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Development and validation of the Granada Burnout Questionnaire in Spanish police

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Abstract The goal of the present study is to develop a questionnaire, with proper psychometric properties and current norms, to evaluate the burnout syndrome in Spain. The operative definition of burnout proposed by Maslach and Jackson is used to define three dimensions (*Emotional exhaustion*, *Depersonalization* and *Personal accomplishment*). A total of 2,403 national Spanish police participated. Evidence of construct validity was checked through cross validation (showing a good fit of the three factors model to the data). Using the MBI, NEO-FII and CECAD evidence of convergent validity and criteria validity were developed (showing that the relations are similar to the ones that appear in other research). The discrimination, mean, standard deviation, and typical error of the average of the items composing the various dimensions were analyzed. Both the Cronbach's alpha coefficient and the conditional standard error of measurement (CSEM) were calculated for each of the dimensions. The results showed good internal consistency (all α values $> .85$). Finally, the questionnaire was scaled using *T* scores. The psychometrical properties reported here support the use of this new questionnaire for the burnout evaluation in Spanish police.

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PALABRAS CLAVE

Evaluación del
síndrome de burnout;
Cuestionario de
Burnout Granada;

Resumen El objetivo del presente estudio es desarrollar un cuestionario, con propiedades psicométricas adecuadas y baremos actuales, para evaluar el síndrome de burnout en España. Se utiliza la definición de burnout propuesta por Maslach y Jackson para definir las tres dimensiones (*Cansancio emocional*, *Despersonalización* y *Realización personal*). Participan un total de 2.403 policías nacionales españoles. Se estudian evidencias de validez de constructo mediante validación cruzada (encontrándose un buen ajuste del modelo de tres factores a los datos). Se

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Estudio Instrumental

utilizan MBI, NEO-FII y CECAD para obtener evidencias de validez convergente y validez de criterio (se encuentran relaciones similares a las que se informan en otras investigaciones). Se analizan la discriminación, media, desviación típica y error típico de la media de los ítems que forman parte de las citadas dimensiones. Se calcula tanto el coeficiente alfa de Cronbach como el error estándar de medida condicional (CSEM) para cada una de las dimensiones del cuestionario. Los resultados muestran una buena consistencia interna (todos los valores $\alpha > .85$). Finalmente, el cuestionario fue baremado utilizando puntuaciones *T*. Sus propiedades psicométricas, apoyan el uso de este nuevo cuestionario para la evaluación del burnout en policías españoles.

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Police work is one of the most stressful professions in modern society due to exposure to violent situations, antisocial and aggressive behavior, and situations that put one's own safety at risk (Vuorensyrjä & Mälkiä, 2011). These professionals may undergo conflict as a function of the role that they perform. On the one hand, they are carrying out the laws in force and should not be moved by emotions or personal opinions. On the other hand, they should serve citizens and are expected to be friendly, understanding, and have a "friendly" relationship with the public. The difficulty of combining both roles can generate high levels of stress, which, if continuous, may lead to burnout syndrome (Shirom, 2009). In fact, in the United States, studies relate this problem to the number of suicides among these professionals, which is greater than the number of police agents who die in the course of duty (Seay, 2009).

Burnout is traditionally defined as a syndrome that is characterized by "Emotional Exhaustion" which refers to the sensations of physical overexertion and emotional weariness that occur as a consequence of the continual interactions that workers must maintain between themselves and clients, "Depersonalization" which involves the development of cynical attitudes and responses toward the persons for whom the workers provide services, and low "Personal Accomplishment" which implies the presence of a negative self-concept as the result of unpleasant situations (Maslach & Jackson, 1981).

According to Wheeler, Vassar, Worley, and Barnes (2011), the most commonly used questionnaire for the evaluation of burnout syndrome is the Maslach Burnout Inventory (MBI). The MBI has been translated and adapted for multiple cultures and has been used to establish the convergent validity of other instruments that evaluate the syndrome (Isoard-Gautheur, Oger, Guillet, & Martin-Krumm, 2010). There are three versions: the MBI-GS [General Survey], which is used to evaluate the general population; the MBI-ES [Educators Survey], which is intended for educators; and the MBI-HSS [Human Services Survey], which is used to evaluate professionals who provide human services (Maslach, Jackson, & Leiter, 1996). The Spanish version of the MBI was adapted in 1997 (Seisdedos, 1997). This survey is presently unavailable; thus, it cannot be used legally. Furthermore, there are no current scales; that is, the Spanish population is evaluated with criteria that were prepared in 1997, which does not seem advisable (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 1999).

The development of burnout syndrome has negative consequences on the individual. For example, high levels of burnout are related to a greater propensity for violent conduct, greater negativity toward performing tasks that extend beyond the limits of those that must be performed due to obligation, and deterioration in the performance of work (Manzoni & Eisner, 2006; Van Emmerick, Jawahar, & Stone, 2005). Relationships have also been established between various dimensions of burnout and several emotional disorders and personality factors (Tourigny, Baba, & Wang, 2010; Wu, 2009).

The organizations for which these professionals work can also be affected by the problem. For example, there is a connection between high levels of worker burnout and a decrease in work effectiveness and an increase in absenteeism (Petita & Vecchione, 2011).

Finally, it should be emphasized that this problem affects the users of the services that these professionals provide and, thus, society as a whole due to the lower service quality (Storm & Rothmann, 2003). Research in this area shows that when professionals suffer burnout, their relations with citizens become more frustrating and hostile. This effect is especially important for police activity because respectful conduct is considered to be key to resolving a conflict in a satisfactory fashion (Euwema, Kop, & Bakker, 2004).

The goal of the present instrumental study is to prepare a questionnaire, with proper psychometric properties and current norms, that reliably and validly evaluates burnout syndrome in Spain. This tool uses the same theoretical framework as the MBI, is included as an annex to this paper, and is available to psychologists who wish to use it. The wording of the items allows the questionnaire to be used with the general population and various professional groups. The psychometric analysis of the Spanish national police is presented in the current study.

Method

Participants

A total of 2,403 national Spanish police participated. The average age of the participants was 35.41 years ($SD = 8.75$). Of the participants, 84.2% were male and 14.1% were female; 47.2% were single, 49% married, and 3.8% separated, divorced, or widowed. Of the sample, 88.9% belonged to the Basic Scale, 7.2% were sub-inspectors, and 3.9%

belonged to the Executive Scale. Concerning the work schedule, 23.8% worked a morning and afternoon schedule, 15.1% mornings, 9.5% afternoons, 50.4% shifts (with the various modalities for shifts within the Spanish police), .6% were always available (operational service), and .6% worked nights.

Instruments

The Granada Burnout Questionnaire (in Spanish *Cuestionario Burnout Granada*, [CBG]) is a paper-and-pencil test that was developed following the guidelines proposed by Downing (2006). The operative definition of burnout proposed by Maslach and Jackson (1981) is used to define the various dimensions.

The response format for the items is a Likert-type scale with five alternatives (Lozano, García-Cueto, & Muñiz, 2008), with 1 signifying total disagreement and 5 representing total agreement. The items measure dimensions of burnout in a positive or negative way. They are then corrected such that a high score signifies a high value in the evaluated trait.

Professors of the Department of Methodology of Behavioral Sciences constructed 10 items for each one of the three dimensions that compose burnout; thus, the questionnaire is brief and easy to apply (see Appendix). A pilot study was performed in which the questionnaire was applied to 116 members of the Mossos d'Esquadra (autonomous Catalan police) to test potential problems in the comprehension of the items and the psychometric properties. Three items were eliminated from *Depersonalization* and one was eliminated from *Emotional Exhaustion* due to problems with comprehension and because the discrimination index (i.e., corrected item-scale score correlation) was lower than the pre-established cut-off point (.30).

The MBI (Maslach & Jackson, 1981) version that was adapted to the Spanish population (Seisedos, 1997) was also applied to examine the convergent validity of the CBG. The MBI is composed of 22 items with a seven-point Likert-type response format. Following the recommendations of meta-analytic studies (Aguayo, Vargas, De la Fuente, & Lozano, 2011), the reliability of each of the dimensions of the MBI was calculated. These dimensions are *Emotional Exhaustion* (9 items, $\alpha = .89$), *Depersonalization* (5 items, $\alpha = .68$) and *Personal Accomplishment* (8 items, $\alpha = .85$).

The Neo Reduced Five-Factor personality inventory (NEO-FFI; Costa & McCrae, 1992) was administered in the version that was adapted for the Spanish population (Costa & McCrae, 2002) to evaluate concurrent validity. This measure is composed of 60 items (12 items for each aspect) with a five-point Likert-type response format. In the current sample, the alpha for each dimension was as follows: *Neuroticism* (.83), *Extroversion* (.73), *Openness* (.66), *Agreeableness* (.73), and *Responsibility* (.82).

The Educational-Clinical Questionnaire: Anxiety and Depression (CECAD; Lozano, García-Cueto, & Lozano, 2011) was also administered to evaluate concurrent validity. This questionnaire consists of 50 items with a five-point Likert-type response format. It globally evaluates emotional disorders based on scores for six dimensions. In the current sample, the reliability of these dimensions was as follows: *Depression* (29 items, $\alpha = .95$), *Anxiety* (20 items, $\alpha = .94$),

Uselessness (8 items, $\alpha = .83$), *Irritability* (6 items, $\alpha = .88$), *Problematic Thoughts* (7 items, $\alpha = .84$), and *Psychophysiological Symptoms* (16 items, $\alpha = .92$).

The measures were edited by the authors following the recommendations of Campion & Miller (2006).

Procedure

The current work is an instrumental study (Hartley, 2012; Montero & León, 2007). Contact was made with the *Comité Nacional de Riesgos Laborales del Sindicato Unificado de Policía* [National Committee on Occupational Hazards of the Unified Police Union] (SUP). This committee, in collaboration with the authors, coordinated the collection of information to enable professionals from the various policing regions of Spain to participate. The information was collected during police training courses (small groups) or individually, and all of the participants participated in the study voluntarily and anonymously.

Analysis

To evaluate the evidence of validity based on internal structure of the questionnaire, the factorial validity was checked through cross-validation. Exploratory factor analysis was conducted with 40% of the sample, and a confirmatory factor analysis (using AMOS 16.0) was performed with the remaining 60% of the sample to determine whether the structure was replicable. Next, evidences of convergent validity were checked by correlating the scorings of the various dimensions of the CBG with the various factors of the MBI.

Then, evidence of criterion-related validity was checked. For this process, the concurrent validity was calculated by correlating the various dimensions of the CBG with those of the NEO-FFI and CECAD. All of the correlations were corrected for the role of errors of measurement to evaluate both convergent and concurrent validity (using the attenuation formulas) (American Educational Research Association [AERA] et al., 1999).

An analysis was conducted to examine the discrimination, mean, standard deviation, and typical error of the average of the items composing the various dimensions. Both the α coefficient and the conditional standard error of measurement (CSEM) were calculated for each of the dimensions.

Analysis of variance (ANOVA) was performed to examine differences in scoring dimensions among different groups. Finally, scores from the questionnaire were transformed to a mean of 50 and a standard deviation of 10 and following a normal distribution. These are better known as T scores and are a popular reporting scale with psychological tests.

Results

Validity

An exploratory factor analysis was conducted with 40% of the sample ($n = 911$). Employing the minimum rank factor analysis extraction method with Promin rotation, three factors were extracted, explaining 63.54% of the total variance of the questionnaire (Table 1). The correlation

Table 1 Factor loadings for exploratory factor analysis (40% of the sample).

Item	D	PA	EE
i01		.70	
i02			.85
i03			.85
i04		.59	
i05			.75
i06		.65	
i07			.54
i08			.54
i09			.53
i10	.57		
i11		.76	
i12	.57		
i13	.64		
i14		.44	
i15			.60
i16		.76	
i17		.92	
i18		.64	
i19		.64	
i20		.34	
i21		.56	
i22			.64
i23	.72		
i24	.85		
i25	.85		
i26	.90		

Note. D = Depersonalization; EE = Emotional Exhaustion; PA = Personal Accomplishment.

between the factors *Depersonalization* and *Personal Accomplishment* was $-.57$, the correlation between *Depersonalization* and *Emotional Exhaustion* was $.37$, and the correlation between *Personal Accomplishment* and *Emotional Exhaustion* was $-.53$. The average of the residuals for the model was 0.0014 ($SD = 0.0013$), GFI [goodness-of-fit index] = $.99$, and RMSR [root mean square residual] = $.036$, indicating a good fit of the three-dimensional model to the data.

Next, a confirmatory factor analysis was conducted with the remaining 60% of the sample ($n = 1,492$). The model obtained in the previous analysis (Figure 1) was checked. Because the items were Likert-type, weighted least squares was used as the estimation method. In Figure 1, the correlations between the errors were eliminated for clarity.

After ascertaining that the assumption of multivariate normality was not fulfilled, the Bollen-Stine bootstrapping method was used (2,000 bootstrappings were performed) to confirm the global fit of the model. A good global fit was obtained ($p = .113$). Additionally, values of GFI = $.90$ and RMSEA = $.031$ (90% confidence interval $.027-.034$) were obtained. Due to the high correlation between *Emotional Exhaustion* and *Personal Accomplishment*, the correlation was fixed at -1 to test the two-dimensional model. The chi-

square difference test evidenced $\chi^2 = 422.6$ ($p < .001$), which indicates that the three-dimensional model has a better fit than the two-dimensional model (Byrne, 2001).

To obtain evidence for convergent validity, the correlations between the final scores of the various dimensions of the CBG and MBI were calculated (Table 2). These correlations were corrected to eliminate the suppressing influence of measurement errors.

To obtain evidence for criterion-related validity, the correlations between the scores of the various dimensions of the CBG and MBI and the scores obtained for the various dimensions of the NEO-FII and the CECAD were calculated (Table 2) and corrected or adjusted for the role of measurement errors.

Analysis of items and reliability

Table 3 presents the descriptive analyses, the index of discrimination of the items in CBG by dimension, the α coefficients of each aspect of the CBG and MBI, and their dispersion.

Following the recommendations of American Educational Research Association [AERA] et al. (1999), the CSEM was calculated for each dimension of the CBG and the MBI (Figure 2). The CSEMs are useful for interpreting proximity between the scores obtained in the test and the true score that underlies it and calculating the confidence intervals of the scores (Raju, Price, Oshima, & Nering, 2007).

After calculating the coefficient of reliability of the dimensions of the CBG and setting the variance to that obtained in the dimensions of the MBI, the following reliability values were obtained: $.93$ for *Emotional Exhaustion*, $.90$ for *Depersonalization*, and $.92$ for *Personal Accomplishment*.

Scales

The current study examined whether the scores of the dimensions of the CBG differ as a function of group membership to set different scales for groups if necessary. For this purpose, an ANOVA was performed on fixed effects with three factors: family status, employment ladder, and work schedule. No statistically significant differences for any of the dimensions were found as a function of the various factors or their interactions.

T scores were used for the scales because they are frequently used by clinical psychologists (Table 4).

Discussion

This study presents the Granada Burnout Questionnaire (CBG), which was developed using the theoretical framework of the MBI. To study the validity of the construction of the CBG, a three factor solution was evaluated and it provided an excellent fit to the data.

Indices of concurrent and convergent validity were obtained between the final scores for the various dimensions of the CBG and the MBI, NEO-FII, and CECAD.

With respect to concurrent validity, the relationships between the various dimensions of burnout and personality factors were similar to those obtained in studies that used

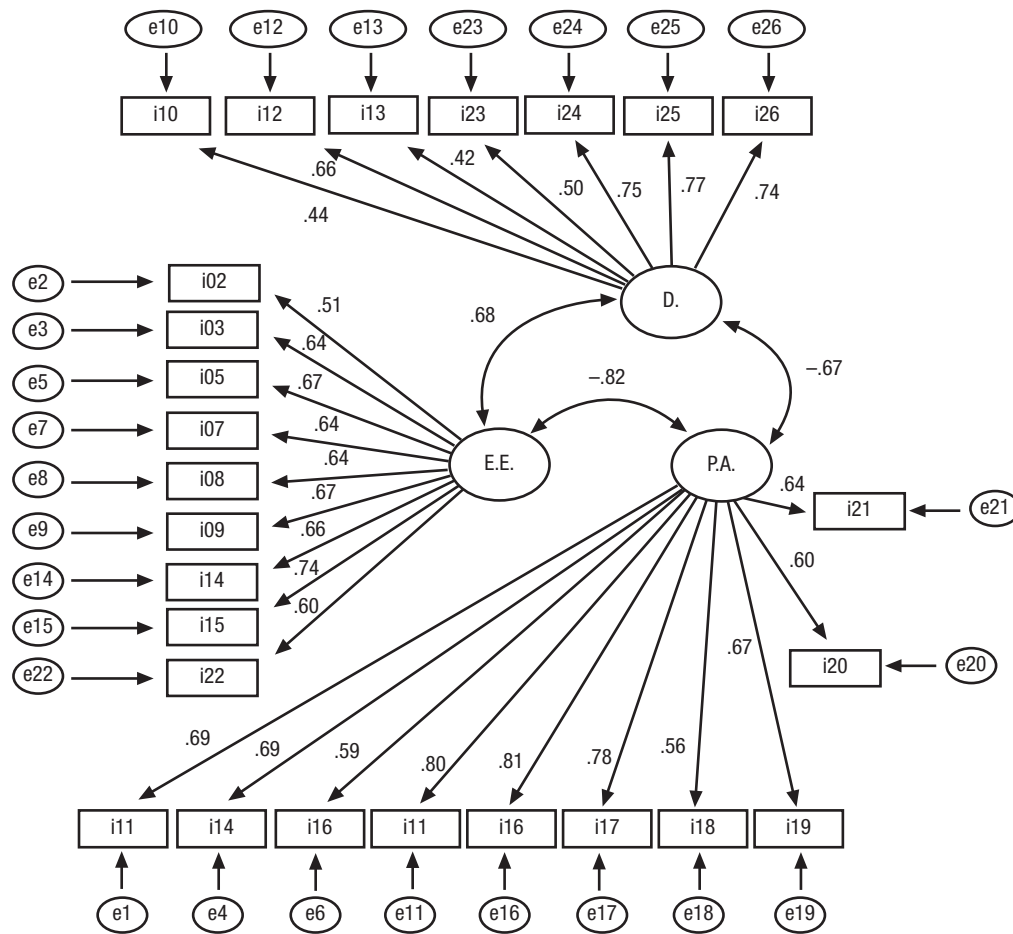


Figure 1 Cuestionario Burnout Granada confirmatory factor analysis (60% of the sample).

Table 2 Corrected correlation matrix (correlations were adjusted using the attenuation formula).

		MBI CE	MBI D	MBI RP			
CBG	EE	.70					
CBG	D		.33				
CBG	PA			.47			
CBG	EE	.58	-.41	-.10	-.44	-.42	
MBI	EE	.51	-.38	-.09	-.44	-.39	
CBG	D	.51	-.58	-.20	-.53	-.70	
MBI	D	.41	-.31	-.05	-.48	-.37	
CBG	PA	-.56	.50	.12	.49	.57	
MBI	PA	-.42	.44	.21	.35	.52	
CBG	EE	.52	.55	.42	.51	.47	.55
MBI	EE	.61	.65	.51	.60	.57	.64
CBG	D	.45	.43	.38	.43	.38	.40
MBI	D	.48	.48	.41	.47	.47	.47
CBG	PA	-.50	-.51	-.42	-.48	-.44	-.50
MBI	PA	-.39	-.39	-.34	-.38	-.35	-.37

Note. CBG = Cuestionario Burnout Granada; D = Depersonalization; EE = Emotional Exhaustion; MBI = Maslach Burnout Inventory; PA = Personal Accomplishment.

Table 3 Item analysis, reliability and variance of scores on the dimensions.

Dimension	Item	Mean	SD	SE	Disc.	α CBG	α MBI	σ^2_{CBG}	σ^2_{MBI}
EE	i02	2.21	1.29	0.026	.56	.86	.89	55.68	112.44
	i03	1.93	1.16	0.024	.63				
	i05	2.51	1.27	0.026	.60				
	i07	2.05	1.24	0.025	.57				
	i08	1.48	0.98	0.020	.58				
	i09	1.82	1.19	0.024	.61				
	i14	2.13	1.26	0.026	.55				
	i15	2.00	1.15	0.023	.68				
D	i22	2.33	1.22	0.025	.58	.85	.68	23.12	34.98
	i10	1.94	1.06	0.022	.52				
	i12	1.69	0.96	0.020	.64				
	i13	1.82	1.01	0.021	.50				
	i23	1.81	0.98	0.020	.59				
	i24	1.74	0.88	0.018	.66				
	i25	1.91	0.91	0.019	.63				
	i26	1.88	0.89	0.018	.69				
RP	i01	4.09	1.23	0.025	.62	.88	.85	64.89	96.01
	i04	4.22	1.17	0.024	.64				
	i06	3.81	1.13	0.023	.59				
	i11	4.20	1.08	0.022	.71				
	i16	4.14	1.09	0.022	.72				
	i17	3.78	1.21	0.025	.73				
	i18	3.49	1.21	0.025	.56				
	i19	4.15	1.13	0.023	.63				
	i20	4.50	0.94	0.019	.52				
	i21	3.69	1.28	0.026	.46				

Note. CBG = *Cuestionario Burnout Granada*; D = Depersonalization; Disc. = Discrimination Index; EE = Emotional Exhaustion; MBI = Maslach Burnout Inventory; SD = Standard Deviation.

the MBI (Kiffin-Pettersen, Jordan, & Soutar, 2011; Wu, 2009). With respect to the Emotional Exhaustion aspect and personality factors, an intermediate and positive correlation was obtained with Neuroticism, non-significant correlation was evidenced with Neuroticism and Openness, and intermediate and negative correlations were found with Extroversion, Agreeableness, and Responsibility. These results are in accordance with the literature (Bakker, Van der Zee, Lewig, & Dolland, 2006).

Depersonalization was also related to personality factors. A medium and positive relation was found with Neuroticism and a negative relation with Extroversion, Agreeableness, and Responsibility. These results are in line with those reported by other authors (Goddard, Patton, & Creed, 2004), although it is important to emphasize the lack of consensus in the literature concerning the relation between Depersonalization and Openness.

Intermediate correlations were obtained between Personal Accomplishment and personality factors. Personal Accomplishment negatively correlated with Neuroticism and positively correlated with Extroversion, Openness, Agreeableness, and Responsibility. These results are similar to those reported in previous studies (Bakker et al., 2006).

The concurrent validity of the questionnaire rests on the relation between the various dimensions of burnout

according to the CBG and the various emotional disorders evaluated using CECAD (Anxiety, Depression, Uselessness, Irritability, Problematic Thoughts, and Psychophysiological Symptoms). The strategy of grouping the emotional disorders into two large groups (Depression and Anxiety), as suggested by Papastyliaou, Kaila, and Polychronopoulos (2009), was adopted. Correlations between the various dimensions of the CBG and the group of factors associated with Depression were intermediate and in the expected direction. The results are in line with those obtained by authors such as Tourigny et al. (2010), among others. In the current study, the results for the variables associated with Anxiety were similar to those obtained for the Depression group; these results are in accordance with those found in the literature (Cremades, Wated, & Wiggins, 2011).

The adequacy of the psychometric properties of the CBG was revealed through the analysis of items and reliability. Good indices for discrimination were obtained; the lowest value was .46. The coefficients of reliability were satisfactory (Raju et al., 2007), especially when the number of items composing each aspect was taken into account. Statistically significant differences between the reliability coefficients of the MBI and those of the CBG were observed in all cases ($p < .001$).

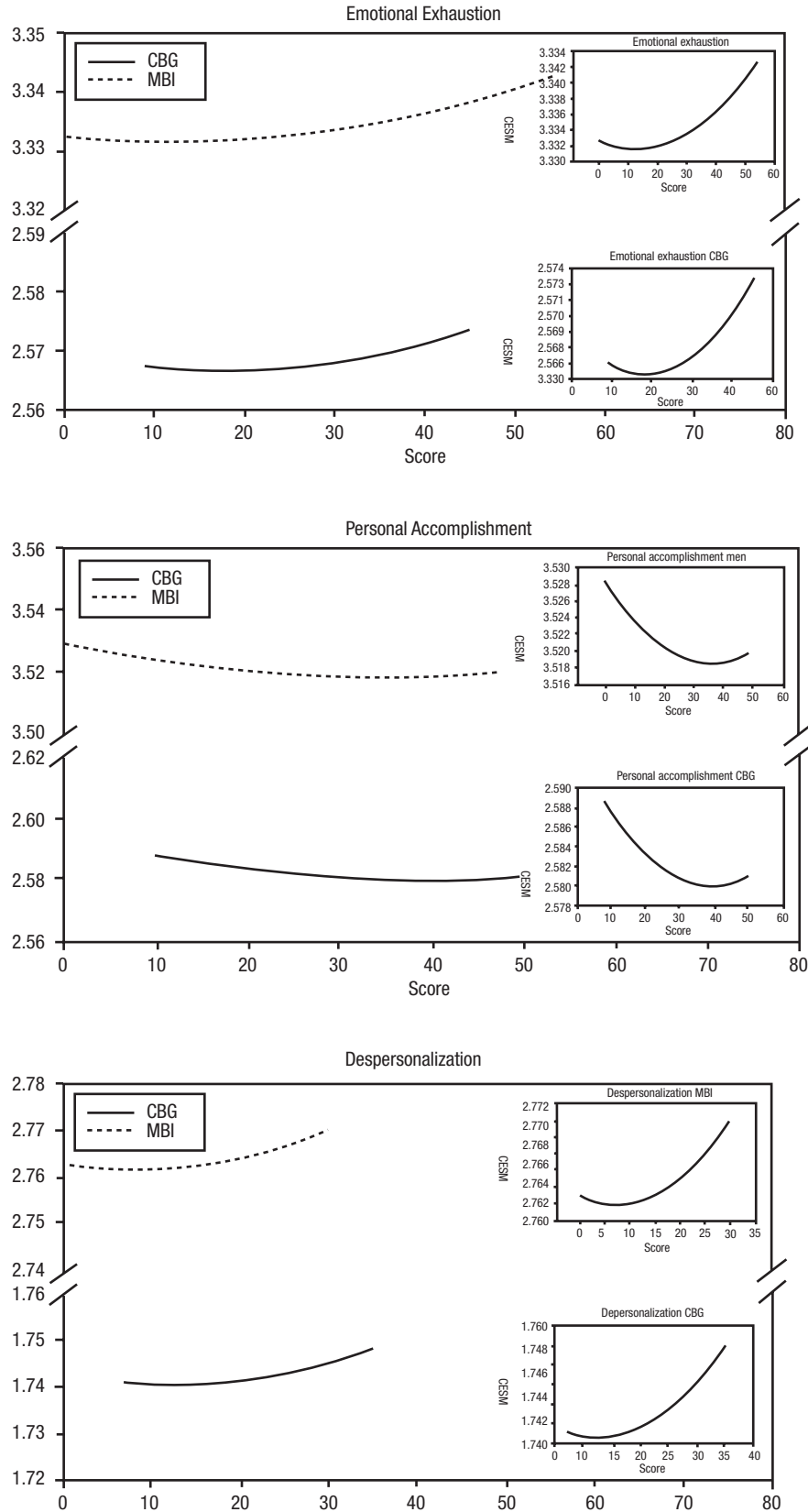


Figure 2 Comparison of the conditional standard error of measurement between Maslach Burnout Inventory (MBI) and *Cuestionario Burnout Granada* (CBG). CSEM = conditional standard error of measurement.

Table 4 *Cuestionario Burnout Granada norms for Spanish police.*

Emotional exhaustion		Depersonalization		Personal accomplishment	
DS	T	DS	T	DS	T
9	37	7	40	10	21
10	39	8	42	11	23
11	41	9	44	12	24
12	43	10	46	13	25
13	45	11	48	14	27
14	46	12	50	15	27
15	47	13	53	16	28
16	49	14	55	17	29
17	50	15	58	18	30
18	52	16	59	19	30
19	53	17	61	20	31
20	54	18	62	21	31
21	56	19	64	22	32
22	57	20	65	23	33
23	58	21	66	24	34
24	59	22	67	25	35
25	60	23	68	26	36
26	61	24	69	27	36
27	62	25	70	28	37
28	63	26	71	29	38
29	64	27	72	30	39
30	65	28	73	31	40
31	65	29	73	32	40
32	66	30	74	33	41
33	67	31	75	34	42
34	68	32	77	35	43
35	68	34	77	36	44
36	69	35	79	37	45
37	70			38	46
38	70			39	47
39	71			40	48
40	72			41	49
41	73			42	51
42	73			43	52
43	74			44	54
44	75			45	55
45	76			46	57
				47	59
				48	61
				49	64
				50	66

Note. DS = Direct Score; T = T Score.

The α coefficients for the Depersonalization and Personal Accomplishment dimensions of the CBG were higher than those for the corresponding dimensions of the MBI. By contrast, for the Emotional Exhaustion aspect, the CBG showed a reliability value that was slightly lower than that of the MBI. This result occurred because the MBI has a Likert-type scale with seven alternative responses, in comparison with the five responses of the CBG. The greater number of alternatives artificially increases the variance, resulting in a higher reliability (Lozano et al., 2008). The

CSEM values on all dimensions of the CBG were systematically lower than those obtained for the corresponding dimension of the MBI. This finding implies that the CBG has a lower error in measurement for all of the factors that compose burnout. Furthermore, this result indicates that if one applies the same questionnaire various times to the same subjects, one will obtain more consistent scores with the CBG than with the MBI (Hurtz, 2008). Finally, the scales (using T scores) of the CBG are included for the group of Spanish police.

In conclusion, the psychometrical properties reported here support the use of this new questionnaire for the Burnout evaluation in a Spanish sample. The biggest limitation in this work is that the sample consisted of only Spanish police, albeit a very large sample for validity studies. With the very strong support from this study for the validity of scores from the CBG, research can now be continued with different professional groups.

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References

- Aguayo, R., Vargas, C., De la Fuente, E., & Lozano, L. M. (2011). A meta-analytic reliability generalization study of the Maslach Burnout Inventory. *International Journal of Clinical and Health Psychology, 11*, 343-361.
- American Educational Research Association-AERA, American Psychological Association-APA, & National Council on Measurement in Education-NCME (1999). *Standards for educational and psychological testing*. Washington, D.C.: American Educational Research Association.
- Baker, A. B., Van der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology, 146*, 31-50.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: basic concepts, applications and programming*. New York: Taylor & Francis Group.
- Campion, D., & Miller, S. (2006). Test production effects on validity. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of test development* (pp. 599-623). London: LEA.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI): professional manual*. Odessa, F.L.: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (2002). *Inventario de Personalidad NEO Revisado (NEO PI-R). Inventario NEO Reducido de Cinco Factores (NEO-FFI). Manual*. Madrid: TEA Ediciones, S. A.
- Cremades, J., Wated, G., & Wiggins, M. S. (2011). Multiplicative measurements of a trait anxiety scale as predictors of burnout. *Measurement in Physical Education and Exercise Science, 15*, 220-233.
- Downing, S. M. (2006). Twelve steps for effective test development. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of test development* (pp. 3-25). London: LEA.
- Euwema, M. C., Kop, N., & Bakker, A. B. (2004). The behavior of police officers in conflict situations: how burnout and reduced dominance contribute to better outcomes. *Work & Stress, 18*, 23-38.
- Goddard, R., Patton, W., & Creed, P. (2004). The importance and place of Neuroticism in predicting burnout in employment service cause managers. *Journal of Applied Social Psychology, 34*, 282-296.
- Hartley, J. (2012). New ways of making academic articles easier to read. *International Journal of Clinical and Health Psychology, 12*, 143-160.
- Hurtz, G. (2008, April). *Clarifications on some misconceptions about Conditional Standard Errors of Measurement*. Paper presented at the Annual Conference of the Society of Industrial and Organizational Psychology, San Francisco, C.A.
- Isoard-Gauthier, S., Oger, M., Guillet, E., & Martin-Krumm, C. (2010). Validation of a french version of the Athlete Burnout Questionnaire (ABQ): In competitive sport and physical education context. *European Journal of Psychological Assessment, 26*, 203-211.
- Kiffin-Pettersen, S., Jordan, C. L., & Soutar, G. N. (2011). The big five, emotional exhaustion and citizenship behaviors in service settings: the mediating role of emotional labor. *Personality and Individual Differences, 50*, 43-48.
- Lozano, L., García-Cueto, E., & Lozano, L. M. (2011). *Cuestionario Educativo Clínico de Ansiedad y Depresión (2th ed.)*. Madrid: TEA Ediciones.
- Lozano, L.M., García-Cueto, E. & Muñiz, J. (2008). Effect of the number of response categories on the reliability and validity of rating scales. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences, 4*, 73-79.
- Manzoni, P., & Eisner, M. (2006). Violence between the police and the public: influences of work-related stress, job satisfaction, burnout and situational factors. *Criminal Justice and Behavior, 33*, 613-645.
- Maslach, C. & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior, 2*, 99-113.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *The Maslach Burnout Inventory manual (3th. ed.)*. Palo Alto, C.A.: Consulting Psychologists Press.
- Montero, I. & León, O. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology, 7*, 847-862.
- Papastilianou, A., Kaila, M., & Polychronopoulos, M. (2009). Teachers' burnout, depression, role ambiguity and conflict. *Social Psychology of Education, 12*, 295-314.
- Petita, L., & Vecchione, M. (2011). Job burnout, absenteeism, and extra role behaviors. *Journal of Workplace Behavioral Health, 26*, 97-121.
- Raju, N. S., Price, R., Oshima, T. C., & Nering, L. (2007). Standardized conditional SEM: A case for conditional reliability. *Applied Psychological Measurement, 31*, 169-180.
- Seay, S. D. (2009). *Job related stress and the ability to transition among life roles for police officers* (Master's Theses). Retrieved from JSJU ScholarWorks (Paper 3652).
- Seisdedos, N. (1997). *Manual MBI, Inventario Burnout de Maslach*. Madrid: TEA.
- Shirom, A. (2009). Acerca de la validez de constructo, predictores y consecuencias del burnout en el lugar de trabajo. *Ciencia & Trabajo, 32*, 44-54.
- Storm, K., & Rothmann, S. (2003). A psychometric analysis of the Maslach Burnout Inventory-General Survey in the South Africa police service. *South Africa Journal of Psychology, 33*, 219-226.
- Tourigny, L., Baba, V. V., & Wang, X. (2010). Burnout and depression among nurses in Japan and China: the moderating effects of job satisfaction and absence. *The International Journal of Human Resource Management, 21*, 2741-2761.
- Van Emmerick, H., Jawahar, I. M., & Stone, T. H. (2005). Associations among altruism, burnout dimensions, and organizational citizenship behavior. *Work & Stress, 19*, 93-100.
- Vuorensyrjä, M., & Mälkiä, M. (2011). Nonlinearity of the effects of police stressors on police officer burnout. *Policing: An international journal of police strategies and management, 34*, 382-402.

Wheeler, D. L., Vassar, M., Worley, J. A., & Barnes, L. L. B. (2011). A reliability generalization meta-analysis of coefficient alpha for the Maslach Burnout Inventory. *Educational and Psychological Measurement, 71*, 231-244.

Wu, C. H. (2009). Role conflicts, emotional exhaustion and health problems: a study of police officers in Taiwan. *Stress and Health, 25*, 259-265.

Appendix Cuestionario de Burnout Granada (CBG).

	1. Totalmente en desacuerdo	5. Totalmente de acuerdo				
1*	El tipo de trabajo que hago me frustra		1	2	3	4 5
2	El trabajo que tengo que realizar cada día es más de lo que es posible realizar en una jornada laboral		1	2	3	4 5
3	Estoy desbordado por mi trabajo		1	2	3	4 5
4*	Estoy harto de mi trabajo		1	2	3	4 5
5	Al final de la jornada laboral estoy agotado		1	2	3	4 5
6	Al final de la jornada me siento satisfecho con el trabajo realizado		1	2	3	4 5
7	Al iniciar la jornada laboral me da la sensación de que nunca he salido de trabajar		1	2	3	4 5
8	Creo que ya no puedo más		1	2	3	4 5
9	Me cuesta iniciar cada jornada laboral		1	2	3	4 5
10*	Me gusta compartir ciertos momentos de ocio con mis compañeros de trabajo		1	2	3	4 5
11	Me gusta mi trabajo		1	2	3	4 5
12*	Me gusta relacionarme con mis compañeros de trabajo		1	2	3	4 5
13*	Me preocupo por las personas que acuden a mí en mi trabajo		1	2	3	4 5
14	Estoy quemado por mi trabajo		1	2	3	4 5
15	Me siento cansado en el trabajo		1	2	3	4 5
16	Me siento orgulloso de mi trabajo		1	2	3	4 5
17	Me siento realizado en mi trabajo		1	2	3	4 5
18	Mi trabajo hace que me sienta importante		1	2	3	4 5
19*	Mi trabajo me decepciona		1	2	3	4 5
20*	Nada de lo que hago merece la pena		1	2	3	4 5
21	No he conseguido los logros que me había propuesto al comenzar en mi puesto de empleo		1	2	3	4 5
22	Pienso que trabajo demasiado		1	2	3	4 5
23*	Sentirme cercano a mis compañeros facilita mi labor		1	2	3	4 5
24*	Soy capaz de comprender a las demás personas		1	2	3	4 5
25*	Soy capaz de comprender las emociones de las personas a las que va dirigido mi trabajo		1	2	3	4 5
26*	Soy capaz de comprender las emociones de los compañeros de trabajo		1	2	3	4 5

Note. * These items must be redirected to perform the corrections.