Psicothema

Development and validation of the Work Conflict Appraisal Scale (WCAS)

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Abstract

Background: In the context of cognitive appraisal, the Work Conflict Appraisal Scale (WCAS) was developed to assess work conflict in terms of threat and challenge. **Method:** In the first study, the factorial structure of the scale was tested using confirmatory factor analysis with a Spanish multi-occupational employee sample (N= 296). In the sec-ond study, we used multi-sampling confirmatory factor analysis (N= 815) to cross-validate the results. **Results:** The analyses confirm the validity of the scale and are con-sistent with the tri-dimensional conflict classification. The findings support the distinc-tion between the challenge and threat appraisals of work conflict, highlighting the im-portance of measuring these two types of appraisal separately. **Conclusions:** This scale is a valid and reliable instrument to measure conflict appraisal in organizations.

Keywords: Work conflict, threat, challenge, validation.

Resumen

Desarrollo y validación de la Escala de Valoración del Conflicto (WCAS). Antecedentes: en el contexto de la valoración cognitiva se ha desarrollado la escala de Evaluación del Conflicto en el Trabajo (WCAS) que permite evaluar el conflicto en términos de desafío y amenaza. **Método:** el Estudio 1 contó con 296 trabajadores con los que se puso a prueba la estructura factorial de la escala usando análisis factorial confirmatorio. En el Estudio 2, con 815 trabajadores, se realizó un análisis factorial confirmatorio multi-muestra, para la validación cruzada de los resultados. **Resultados:** los análisis confirman la validez de la escala y son consistentes con la clasificación tridimensional del conflicto, apoyando la distinción entre evaluación del conflicto como desafío y como amenaza. Se subraya la importancia de medir estos dos tipos de valoración separadamente **Conclusiones:** esta escala es un instrumento válido y fiable para medir la percepción de conflicto en las organizaciones.

Palabras clave: conflicto en el trabajo, amenaza, desafío, validación.

Work conflict is a process that emerges from company members' tension due to real or perceived differences (De Dreu & Weingart, 2003). Interpersonal conflict at work has been described as an important social stressor (Alzate, Laca, & Valencia, 2004). In fact, employees face considerable work demands and pressure that can undermine their relationships, increase interpersonal work conflict, and affect organizational outcomes.

Different types of conflict are considered in the literature: task conflict, relationship conflict, and process conflict (De Dreu & Weingart, 2003; Jehn, 1997; Jehn & Mannix, 2001; Jehn & Bendersky, 2003; Medina, Munduate, Dorado, Martínez, & Guerra, 2005; Simons & Peterson, 2000). Task conflict is the perception of incompatibilities or dissenting views among group members or individuals about the task. Relationship conflict is the perception of interpersonal incompatibilities related to personality differences or preferences about non-task issues (e.g., religion, politics, etc.). Process conflict is the perception of disagreeing about how tasks

should be carried out and people should be managed. Several empirical studies have supported this tri-dimensional classification of conflict (see Greer, Jehn, & Mannix, 2008; Martínez-Moreno, Zornoza, González-Navarro, & Thompson, 2012).

Research on conflict has revealed that different types of work conflict have the potential to either promote or diminish employees' outcomes (De Dreu & Weingart, 2003; Jehn & Mannix, 2001). However, there are no consistent results in the literature about the types of conflict and their organizational outcomes (see meta-analysis by De Dreu & Weingart, 2003; and by De Wit, Greer, & Jehn, 2012). In general, there is a broad consensus about the negative consequences of relationship and process conflict (Jehn, 1997; Jehn & Mannix, 2001; De Wit, Greer, & Jehn, 2012). However, both positive and negative organizational outcomes have been associated with task conflict (see De Wit, Greer, & Jehn, 2012; Bruk-Lee, Nixon, & Spector, 2013). Therefore, the effects of task conflict at work are still unclear.

A possible explanation for these inconsistent results is offered by Martínez-Moreno, Zornoza, González-Navarro, and Thompson (2012), who point out the importance of understanding the conditions in which one type of conflict subsequently triggers other kinds of conflict, due to limited information processing ability or cognitive functioning. Nevertheless, not only is the type of conflict important, but also the way the person appraises the

work conflict. Some people may appraise a situation of conflict at work as a challenge, whereas other people can experience it as a threat. Therefore, on the basis of Lazarus and Folkman's (1984) theory, this study presents a tool to measure how individuals assess a conflict situation in terms of challenge and threat appraisals of work conflict: the Work Conflict Appraisal Scale (WCAS).

Work conflict, as a social stressor, can be associated with different types of appraisal and lead employees' behavior to different work outcomes. According to Lazarus' transactional model of stress (Lazarus & Folkman, 1984), an individual's perception of a stressor, in this case work conflict, can primarily take different forms, depending on the way the individual appraises the situation (Regueiro & León, 2003). Cognitive appraisal was defined by Lazarus and Folkman (1984, p. 31) as "the process of categorizing an encounter, and its various facets, with respect to its significance for well-being". These authors distinguished between threat and challenge appraisals, which both appear after a stressful situation. Therefore, on the one hand, a challenge appraisal is associated with the anticipation of potential gain or growth in conflict management, and so it is accompanied by pleasurable emotions (engagement and excitement). On the other hand, a threat appraisal is associated with the anticipation of potential harm and negative emotions, such as fear, anxiety and anger. Thus, challenge appraisals can lead to focusing on gains and achieving a creative understanding of task issues. They facilitate an assimilative, flexible, and generative style of thinking, characteristic of an entrepreneurial style (see Gutnick, Walter, Nijstad, & De Dreu, 2012). In addition, coinciding with the attribution-appraisal model of venting (Parlamis, 2012), a reciprocal exchange of emotions (venting emotions) with another person is a regulatory mechanism to appraise interpersonal incompatibilities as a challenge.

However, the appraisal of a conflict situation as threatening may undermine employees' outcomes by distracting them from the task and leading them to work less cooperatively and productively (Griffith, Mannix, & Neale, 2003), or to having disagreements about resources and responsibilities (Hinds & Bailey, 2003), thus lowering performance expectancies and producing disengagement from the task (see Gutnick et al., 2012). When task disagreements are not solved and employees spend a lot of time and energy focusing on the task-topic, employees appraise this conflict as dysfunctional. Even a challenge appraisal of task conflict can become a threat appraisal if the lack of consensus harms the decision-making process (Jehn & Bendersky, 2003).

The results of the meta-analyses by LePine, Podsakoff and LePine (2005) shows that hindrance stressors were directly and negatively related to job satisfaction and organizational commitment, whereas challenge stressors were directly and positively related to job satisfaction and organizational commitment. In addition, Medina, Munduate, Dorado, Martínez, and Guerra (2005) found a negative relationship between relationship conflict and affective reactions (satisfaction, wellbeing, and propensity to leave a job), whereas task conflict was not directly related to these affective reactions. Similarly, Chen, Zhang and Vogel (2011) found that task conflict had indirect, positive effects on work engagement through two psychological states (i.e., experienced safety, experienced availability) that are very close to a challenge appraisal. However, relationship conflict had an indirect, negative effect on employees' work engagement through these psychological states. Along these lines, Maier, Waldstein, and Synowski (2003), in a laboratory context, found that threat appraisals significantly predicted

enhanced negative affect, and that challenge appraisals predicted greater positive affect and task engagement. These results suggest that these primary cognitive appraisals are potent predictors of affect and task engagement, which is consistent with Lazarus and Folkman's (1984) model. Therefore, challenge appraisals are associated with greater engagement, whereas threat appraisals result in lower engagement (see Putwain, Symes, & Wilkinson, 2016).

In another vein, Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) found that subjects who appraised stressful events as changeable (similar to a challenge appraisal) used task-focused coping strategies (e.g., playful problem-solving) and were more satisfied with encounter outcomes than subjects who appraised the events as unchangeable (similar to a threat appraisal) and used more emotion-focused coping strategies (e.g., distancing and escape-avoidance).

Moreover, Lazarus and Folkman (1984) suggested that challenge and threat appraisals are not necessarily mutually exclusive and can occur simultaneously. Therefore, in this study we assume that challenge and threat are two independent concepts that may occur simultaneously; that is, a person could appraise the same work conflict as both a challenge and a threat, coinciding with Kozusznik, Rodríguez, and Peiró (2012).

Furthermore, the differences in cognitive appraisals in the work conflict structure have never been analyzed. Thus, the objective of this study is to develop and validate a new tool to measure how individuals assess a work conflict situation in terms of challenge and threat appraisals: the Work Conflict Appraisal Scale (WCAS). This scale was constructed and based on the Spanish version (Martínez-Moreno et al., 2012) of Jehn's Intragroup Conflict Scale (Jehn & Mannix, 2001). In this research, we adapted the items by deleting references to the work group. Instead, the conflict concerns coworkers. In designing this scale, the method utilized by Rodriguez, Kozusznik and Peiró (2013) was employed to evaluate the appraisal of stressors.

Specifically, we present two studies to analyze the structure of the scale and its psychometric characteristics, and provide the norms to adequately interpret the scores obtained. The main goal of Study 1 is to explore the factorial structure of the scale. Study 2 is carried out to replicate the structure and validate the WCAS, providing evidence about its usefulness in predicting scores on a criterion scale.

Method

Participants

The participants were 815 Spanish workers in different industrial, commercial, and service organizations. The total sample was a convenience sample with an adequate sample size (Tabachnick & Fidell, 1996). Participants in Study 1 were 296 Spanish workers in different organizations. The gender distribution of this sample was 59.2% female and 40.8% male, with a mean age of 38.46 years (SD = 12, 14), ranging from 18 to 67 years. In terms of their level of education, the majority had a university degree (47%), followed by workers with vocational training (19.3%). Regarding the economic sector, the majority worked in service activities (57.3%), followed by commercial (19.2%) and industrial activities (16.7%). Participants were accessed through personal and business contacts.

Sample 2 (N = 519) was used to cross-validate the factorial structure obtained. In this second sample, the mean age was 38.23 years (SD =12.21), ranging from 18 to 67 years. Moreover, 42.8% were men, and 48.6% had a university degree, followed by workers with vocational training (20%). The majority worked in service activities (51.1%), followed by commercial (21.7%) and industrial (21.1%) activities.

Procedure

The questionnaires were filled out and collected at the workplace. These samples were collected in two consecutive years (sample 1 in 2013 and sample 2 in 2014). Participants received instructions and information on the procedure for filling out the questionnaires. In addition, the presence of the researcher was helpful, as doubts about the questions were resolved and clarified. The researchers emphasized that the data participants provided were anonymous, and that there were no right or wrong answers (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003).

Instruments

Work Conflict Appraisal Scale (WCAS). To evaluate the Appraisal of Work Conflict as a Threat and as a Challenge, we used the WCAS. It was an adaptation of Jehn's Intra-group Conflict Scale (Jehn & Mannix, 2001). This scale is composed of 9 items repre-senting work conflict situations (see Table 1). The scale evaluates three types of con-flicts at work: task conflict, relationship conflict, and process conflict. Each conflict item was also appraised as threatening and/or challenging. The 6-point response scale ranges from 1 (clearly, it is not a source of threat/ challenge) to 6 (clearly, it is a source of threat/challenge). An example of a task conflict item is: "For me, the conflicting ideas about the tasks to be done are a challenge / a threat. An example of a relationship conflict item is: "Anger among coworkers is a challenge/ a threat; and an example of a process conflict item is: "Conflicts about task responsibilities are a challenge/ a threat"

Coping Strategies. To assess the work conflict coping strategies, we used a Spanish version of the Coping Strategies Questionnaire (CSQ) (González, Zurriaga, & Bravo, 1995). The psychometric

properties were reported to be satisfactory by Rodríguez, Terol, López-Roig and Pastor (1992), and evidence for the discriminant validity was provided through confirmatory factor analysis (González et al., 1995). The questionnaire contains 28 items classified into four types of coping: problem-focused (e.g., "I focused on the positive aspects of my situation") (α= .83), problem-avoidance (e.g., "I talked to someone to try to find a solution") (α= .63), emotion-focused (e.g., "I hoped a miracle would happen") (α= .82), and emotion-avoidance (e.g., "I talked to someone to try to find a solution") (α= .79). The items are measured using 5-point scales, ranging from 1 (never) to 5 (often).

Work-Engagement. Engagement was assessed with the Spanish version of the Utrecht Work Engagement Scale (Shaufeli, Bakker, & Salanova, 2006). The 9 items are scored on a 6-point frequency rating scale ranging from 1 (*never*) to 6 (*always*). Cronbach's alpha was 0.93. An example of an item is: "At my work, I feel that I am bursting with energy".

Job Satisfaction. Job Satisfaction was measured with a questionnaire adapted from the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1964), with satisfactory psychometric properties (Bravo, García, Peiró, & Prieto, 1993). This scale measures employees' level of satisfaction with some extrinsic aspects of their jobs (e.g., "My pay and the amount of work I do"), as well as their general job satisfaction (e.g., "Overall, how satisfied are you with your job?"). Satisfaction was assessed with 6 items rated on a 5-point response scale from 1 (not satisfied) to 5 (very satisfied). In the current sample, Cronbach's alpha was 0.79.

Data analysis

Statistical analyses were conducted using SPSS 22 and EQS 6.1 software. In Study 1, in order to determine the WCAS factorial structure, as a preliminary step, the polychoric correlation matrixes among the items on the scale were obtained. Due to the ordinal nature of the item-level data (Likert scale), robust maximum likelihood was used for parameter estimation. Model fit was evaluated using absolute (Jöreskog & Sörbom, 2006) and relative indices (Marsh, Balla, & Hau, 1996): a) χ^2 statistic with Satorra-Bentler correction and $\chi^2/df<2$ (Kline, 1998); b) the Comparative

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Table 1
The Spanish adaptation of items of Jehn's Intragroup Conflict Scale

Task conflict	**Conflicto de tarea**
1. How much conflict of ideas is there in your work group? 2. How frequently do you have disagreements within your work group about the task of the project you are working on? 3. How often do people in your work group have conflicting opinions about the project you are working on?	1. "El conflicto de ideas sobre las tareas a realizar para mí es ….." 2. "Los desacuerdos sobre las tareas a realizar son ….." 3. "Las opiniones en conflicto sobre la tarea que realizamos son para mí ….."
Process conflict	**Conflicto de proceso**
4. How often are there disagreements about who should do what in your work group? 5. How much conflict is there in your group about task responsibilities? 6. How often do you disagree about resource allocation in your work group?	4. "Los desacuerdo sobre quién debería hacer las cosas en tu trabajo suponen ….." 5. "Los conflictos en relación a las responsabilidades sobre las tareas son ….." 6. "Los desacuerdos sobre el reparto de bienes o recursos en tu trabajo son ….."
Relationship conflict	**Conflicto de relación**
7. How much relationship tension is there in your work group? 8. How often do people get angry while working in your group? 9. How much emotional conflict is there in your work group?	7. "La tensión en el trabajo para mí es ….." 8. "El enfado entre los compañeros de trabajo supone ….." 9. "Cuando el conflicto que existe en tu trabajo tiene que ver con las relaciones entre compañeros para mí es ….."

Fit Index (CFI) and the Normed Fit Index (NFI) with cut-off criteria of .90 or higher (Hu & Bentler, 1999); and c) the Root Mean Square Error Approximation (RMSEA), with values of .08 or less indicating good fit (Hair, Anderson, Tatham, & Black, 2006).

Three confirmatory factor analyses (CFA) were carried out. The structure derived from the theoretical considerations and the two types of work conflict appraisal, that is, a six-factor model of conflict, was used as the baseline model to be estimated with confirmatory techniques (CFA-1). Then we used the results of the initial model fit to formulate a better model, which was then tested and re-specified (CFA-2).

In Study 2, in order to cross-validate the results of the analysis to determine the WCAS factorial structure, we evaluated the fit of the re-specified model in a new sample. The best fitting model (CFA-2) was tested first independently and then simultaneously using multi-sample confirmatory factor analysis (MCFA). Next, we evaluated the quality of the remaining psychometric proprieties, namely, the reliability and validity of the scale and sub-scales. The average variance extracted (AVE) was calculated by computing formulas provided by Fornell and Larckers (1981) to assess convergent and discriminant validity. In order to explore criterion validity, the two types of work conflict appraisals were correlated with coping strategies, engagement, and work satisfaction. Then, the reliability (internal consistency) of the scales was assessed with Cronbach's alpha, Guttman's Split-Half Coefficient, and the composite reliability index by Bagozzi and Yi (1988).

Lastly, scores were calculated for each sub-scale and for the total scale, and we went on to construct the norms that make it possible to interpret these scores. For this purpose, we determined whether the scores on each scale followed a normal distribution by performing the Kolmogorov-Smirnov test.

Participants who omitted 50 per cent of the items were completely removed from the analyses. For the remaining respondents, no imputation method was used to handle the problem of missing data. Missing data on the conflict items represented about 0.3% and 0.8% of the data, and these participants were excluded from the analyses. Statistical analyses were conducted using SPSS 22 and EQS 6.1 software.

RESULTS STUDY 1

The dimensionality of the WCAS scale

The descriptive statistics for the items on the challenge and threat appraisal conflict scales for both samples showed that skewness and kurtosis values did not lie between -1 and 1; there was evidence of deviation from the normal distribution. Therefore, the decision was made to use the robust maximum likelihood estimation method.

The dimensionality of the conflict scales was examined by means of confirmatory factorial analysis (CFA). As expected, the initial model (two-factor: challenge and threat) did not present an adequate fit to the data. Then, an inter-correlated six-factor model was specified, in line with Jehn and Mannix's (2001) study and appraisal factors (Lazarus & Folkman, 1984). This model did not present a satisfactory fit either (see Table 2). The Lagrange multiplier test indicated that the model would improve considerably if we correlated the errors on some items (item 1-2, 5-6, 7-8 and 13-14). A new six-factor model with correlations of appraisal factors, types of conflict, and some errors pairs was specified

in the next step. The re-specified model showed a satisfactory fit. This model presented a reasonable RMSEA (values of 0.05 indicate reasonable fit; Jöreskog & Sörbom, 2006) and satisfactory NFI (0.94) and CFI (0.95) (Hu & Bentler, 1999). The correlations among the six factors were between r= -.272 and r= 720 (ϱ=.001). Moreover, the chi-squared test to compare the two models (initial six-factor model/re-specified six-factor model) was statistically significant ($\Delta\chi^2$= 354.181, Δdf= 4, ϱ<.01), and so we decided to keep the re-specified six-factor model. This last analysis ended the model generation phase.

RESULTS STUDY 1

The WCAS factorial structure and psychometric properties

The skewness and kurtosis values showed evidence of deviation from the normal distribution in both samples (Sample 1, described in Study 1, and Sample 2). Therefore, the decision was made to use the robust maximum likelihood estimation method.

The re-specified model identified in Study 1 was cross-validated with the Study 2 data for the multi-sample model; the results showed that the fit was satisfactory. In addition, all factor loadings were statistically significant and far above .50, and the index of variance extracted from each pair of related constructs was superior to 0.5 in both samples. Based on the recommendations of Fornell and Larcker (1981), the validity was confirmed.

Criterion validity was examined through the scale's relationships with coping strategies for conflict, engagement, and job satisfaction (Table 3). In general, correlations were moderate. Challenge appraisal of conflict (task, process, and relationship) was positively related to problem-focused coping strategies and engagement. Another positive correlation was found between challenge appraisal of task conflict and job satisfaction.

Threat appraisal of task conflict was negatively related to problem-focused coping strategies, but positively related to emotional-focused coping strategies. In addition, threat appraisal of task conflict was negatively correlated with engagement and job satisfaction.

Reliability analyses were performed on each of the two factors (challenge/threat) using Cronbach's Alpha. The scale showed high internal consistency in sample 1. Cronbach's coefficient ranged from 0.8 to 0.87. The internal consistency of the six subscales in sample 2 was assessed using the Cronbach's alpha coefficient, and compared using the composite reliability (CR) by Bagozzi and Yi (1988). Scale reliabilities were also fairly high (Table 4). These findings indicated that the scale was a reliable and valid instrument for measuring the three types of conflict appraisal as a challenge and as a threat.

Table 2
Goodness of fit indices for confirmatory analysis of the three competing models

Scales	**SAMPLE 1**					
	÷2	d.f.	NFI	NNFI	CFI	RMSEA
Two-factor model	1643.48	134	.73	.71	.75	.12
Six-factor initial model	746.12	126	.88	.87	.90	.08
Six-factor re-specified model	391.94	122	.94	.94	.95	.05

Table 3
Correlations between work vonflict appraisal subscales and coping, engagement and satisfaction

	Challenge task	Challenge process	Challenge relationship	Threat task	Threat process	Threat relationship
Problem-focused	.229**	.109**	.125**	-.171**	.044	-.086
Emotion-focused	-.025	-.046	-.014	.151**	.146**	.083
Engagement	.218**	.094*	.095*	-.192**	-.004	-.066
Satisfaction	.127**	.046	.068	-.163**	.026	-.114**

Note: * $p<.05$; ** $p<.01$

Table 4
Cronbach's Alpha value and IFC of the WCAS Subscales

Scale	Index	Sample 1		Sample 2	
		Challenge	Threat	Challenge	Threat
Task	Alpha	.55	.73	.79	.80
	CR	.70	.78	.70	.78
Relationship	Alpha	.82	.79	.73	.76
	CR	.77	.78	.79	.79
Process	Alpha	.83	.80	.76	.85
	CR	.80	.83	.79	.84

Finally, we focused on the interpretation of the scores. We tested whether the raw-score distribution for all the scales approached the normal distribution. Kolmogorov-Smirnov test results were significant, and the global challenge and threat appraisal was significant at $p<.05$. Therefore, the data were not normally distributed. The norms presented the transformation of the raw scores into their corresponding percentiles (Table 5), thus allowing a simple and adequate interpretation of these raw scores. To establish the statistical norms, based on Schaufeli and Bakker (2003), we decided to use five categories: very low (upper limit 5th percentile), low (lower limit 5th percentile, upper limit 25th percentile), average (lower limit 25th percentile, upper limit 75th percentile), high (lower limit 75th percentile, upper limit 95th percentile), and very high (lower limit 95th percentile).

Discussion

This paper presents the structure of the WCAS, its psychometric characteristics (reliability and other sources of validity), and the norms to adequately interpret the scores obtained on the scale.

The findings indicate that the scale is a reliable and valid instrument for measuring the three types of conflict appraised as challenge and as threat. These results were consistent with the tri-dimensional classification of conflict reported in previous studies (e.g., Martínez-Moreno et al., 2012) and the distinction between challenge appraisal of work conflict and threat appraisal of work conflict. Moreover, criterion validity was established through its correlations with other measures of job satisfaction, engagement, and coping strategies. These variables were differentially related to the two measures of work conflict appraisal, and the differences were consistent with our expectations and the literature reviewed (Podsakoff, LePine, & LePine, 2007). Furthermore, as Folkman, et al. (1986) suggested, our results showed that when people appraise conflict as a challenge, they use task-focused coping strategies, whereas they use more emotion-focused coping strategies when they appraise conflict as threatening.

Table 5
Percentiles of the WCAS subscales and challenge/threat for total sample

	Challenge task	Challenge process	Challenge relationship	Threat task	Threat process	Threat relationship	Challenge	Threat
10	1.33	1.00	1.00	1.00	1.00	1.33	1.33	1.77
20	2.00	1.00	1.66	1.66	2.00	1.88	1.88	2.33
25	2.33	1.33	2.00	2.00	2.00	2.11	2.11	2.55
30	2.33	1.66	2.00	2.00	2.33	2.33	2.33	2.77
40	3.00	2.00	2.66	2.33	2.66	2.66	2.66	3.00
50	3.33	2.33	3.00	3.00	3.00	2.88	2.88	3.33
60	3.66	2.66	3.33	3.00	3.66	3.13	3.13	3.55
70	4.00	3.33	3.66	3.66	4.00	3.44	3.44	3.77
75	4.00	3.33	3.66	3.66	4.00	3.66	3.66	4.00
80	4.33	3.66	4.00	4.00	4.33	3.77	3.77	4.22
90	5.00	4.33	4.66	4.66	5.00	4.22	4.22	4.77
95	5.00	4.66	5.00	5.00	6.00	5.33	4.44	5.00

This way of approaching conflict (discerning its positive and negative appraisal) makes it possible to find answers to new research questions. Thus, work conflict may be more complex than previously believed because there are important cognitive mechanisms underlying conflict. This is important because it can help to understand inconsistent research findings (see De Wit, Greer, & Jehn, 2012; Bruk-Lee, Nixon, & Spector, 2013). In addition, coinciding with Milfont and Fischer (2011), future studies should show that the WCAS has adequate psychometric properties in different groups. Testing for equivalence of measures is a way to increase the scale's power and versatility.

The findings obtained are of limited generalizability due to the use of a convenience sample; however, the sample represents an important sector of workers. Therefore, generalizations will require further studies, which should also incorporate more occupational groups in order to examine the present model empirically. In addition, future studies should examine the error correlations between some items, following the Lagrange multiplier test.

Nevertheless, there are a number of different research directions that can extend the results of this study. First, the Spanish adaptation of the WCAS presents adequate psychometric properties, which means the scale can be used in Spanish-speaking samples. Second, our findings have implications for work conflict measurement. The literature on work conflict usually studies specific work conflict situations (distinguishing among task conflict, relationship conflict, and process conflict). However, there is a need to use instruments to assess work conflict based on the appraisal of the conflict situation. As Gutnick, et al. (2012) suggest, an appraisal of challenge drives behavior oriented toward action and positive affect, whereas an appraisal of threat results in behavior oriented toward avoidance and negative affect. In this regard, it is important for managers to be aware of the importance of creating situations that can be viewed as opportunities rather than threats. This strategy would have important implications for managers' interventions in work conflict. Thus, when the conflict has occurred, managers should evaluate the conflict appraisal to plan interventions, taking into account not only the type of conflict, but also the appraisal made by the workers.

Future research should include measures of conflict appraisals and the way they affect workers' attitudes and behaviors. Finally, the WCAS scale is a tool that can facilitate reliable research on conflict perception in organizations.

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