trabajo.
 8. Hacer una broma de tipo étnico, religioso o racial en el trabajo.
 9. Llegar tarde al trabajo sin permiso.
 10. Tener desordenado su lugar de trabajo.
 11. Insultar a alguien en el trabajo.
 12. Hablar mal de su empresa a alguien.
 13. Perder los nervios en el trabajo.
 14. Desobedecer las instrucciones de su jefe.
 15. Trabajar intencionalmente más despacio de lo que podría hacerlo.
 16. Hablar de información confidencial de la empresa con una persona no autorizada.
 17. Irse temprano del trabajo sin permiso.
 18. Gastar una broma pesada a alguien en el trabajo.
 19. Dejar su trabajo inacabado para que lo termine otra persona.
 20. Ser grosero con alguien en el trabajo.
 21. Consumir drogas o alcohol en el trabajo.
 22. Esforzarse poco en su trabajo.
 23. Avergonzarse públicamente a alguien en el trabajo.
 24. Dejar trabajo pendiente para conseguir horas extra.

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