Translation, adaptation, and validation of the Copenhagen Burnout Inventory for the Peruvian version[1]

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The goal is to adapt and analyze the psychometric properties of the Copenhagen Burnout Inventory (CBI) in workers of the national domestic violence helpline (Peru). Two measurements were taken in the same population (n=160). Translation-back translation was applied. Internal consistency was assessed with Cronbach's alpha, corrected Item-Total Correlation and omega coefficient. Test-retest was performed in the second measurement. Convergent validity was examined with Pearson correlations with the Secondary Traumatic Stress Scale, the Perceived Stress Scale, and the Fear of Covid-19 Scale. Confirmatory Factor Analysis confirmed that the three-correlated factor model has the best fit. Regarding reliability, adequate coefficients were found (alpha: >.82, omega: >.91 and intraclass correlation: > .66). The CBI scales are correlated with the Secondary Traumatic Stress Scale, the Perceived Stress Scale, and the Fear of Covid-19 Scale, and they are also significantly associated with self-reported health status, but only work-related burnout is associated with self-reported workload. As a result, the CBI shows excellent psychometric properties.
Keywords: burnout, CBI, Peru, psychometrics, stress.

Traducción, adaptación y validación del inventario de burnout de Copenhagen para Perú
El objetivo es adaptar y analizar las propiedades psicométricas de Copenhagen Burnout Inventory (CBI) en operadoras de la línea telefónica de violencia familiar (Perú). Se realizaron dos mediciones en la misma población (n=160). Se aplicó traducción – traducción inversa. La consistencia interna se analizó mediante el alfa de Cronbach, correlación ítem-total corregida y el coeficiente omega. Se aplicó testeo-retesteo en la segunda medición. La validez convergente se analizó con correlaciones de Pearson para Estrés Traumático

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Secundario, Estrés Percibido Agudo y la escala del Miedo al Covid-19. El análisis confirmatorio mostró que la mejor solución es la de los tres factores correlacionados. Respecto de la confiabilidad, se obtuvieron coeficientes adecuados (alfa: >.82, omega: >.91 y correlación intraclase: >.66). Las escalas del CBI mostraron correlación con el Estrés Traumático Secundario, Estrés Percibido Agudo y la escala del Miedo al Covid-19, y también con el autorreporte de salud, aunque solo el burnout relacionado al trabajo se asoció con el volumen de trabajo. Como resultado, el CBI muestra excelentes propiedades psicométricas.
Palabras clave: burnout, CBI, Perú, psicometría, estrés.

Tradução, adaptação e validação do Copenhagen Burnout Inventory para a versão peruana

O objetivo é adaptar e analisar as propriedades psicométricas do Copenhagen Burnout Inventory (CBI) em operadores da linha direta de violência familiar (Peru). Duas medidas foram feitas na mesma população (n=160). A tradução foi aplicada - tradução reversa. A consistência interna foi analisada por meio do alfa de Cronbach, correlação item-total corrigida e coeficiente ômega. O teste-reteste foi aplicado na segunda medição. A validade convergente foi analisada com correlações de Pearson para Estresse Traumático Secundário, Estresse Percebido Agudo e a escala de Medo da Covid-19. A análise confirmatória mostrou que a melhor solução é a dos três fatores correlacionados. Quanto à confiabilidade, obtiveram-se coeficientes adequados (alfa: >.82, ômega: >.91 e correlação intraclasse: >.66). As escalas CBI mostraram correlação com Estresse Traumático Secundário, Estresse Percebido Agudo e Escala de Medo da Covid-19, e também com a saúde autorreferida, embora apenas o burnout relacionado ao trabalho tenha sido associado à carga de trabalho. Como resultado, o CBI apresenta excelentes propriedades psicométricas.
Palavras-chave: burnout, CBI, Peru, psicometria, estresse.

Traduction, adaptation et validation du Copenhagen Burnout Inventory pour la version péruvienne

L'objectif est d'adapter et d'analyser les propriétés psychométriques du Copenhagen Burnout Inventory (CBI) chez les opérateurs de la hotline contre la violence familiale (Pérou). Deux mesures ont été faites dans la même population (n=160). La traduction a été appliquée - traduction inversée. La cohérence interne a été analysée à l'aide de l'alpha de Cronbach, de la corrélation item-total corrigée et du coefficient oméga. Le test-retest a été appliqué dans la deuxième mesure. La validité convergente a été analysée avec les corrélations de Pearson pour le stress traumatique secondaire, le stress perçu aigu et l'échelle de peur du Covid-19. L'analyse confirmatoire a montré que la meilleure solution est celle des trois facteurs corrélés. Concernant la fiabilité, des coefficients adéquats ont été obtenus (alpha : >.82, oméga : >.91 et corrélation intraclasse : >.66). Les échelles CBI ont montré une corrélation avec le stress traumatique secondaire, le stress aigu perçu et l'échelle de peur de Covid-19, ainsi qu'avec l'état de santé autodéclaré, bien que seul l'épuisement professionnel soit associé à la charge de travail. En conséquence, le CBI présente d'excellentes propriétés psychométriques.
Mots-clés: burnout, CBI, Pérou, psychométrie, stress.

Burnout has many different definitions, but it is broadly understood as a long-term product of work-related stress (Maslach & Schaufeli, 1993) characterized by physical, emotional, and mental exhaustion (Schaufeli & Greenglass, 2001). Many human service workers are exposed to burnout, among which domestic violence service providers hold an important risk of developing the syndrome as they constantly interact with victims of violence and their history.

Although we are not aware of any study on burnout on domestic violence helpline services, in general, existent work has focused on burnout in domestic violence shelter staff (Molloy, 2019), domestic violence victim therapists (Ben-Porat & Itzhaky, 2011), sexual assault and domestic violence counselors (Baird & Jenkins, 2003) or social workers (Choi, 2011), among others (Kulkarni et al., 2013). Furthermore, studies on the impact of burnout in domestic violence services is also scarce (Walters et al., 2018).

All around the globe there is a massive pressure on victim support services to provide adequate aid for those affected by abuse; women, children and the elderly are the most prone to experience physical, psychological and sexual abuse (World Health Organization, 2014). Women are especially vulnerable, as one out of three women worldwide have been victims of physical and/or psychological violence at the hands of their partners (World Health Organization, 2013). Given the importance of providing quality services for these populations, we find it important to examine the likelihood of burnout in domestic violence service workers, particularly in countries with high domestic violence rates, which are more likely to have less institutional capacity to address victims' needs and to properly treat service providers' burnout. For that reason, it is important to address self-care among these workers since it will also affect positively on the quality of services provided (Gomà-Rodríguez et al., 2018).

Among domestic violence providers, helpline workers face specific risks. Given their work involves listening to stories of violence on a daily basis, in addition to the emotional toll of the work, the stressful context of uncertainty underpinning the psychological support given by these workers is another factor (i.e.: victims could hang up at any moment, his/her aggressor may be meters away, victims may never report to the police). These workers must perform vital services in only a few minutes of telephone communication in which they have to be considerate but are also confronted with difficult situations. In the face of the quarantine response during the COVID-19 context, domestic violence increased in several countries, among others, increasing the demand for helpline services as lockdowns were implemented.

The concept of burnout is broadly assessed by the Maslach Burnout Inventory (MBI), a paid instrument which measures emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach & Jackson, 1981). Although the MBI is the most common burnout inventory used, both its empirical and theoretical dimensions are not free of critiques. The MBI has been criticized for lacking both a strong theoretical conceptualization as well as relationships across its three dimensions. For example, Schaufeli (2003, p. 3) argues that the MBI "[…] has been developed inductively by factor-analyzing a rather arbitrary set of items." In addition, the MBI has been criticized for having been built without in-depth qualitative research, a problem that may also be related to the difficulty for understanding some of its items originally developed for the Danish society (Yeh et al., 2007).

Other authors have questioned the quality of the relationships across the dimensions. For example, Schaufeli (2003), only considers exhaustion and depersonalization as core dimensions of burnout. On the other hand, Taris et al. (2005), state that depersonalization is usually considered a coping strategy for burnout rather than part of it. In addition, reduced personal accomplishment could be a consequence of burnout that is dependent on personality dispositions or possibly genetics, rather than a fundamental aspect (Shirom, 2005). The MBI is also an incomplete measure of exhaustion as it only focuses on the

affective components of emotional exhaustion, leaving aside other sources that also lead to burnout, such as cognitive and physical elements (Halbesleben & Demerouti, 2005).

The extensive use of MBI as a burnout measure has led to a narrowing in its conceptualization (Schaufeli, 2003), by which "…burnout is what the MBI measures and that the MBI measures what burnout is" (Berat et al., 2016). Some scholars claim that the burnout concept of the MBI has been misused in research (Eckleberry-Hunt et al., 2018).

In an effort to fill these gaps in burnout research, Kristensen et al. (2005) developed the Copenhagen Burnout Inventory (CBI). It is available in the public domain and is a straightforward measure for burnout in which causal attribution to symptoms is key. It is based on the development of Pines and Aronson (1988) and Shirom (1989), who consider burnout as a state of physical and emotional exhaustion resulting from long-term involvement in emotionally demanding situations at work (cited in Kristensen et al., 2005). For Kristensen et al. (2005), an element of attribution must also be present, and is a fundamental aspect of their definition of burnout: the personal fatigue and exhaustion experienced, the fatigue and exhaustion attributed by the person to work; and the fatigue and exhaustion perceived to be related to working with clients.

Since 2007, the CBI has been validated using several professions and countries and has shown consistent reliability and validity. This literature includes country studies such as: Taiwan (Yeh et al., 2007), New Zealand (Milfont et al., 2008), Portugal and Brazil (Campos et al., 2013; Rocha et al., 2020), Spain (Molinero et al., 2013), Italy (Avanzi et al., 2013; Fiorilli et al., 2015), China (Fong et al., 2014), Thailand (Phuekphan et al., 2016), Serbia (Berat et al., 2016), Iran (Javanshir et al., 2019; Mahmoudi et al., 2017), Malaysia (Chin et al., 2018) and Greece (Papaefstathiou et al., 2019). In general, these studies report good psychometric properties, though mixed results are observed in terms of the number of dimensions since the high correlation between personal and work-related burnout could be interpreted as a single factor (Milfont et al., 2008).

Moreover, despite the important number of CBI validation studies, to our knowledge its psychometric properties have not been assessed in a Spanish-speaking country in Latin America. The only available study that tested the psychometric properties of the CBI in Spanish was developed for Spain (Molinero et al., 2013). Filling this gap would address the need for more international validations in different cultural settings (Kristensen et al., 2005). In that sense, the aim of this study is to adapt and analyze the psychometric properties of the Peruvian version of the CBI. We do so by examining burnout in national domestic violence helpline workers.

The domestic violence helpline service in which we focus our study is the only service of its type in Peru. It is led by the Ministry of Women and Vulnerable Populations. This is a telephone-based free service (24/7) that gives information and orientation for victims of gender-based violence. Approximately, before the pandemics the helpline received ten thousand calls per month. Victims were identified as the partner (42%) – male in most cases – or parent (38%). During pandemics, the volume of calls doubled, but partner violence calls increased slightly their proportion (Author1). No

Method

Participants

Participants were drawn from an ongoing longitudinal study on burnout in workers of the national domestic violence helpline in Peru. This study is based on information from 160 participants (mid-June, 2020); 22% of helpline workers decided not to take part in the study. Re-test strategy was also collected a month later (mid-July, 2020). All the participants provided informed consent before completing online protocols.

Participants ages ranged between 28 and 61 years old (M = 40.11; SD = 8.19) and 84.38% were women. These professionals were psychologists (58.75%), lawyers (40.00%) or social workers (1.25%).

Most of the participants (83.13%) have been working in the service for four or more years. Additional information regarding the sample can be found in Table 1.

Table 1

Sample characteristics

	n = 160	%
Civil status		
Married	50	31.25
Cohabitating	24	15
Divorced	11	6.88
Single	75	46.88
Educational level		
Graduate	89	55.63
Master	66	41.25
PhD	5	3.13
Self-reported health status		
Poor	0	0
Regular	16	10
Good	75	46.88
Very good	55	34.38
Excellent	14	8.75
Self-reported workload		
Very Low	1	0.63
2	2	1.25
3	44	27.5
4	79	49.38
Very High	34	21.25

Instruments

Information on all instruments was gathered via online questionnaires. Besides instruments presented below, sociodemographic information was also collected (gender, age, marital status, etc.) as well as work characteristics (time working, workload, etc.). These instruments are presented as follows.

Copenhagen Burnout Inventory – CBI (Kristensen et al., 2005). The CBI measures burnout through three scales comprised of 19 items: personal burnout (6 items), work-related burnout (7 items), and client-related burnout (6 items), with scores reflecting an average from each scale. Responses are structured on a 5-point Likert scale (where 5 = always or to a very high degree; 4 = often/to a high degree, 3 = sometimes/somewhat, 2 = seldom/to a low degree, 1 = and never /almost never/to a very low degree). Only item 10 is code-reversed, so that higher values reflect a higher burnout score. The authors suggest rescaling the CBI so it can vary between 0 and 100 (Kristensen et al., 2005).

The original CBI has excellent psychometric properties (Kristensen et al., 2005): internal consistency (coefficient's alpha: .87 for personal burnout, .87 for work-related burnout, and .85 for client-related burnout) and all correlations between the CBI scales and the Short Form-36 Health Survey Questionnaire (SF-36) were found to be statistically significant ($p < .001$). Validation studies for different cultural settings and professions have confirmed its good psychometric properties (Avanzi et al., 2013; Berat et al., 2016; Campos et al., 2013; Chin et al., 2018; Fiorilli et al., 2015; Fong et al., 2014; Javanshir et al., 2019; Mahmoudi et al., 2017; Milfont et al., 2008; Molinero et al., 2013; Papaefstathiou et al., 2019; Phuekphan et al., 2016; Rocha et al., 2020; Yeh et al., 2007).

Secondary Traumatic Stress Scale – STSS (Moreno-Jiménez et al., 2004). The STSS measures secondary traumatic stress through 14 items comprised of three factors: Emotional fatigue, Cognitive changes, and Symptoms of secondary trauma. It has a 4-point Likert scale (where 1 = strongly disagree and 4 = strongly agree). In this study, the Mexican

version was utilized (Meda-Lara et al., 2011). A high coefficient's alpha was obtained for the overall score (.87) and its factors (.85, .68 and .81, respectively).

Perceived Stress Scale – PSS (S. Cohen et al., 1983). The PSS measures perceived stress through 14 items in a 5-point Likert scale (where 0 = never and 4 = almost always). Items can also be grouped in two dimensions: Positive stress and Negative stress (Guzmán-Yacaman & Reyes-Bossio, 2018). The Peruvian version of this scale was used (Guzmán-Yacaman & Reyes-Bossio, 2018). High internal reliability was obtained for the scale (coefficient's alpha = .87) and its dimensions (.90 and .75, respectively).

Fear of Covid-19 Scale – FCV-19S (Ahorsu et al., 2020). The FCV-19S measures fear of COVID-19 through 7 items in a 5-point Likert scale (where 1= strongly disagree and 5 = strongly agree), with a total score ranging from 7 to 35 points. The Peruvian version was used (Authors). For this study, high internal reliability was found (coefficient's alpha = .82).

Self-reported health status. Respondents' perceived health is measured with a single question: "On a scale of 1 to 5, how would you rate your health?", with responses constructed on a 5-point Likert scale (where 1 = poor and 5 = excellent).

Self-reported workload. Respondents' perceived workload is measured with the following question: "¿How would you classify an average day's workload?", with responses on a 5-point Likert scale (where 1 = very low and 5 = very high).

Procedure

Translation-back translation was applied for the CBI scale. Three psychologists with high proficiency in English translated the CBI independently. One of the psychologists translated the CBI from English to Spanish; then, a second one verified the translation along with two of the coauthors of this study. Later, the verified version was back-translated to English by a third psychologist and checked by the same

two co-authors of this study. In the Spanish version used in this study, the term *client* of the original CBI was replaced by *user* as it is a more appropriate reference for those who use the service provided by people in our sample and one single Likert scale was employed (5 = always and 1 = never).

Afterwards, the inventory was submitted for evaluation by six judges (all psychologists, four with Master's degrees and two with Ph.Ds.), who reviewed the scales and made adjustments. Finally, a linguistic pilot evaluation was conducted with three helpline workers (one male and two female), who did not suggest the need for any modification. The final Peruvian version of the CBI can be found in Appendix 1.

Data analysis

Initial descriptive analysis presents mean, standard deviation, minimum and maximum values, kurtosis and skewness for the CBI scales and items. Group mean differences are explored by comparing the score of the CBI scales by gender, profession, time working in the service, and workload.

Confirmatory Factor Analysis (CFA) was performed with Weighted Least Square Mean and Variance Adjusted Estimators (WLSMV) method due to the ordinal nature of the variables (Brown, 2015). To assess the degree to which the data fit the theoretical model, we followed the goodness-of-fit indices and cutoffs suggested by Hu and Bentler (1999), including Chi-Square (non-significant), Root Mean Square Error Approximation and Standardized Root Mean-Square Residual (*RMSEA*, *SRMR* < .08), Comparative Fit Index and Tucker-Lewis Index (*CFI*, *TLI* >. 90).

Internal consistency was assessed with coefficient alpha for both Trials and Corrected Item-Total Correlation were also analyzed. Due to the limitations of the former (McNeish, 2018), omega coefficient was also used (for Trial 1). This coefficient is more appropriate for non-unidimensional items (Raykov & Marcoulides, 2015). Test-retest was done with a second measurement, gathered a month later. As suggested

by Koo & Li (2016), the intraclass correlation coefficient (ICC) was estimated using a two-way mixed-effects model, where an ICC between .5 and .75 is considered moderate reliability (Portney, 2020). We complement information on reliability with Pearson correlations between the CBI scales and across-time correlations for each scale.

Convergent validity evidence was assessed by also estimating the Pearson correlations of the CBI scales with the Secondary Traumatic Stress Scale, the Perceived Stress Scale, and the Fear of Covid-19 Scale. Finally, to obtain test-criterion validity evidence, Pearson correlations were estimated between the CBI scales, self-reported health status and self-reported workload. Cohen's (1988) criteria for evaluating correlation were taken (small: $.10 \leq |r| \leq .3$; medium: $.3 \leq |r| \leq .5$; and large: $|r| > .5$). Data were analyzed using Stata 16 and R Studio version 4.0.3.

Results

Descriptive statistics

In Table 2, descriptive statistics are presented. Participants scored higher on the personal burnout scale (M = 29.69; SD = 14.75), compared to the work-related (M = 27.77; SD = 16.08) and client-related burnout scales (M = 16.07; SD = 13.43). All scales are positively skewed, showing concentration on lower levels of burnout, a result also found in the original CBI validation (Kristensen et al., 2005).

Though no clear cutoffs exist for the CBI, Borritz et al. (2006) suggest considering values equal or above the midpoint of the scale (50) as an indication of a high degree of burnout. Based on this rule, we constructed Table 3. While 6.25% of participants described high personal burnout, the highest concentration of burnout was in the work-related scale (8.75%). In opposition, only one participant presented high levels of burnout related to clients. No participant changed from a non-high score to high level burnout (or vice versa) in Trial 2, suggesting burnout level stability after one month.

Table 2

Descriptive statistics for CBI items and scales

	Mean	Min	Max	*SD*	Skewness	Kurtosis
Personal burnout	29.69	.00	66.67	14.75	.33	.57
Work-related burnout	27.77	.00	67.86	16.08	.21	.00
Client-related burnout	16.07	.00	54.17	13.43	.00	.36
Personal burnout						
i1	40.00	0	100	19.26	.40	.92
i2	32.97	0	100	20.10	.05	.55
i3	31.41	0	75	19.88	.84	.05
i4	16.41	0	50	16.83	.01	.00
i5	32.97	0	100	20.29	.07	.68
i6	24.38	0	75	17.04	.15	.99
Work-related burnout						
i7	44.84	0	100	22.62	.26	.83
i8	19.53	0	75	20.16	.00	.07
i9	17.19	0	75	19.86	.00	.23
i10	22.66	0	100	21.13	.00	.30
i11	39.38	0	100	23.72	.83	.09
i12	28.44	0	75	20.31	.54	.00
i13	22.34	0	75	19.34	.07	.00
Client-related burnout						
i14	14.69	0	50	15.96	.00	.05
i15	18.75	0	75	18.17	.00	.73
i16	15.94	0	50	17.17	.00	.00
i17	22.97	0	100	24.76	.00	.36
i18	10.00	0	75	15.91	.00	.00
i19	14.06	0	75	18.32	.00	.25

Table 3

Burnout score by levels

	Low (score < 50) N (%)	High (score >= 50) N (%)
Personal burnout	150 (93.75%)	10 (6.25%)
Work-related burnout	146 (91.25%)	14 (8.75%)
Client-related burnout	159 (99.38%)	1 (0.63%)

Several group differences were examined to test CBI stability across participant characteristics by difference in means test. As Table 4 illustrates, differences were found only between personal burnout and gender (M_{men} = 23.17, M_{women} = 30.90, t = -2.44, p < .05) and work-related burnout and workload ($M_{not\ high}$ = 23.86, M_{high} = 29.39, t = -2.00, p <= .05). In all three scales, psychologists experienced more burnout than lawyers.

Table 4

CBI mean-group differences

	Personal burnout		Work-related burnout		Client-related burnout	
	Mean (N)	T-test p-value	Mean (N)	T-test p-value	Mean (N)	T-test p-value
Gender						
Male	23.17 (25)	-2.44	23.00 (25)	-1.62	18.67 (25)	1.05
Female	30.90 (135)	.016*	28.65 (135)	.107	15.59 (135)	.294
Profession						
Lawyer	26.30 (64)	-2.39	22.71 (64)	-3.49	13.15 (64)	-2.46
Psychologist	31.91 (94)	.018*	31.50 (94)	.001***	18.40 (94)	.015*
Time working at helpline						
4 or more years	32.05 (26)	.89	29.40 (26)	.53	15.38 (26)	-0.28
1-3 years	29.23 (133)	.375	27.58 (133)	.600	16.20 (133)	.780
Self-reported workload						
Not high (1-3)	28.10 (47)	-.88	23.86 (47)	-2.00	14.18 (47)	-1.15
High (4-5)	30.35 (113)	.382	29.39 (113)	.047*	16.85 (113)	.254

Note: *p < .05, **p < .01, ***p < .001

Confirmatory Factor Analysis

Based on previous research, three models were evaluated: a single-factor model, a two-correlated factor model and the original three-correlated factor model. Since all of them showed significant Chi-squares, other goodness of fit indicators were calculated. Results, presented in Table 5, show that the inclusion of additional correlated factors produces a better fit. The single-factor model only meet CFI and TLI Hu and Bentler's (1999) cutoff point. The two-correlated factor model, where personal and work-related burnout were considered as a single factor, showed a better performance (*RMSEA* =.10, *SRMR* =.08, *CFI* =.96, *TLI* =.96), but it was the three-correlated factor model that presented the best fit (*RMSEA* =.07, *SRMR* =.06, *CFI* =.98, *TLI* =.98).

Table 5

Goodness of fit indices for Confirmatory Factor Analysis

	X^2 (**df**)	RMSEA	SRMR	CFI	TLI
1-Factor model	469.279 (152); *p*< .001	.12	.09	.95	.95
2-Factor model	411.471 (151); *p*< .001	.10	.08	.96	.96
3-Factor model	259.355 (149); *p*< .001	.07	.06	.98	.98
Suggested cut-offs (Hu & Bentler, 1999)	Non-significant	<.08	<.08	>.90	>.90

Note: CFI: Comparative Fit Index; TLI: Tucker-Lewis Index; RMSEA: Root Mean Square Error Approximation; SRMR: Standardized Root Mean-Square Residual.

All items' factor loadings presented standardized coefficients between .41 and .92 and were statistically significant (*p*< .001, Figure 1), confirming satisfactory internal validity evidence and a three-correlated factor structure of the CBI as the best solution.
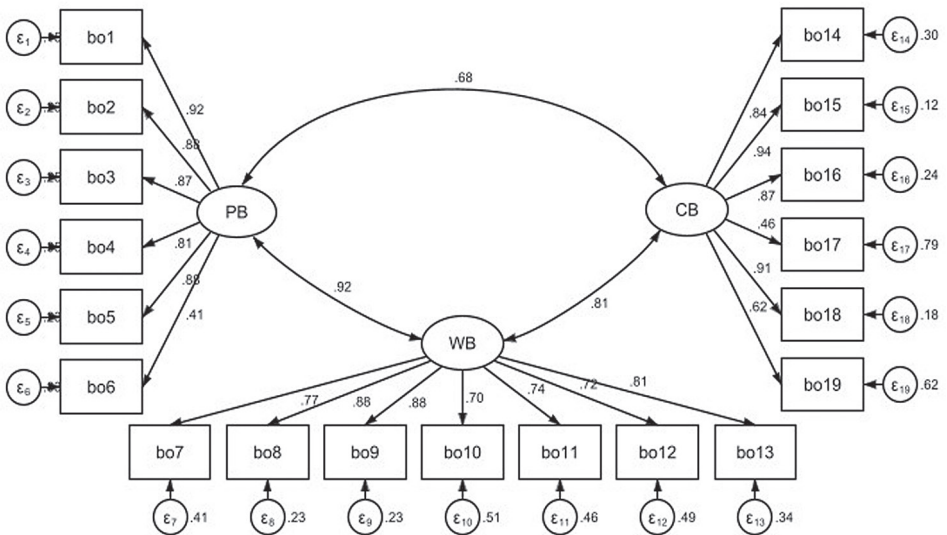
Figura 1. CFA for the 3-correlated factor model

Reliability evidence

Internal consistency was initially examined with Cronbach's Alpha (Table 6). Coefficients were high for the three CBI scales: .87 (personal burnout), .88 (work-related burnout) and .82 (client-related burnout). Corrected Item-Total Correlation were higher than .30 (personal burnout: .35-.78; work-related burnout: .55-.72; and client-related burnout: .39-.70), which shows appropriate items discrimination. Alpha values for Trial 2 were also high: .87, .89 and .81, respectively.

To avoid relying exclusively on Cronbach's Alpha, omega coefficient was estimated in Trial 1. We found satisfactory results for all three CBI scales (.92, .92 and .91, respectively). After one month of the initial information collection, test-retest was evaluated by ICC and presented results at an acceptable threshold (>.5): .66 (personal burnout), .73 (work-related burnout) and .69 (client-related burnout).

In addition to reliability evidence, we also estimated Pearson across-time correlations between CBI scales with the second Trial (Table 6), founding strong across-time correlation: .66 for personal burnout, .73 for work-related burnout, and .69 for client-related burnout. Correlations between scales were also large (between .55 and .81).

Table 6

CBI Reliability Scales, correlations and across-time correlations

| | α | | r | | |
	Trial 1	Trial 2	Personal	Work-related	Client-related
Personal	.87	.87	.66***		
Work-related	.88	.89	.81***	.73***	
Client-related	.82	.81	.55***	.66***	.69***

Note: Correlations in bold are across-time correlations between each scale.
***p< .001

Convergent validity evidence

To assess convergent validity evidence, we explored the Pearson correlation between CBI scales and other related constructs. Results are presented in Table 7. The Secondary Traumatic Stress Scale was positively and moderately correlated with personal burnout (r=.49, p< .001), work-related burnout (r=.50, p< .001) and client-related burnout (r=.46, p< .001). The Emotional Fatigue scale of the Secondary Traumatic Stress Scale was strongly associated with personal burnout and work-related burnout (r=.55, p < .001).

With respect to the Perceived Stress Scale, the strongest correlation was with personal burnout (r= .60, p< .001). At the dimension level, both positive and negative stress were highly correlated with personal and work-related burnout, but the association was stronger with negative stress (r=.60 and .58, p< .001, respectively).

Due to the current pandemic context, we examined the correlation between the CBI and the Fear of Covid-19 Scale, finding moderate and

statistically significant positive correlations with the three scales: r= .39 (personal burnout), p< .001; r=.30 (work-related burnout), p< .001; and r=.25 (client-related burnout), p< .01.

Table 7

Validity evidence: convergent and test-criterion

	Mean	SD	Alpha coefficient	Personal	Work-related	Client-related
Convergent validity evidence						
Secondary Traumatic Stress Scale	1.76	.41	.87	.49***	.50***	.46***
Emotional fatigue	1.43	0.45	.85	.55***	.55***	.46***
Cognitive changes	1.90	0.50	.68	.37***	.45***	.46***
Symptoms of secondary trauma	1.97	0.55	.81	.32***	.29***	.24***
Perceived Stress Scale	76.81	7.23	.87	.60***	.58***	.43***
Positive stress	27.84	4.26	.90	-.51***	-.51***	-.43***
Negative stress	17.41	3.62	.75	.60***	.58***	.43***
Fear of COVID-19 Scale	14.89	4.90	.82	.39***	.30***	.25**
Test-criterion validity evidence						
Self-reported health status	3.42	0.79	-	-.44***	-.34***	-.27***
Self-reported workload	3.89	0.77	-	.11	.18*	.09

Note: *p< .05, **p< .01, ***p< .001

Test-criterion validity evidence

As hypothesized, the CBI scales showed negative correlations with self-reported health: r= -.44 (personal burnout), p< .001; r= -.34 (work-related burnout), p< .001; and r= -.27 (client-related burnout); p< .001. Work-related burnout was the only scale that was significantly and positively associated with self-reported workload (r= .18, p< .05).

Discussion

The aim of this study was to adapt and validate a Peruvian version of the CBI in workers of the national domestic violence helpline in Peru. For that purpose, psychometric properties were evaluated, finding adequate validity and reliability evidence.

Regarding the internal structure of the CBI, we tested a one-, two- and three- correlated factor model, following previous mixed results (Grigorescu et al., 2018; Milfont et al., 2008). The three-correlated factor model, also theoretically justified, performed better in all goodness of fit indices. In this model, standardized factor loadings varied between .41 and .94. Our results are in line with Grigorescu et al. (2018), who also tested a CFA with two and three factors and found that the three factor solution produced the best fit.

Regarding internal reliability, high coefficient's alpha were obtained for the CBI scales (.87, .88 and .82), with similar values to the original CBI study (Kristensen et al., 2005). Also, the personal burnout alpha coefficient was slightly higher than the client-related dimension, as other validation studies have found (Avanzi et al., 2013; Chin et al., 2018; Fiorilli et al., 2015; Fong et al., 2014; Javanshir et al., 2019; Kristensen et al., 2005; Mahmoudi et al., 2017; Milfont et al., 2008; Molinero et al., 2013; Phuekphan et al., 2016). Omega coefficient were also satisfactory for the three scales. Moreover, test-retest reliability was also acceptable. All this information suggests that the Peruvian version of the CBI presents good internal consistency and stability over time.

High correlation was observed between personal burnout and work-related burnout scales, which have also been found in previous validation studies (Avanzi et al., 2013; Campos et al., 2013; Chin et al., 2018; Fiorilli et al., 2015; Fong et al., 2014; Milfont et al., 2008; Molinero et al., 2013; Rocha et al., 2020; Yeh et al., 2007). This result has been interpreted as due to the difficulty to differentiate personal from work-related burnout, as for many people, work may be a central part of life (Fong et al., 2014; Rocha et al., 2020; Yeh et al., 2007).

In addition to the above, high correlation between all three CBI scales could be due to the characteristics of our sample as well as the current COVID-19 crisis, where changes regarding the way of working have occurred. Teleworking from home has supposed a major challenge when setting limits between personal and working sphere (Hayter, 2020; Instituto Peruano de Economía -IPE, 2020), considering that currently many activities of both spaces share the same time and physical space. Moreover, people did not have the opportunity to prepare in advance for this scenario and many of them may not have the implements or an environment to work from home (International Labour Organization -ILO, 2020; Organización Internacional del Trabajo-OIT, 2019). This could also explain the average scores found in this study (personal burnout = 29.69, work-related burnout = 27.77, and client-related burnout= 16.07).

Personal burnout proved to be higher among women, work-related burnout was highest among those with a high workload and differences were found for all CBI scales and profession. Previous studies shed light on the interpretation of these findings. Wood et al. (2020) states that female and non-binary individuals, as well as younger workers, experience higher levels of burnout, which may be due to work-life imbalances associated with gender disparity (Sestili et al., 2018; Wood et al., 2020). In that regard, Hämmig (2018) has also acknowledged work-life imbalance as a predictor of burnout. However, it is also possible that the higher burnout in women in our sample could be explained by the gendered nature of domestic violence and the possibility that women are more likely to accumulate higher stress in this environment. Moreover, the COVID-19 pandemic has exacerbated gender gaps, making women particularly more prone to experience higher levels of stress-, anxiety- and depression-related to work (Health and Safety Executive -HSE, 2020), which could be explained by women perceiving greater amount of work when working from home as they may carry more responsibilities than their male peers, which coincides with the fact that women report greater fatigue (Del Río & García, 2020).

The CBI scales presented moderate to high positive correlations with the Secondary Traumatic Stress Scale and the Perceived Stress Scale, having found a stronger association with the Emotional fatigue and Negative stress sub-scales, respectively. These results confirm the convergent validity evidence for the CBI. In this regard, other validation studies have demonstrated that the CBI is also related to similar constructs, such as depression (Campos et al., 2013), anxiety (Fong et al., 2014) and quality of life (Kristensen et al., 2005; Molinero et al., 2013; Yeh et al., 2007).

As the study was developed during the COVID-19 pandemic, new and additional stressors may have appeared. In that sense, we examined the correlation between the CBI and the Fear of COVID-19 Scale. A moderate correlation was found between the latter and each CBI scale. This association suggests that even though the burnout concept implies a long-term involvement in emotionally demanding situations at work, new stressful conditions may play a certain role in exhaustion and fatigue, particularly that attributed to work and perceived to be related to clients. We suspect two factors drive this result. First, since the first quarantine adopted in Peru, the workers included in this study started to work remotely (from home), which may have blurred the lines between burnout originated at work and changing household dynamics due to health and social isolation measures. Second, as Kristensen et al. (2005) previously indicated, burnout could be altered systematically over time by new contexts. Future research should examine evidence to clarify whether burnout is a cause or effect of fear of COVID-19, or if they have a comorbid relationship. In any case, our study is the first to raise the relationship between burnout as a long-term consequence and fear of COVID-19 as a temporary global threat.

Regarding test-criterion validity evidence, these results indicate that those with higher burnout are likely to have poorer health status and tend to perceive a more intense daily workload. The relationship between burnout and workload has previously been found (Crowe et al., 2018). For example, Xiaoming et al. (2014) found that the amount of workload predicts burnout in medical staff.

In the context of the COVID-19 pandemic, working conditions may include high risk of fatigue and exhaustion, one that may be even more likely in the domestic violence service sector. To that extent, the prevalent rates of domestic violence in some countries exacerbate risks of burnout. Tools for correctly identify stressors and burnout conditions are important as they provide the basic information for possible treatments and public policy alternatives. These results could contribute to that first step, as the CBI Scale could facilitate the development of a burnout research agenda in Peru. Future studies could use this contextualized scale to examine factors such as work-life balance, coping strategies, burnout prevention, work engagement, sick days, and intention to leave work, among others. To our knowledge, this is the first study to validate the CBI scale in Spanish in the Latin American context and could contribute in an important way to the study of burnout on the continent.

Regarding the limitations of this study, given that a small sample was used, we cannot engage in generalizations as regards the Peruvian population given problems of power analysis. Following prior studies, the Peruvian version of the CBI would benefit from establishing convergent validity with the MBI (Campos et al., 2013; Fiorzilli et al., 2015; Jacobs et al., 2012; Winwood & Winefield, 2004) or other related constructs, such as depression or anxiety (Campos et al., 2013; Fong et al., 2014) and work-related constructs (Berat et al., 2016; Fiorilli et al., 2015; Leake et al., 2017; Molinero et al., 2013; Yeh et al., 2007). Also, further analyses should examine evidence for discriminant validity, such as measures of well-being (Avanzi et al., 2013; Fong et al., 2014; Kristensen et al., 2005; Lyndon et al., 2017; Milfont et al., 2008; Molinero et al., 2013; Sestili et al., 2018; Yeh et al., 2007).

In conclusion, the Peruvian version of the CBI has demonstrated to have good reliability and validity evidence making it an appropriate tool to evaluate burnout related to, in this case, domestic violence service workers.

References

Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The Fear of COVID-19 Scale: Development and Initial Validation. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-020-00270-8

Avanzi, L., Balducci, C., & Fraccaroli, F. (2013). Contributo alla validazione italiana del Copenhagen Burnout Inventory (CBI). *Psicologia Della Salute*, *2*, 120-135.

Baird, S., & Jenkins, S. R. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and Victims*, *18*(1), 71-86. https://doi.org/10.1891/vivi.2003.18.1.71

Ben-Porat, A., & Itzhaky, H. (2011). The contribution of training and supervision to perceived role competence, secondary traumatization, and burnout among domestic violence therapists. *Clinical Supervisor*, *30*(1), 95-108.

Berat, N., Jelić, D., & Popov, B. (2016). Serbian version of the work burnout scale from the Copenhagen Burnout Inventory: adaptation and psychometric properties. *Primenjena Psihologija*, *9*(2), 177. https://doi.org/10.19090/pp.2016.2.177-198

Borritz, M., Rugulies, R., Christensen, K. B., Villadsen, E., & Kristensen, T. S. (2006). Burnout as a predictor of self-reported sickness absence among human service workers: Prospective findings from three year follow up of the PUMA study. *Occupational and Environmental Medicine*, *63*(2), 98-106. https://doi.org/10.1136/oem.2004.019364

Brown, T. (2015). Confirmatory Factor Analysis for Applied Research. In *The American Statistician* (Second ed.). The Guilford Press. https://doi.org/10.1198/tas.2008.s98

Campos, J. A. D. B., Carlotto, M. S., & Marôco, J. (2013). Copenhagen burnout inventory - student version: Adaptation and transcultural validation for Portugal and Brazil. *Psicologia: Reflexao e Critica*, *26*(1), 87-97.

Chin, R. W. A., Chua, Y. Y., Chu, M. N., Mahadi, N. F., Wong, M. S., Yusoff, M. S. B., & Lee, Y. Y. (2018). Investigating validity evidence of the Malay translation of the Copenhagen Burnout Inventory. *Journal of Taibah University Medical Sciences*, *13*(1), 1-9.

Choi, G. Y. (2011). Organizational impacts on the secondary traumatic stress of social workers assisting family violence or sexual assault survivors. *Administration in Social Work*, *35*(3), 225-242. https://doi.org/10.1080/03643107.2011.575333

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (Second Edi). Lawrence Erlbaum Associates.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*(4), 385-396. https://doi.org/10.2307/2136404

Crowe, R. P., Bower, J. K., Cash, R. E., Panchal, A. R., Rodriguez, S. A., & Olivo-Marston, S. E. (2018). Association of Burnout with Workforce-Reducing Factors among EMS Professionals. *Prehospital Emergency Care*, *22*(2), 229-236.

Del Río, M., & García, M. del M. (2020). Caregiving and the COVID-19 pandemic from a gender perspective. *Gaceta Sanitaria*, *xx*, 4-7.

Eckleberry-Hunt, J., Kirkpatrick, H., & Barbera, T. (2018). The problems with burnout research. *Academic Medicine, 93*(3), 367-370. Lippincott Williams and Wilkins. https://doi.org/10.1097/ACM.0000000000001890

Fiorilli, C., De Stasio, S., Benevene, P., Iezzi, D. F., Pepe, A., & Albanese, O. (2015). Copenhagen Burnout Inventory (CBI): A validation study in an Italian teacher group. *TPM - Testing, Psychometrics, Methodology in Applied Psychology*, *22*(4), 537-551. https://doi.org/10.4473/TPM22.4.7

Fong, T. C. T., Ho, R. T. H., & Ng, S. M. (2014). Psychometric properties of the Copenhagen Burnout Inventory - Chinese version. *Journal of Psychology: Interdisciplinary and Applied*, *148*(3), 255-266. https://doi.org/10.1080/00223980.2013.781498

Gomà-Rodríguez, I., Cantera, L. M., & Da Silva, J. P. (2018). Self-care of those who work to eradicate gender-based violence. *Psicoperspectivas*, *17*(1).

Grigorescu, S., Cazan, A.-M., Grigorescu, D., & Rogozea, L. (2018). Assessing professional burnout among hospital nurses using the Copenhagen Burnout Inventory. *AMT*, *23*(4), 6.

Guzmán-Yacaman, J. E., & Reyes-Bossio, M. (2018). *Revista de Psicología*, *36*(2), 719-750.

Halbesleben, J. R. B., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work and Stress*, *19*(3), 208-220. https://doi.org/10.1080/02678370500340728

Hämmig, O. (2018). Explaining burnout and the intention to leave the profession among health professionals - A cross-sectional study in a hospital setting in Switzerland. *BMC Health Services Research*, *18*(1), 1-11. https://doi.org/10.1186/s12913-018-3556-1

Hayter, S. (2020). *Nada que ver con lo habitual: Cómo la COVID-19 puso de manifiesto el futuro del trabajo*. http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_748739/lang--es/index.htm

Health and Safety Executive (HSE). (2020). *Work-related stress, anxiety or depression statistics in Great Britain, 2020*. www.hse.gov.uk/statistics/

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1-55. https://doi.org/10.1080/10705519909540118

Instituto Peruano de Economía (IPE). (2020). *Boletín IPE: ¿Trabajo remoto o teletrabajo?* https://www.ipe.org.pe/portal/boletin-ipe-trabajo-a-distancia/

International Labour Organization (ILO). (2020). *Teleworking during the COVID-19 pandemic and beyond A Practical Guide*. www.ilo.org/publns

Jacobs, L. M., Nawaz, M. K., Hood, J. L., & Bae, S. (2012). Burnout among Workers in a Pediatric Health Care System. *Workplace Health & Safety*, *60*(8), 335-344.

Javanshir, E., Dianat, I., & Asghari-Jafarabadi, M. (2019). Psychometric properties of the Iranian version of the Copenhagen Burnout Inventory. *Health Promotion Perspectives*, *9*(2), 137-142. https://doi.org/10.15171/hpp.2019.19

Koo, T. K., & Li, M. Y. (2016). A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. *Journal of Chiropractic Medicine*, *15*(2), 155-163.

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work and Stress*, *19*(3), 192-207. https://doi.org/10.1080/02678370500297720

Kulkarni, S., Bell, H., Hartman, J. L., & Herman-Smith, R. L. (2013). Exploring Individual and Organizational Factors Contributing to Compassion Satisfaction, Secondary Traumatic Stress, and Burnout in Domestic Violence Service Providers. *Journal of the Society for Social Work and Research*, *4*(2), 114-130. https://doi.org/10.5243/jsswr.2013.8

Leake, R., Rienks, S., & Obermann, A. (2017). A Deeper Look at Burnout in the Child Welfare Workforce. *Human Service Organizations Management, Leadership and Governance*, *41*(5), 492-502. https://doi.org/10.1080/23303131.2017.1340385

Lyndon, M. P., Henning, M. A., Alyami, H., Krishna, S., Zeng, I., Yu, T. C., & Hill, A. G. (2017). Burnout, quality of life, motivation, and academic achievement among medical students: A person-oriented approach. *Perspectives on Medical Education*, *6*(2), 108-114. https://doi.org/10.1007/s40037-017-0340-6

Mahmoudi, S., Atashzadeh-Shoorideh, F., Rassouli, M., Moslemi, A., Pishgooie, A., & Azimi, H. (2017). Translation and psychometric properties of the Copenhagen Burnout Inventory in Iranian nurses. *Iranian Journal of Nursing and Midwifery Research*, *22*(2), 117. https://doi.org/10.4103/1735-9066.205958

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*(2), 99-113. https://doi.org/10.1002/job.4030020205

Maslach, C., & Schaufeli, W. B. (1993). Historical and Conceptual Development of Burnout. In C. Maslach, W. B. Schaufeli, & T. Marek (Eds.), *Professional Burnout* (pp. 1-16). Taylor & Francis. https://doi.org/10.4324/9781315227979-1

McNeish, D. (2018). Thanks coefficient alpha, We'll take it from here. *Psychological Methods*, *23*(3), 412-433. https://doi.org/10.1037/met0000144

Meda-Lara, R., Moreno-Jiménez, B., Rodríguez, A., Arias, E., & Palomera, A. (2011). Validación mexicana de la Escala de Estrés Traumático Secundario. *Psicología y Salud*, *21*(1), 5-15.

Milfont, T. L., Denny, S., Ameratunga, S., Robinson, E., & Merry, S. (2008). Burnout and wellbeing: Testing the Copenhagen burnout inventory in New Zealand teachers. *Social Indicators Research*, *89*(1), 169-177. https://doi.org/10.1007/s11205-007-9229-9

Molinero, E., Gómez-Quintero, H. B., & Moncada, S. (2013). Fiabilidad y validez del Copenhagen burnout inventory para su uso en España. *Revista Española de Salud Pública*, *87*(2), 165-179. https://doi.org/10.4321/S1135-57272013000200006

Molloy, E. M. (2019). An exploration of social care workers experiences of emotional An exploration of social care workers experiences of emotional labour and professional burnout in domestic violence refuges labour and professional burnout in domestic violence refuges. In *Journal of Social Care* (Vol. 2). https://arrow.tudublin.ie/jsoc/vol2/iss1/3

Moreno-Jiménez, B., Garrosa, E., Morante, M. E., Rodríguez, R., & Losada, M. M. (2004). Secondary traumatic stress. Assessment , treatment , prevention. *Terapia Psicológica*, *22*(1), 69-76. http://www.redalyc.org/articulo.oa?id=78522108%0AHow

Organización Internacional del Trabajo (OIT). (2019). *Seguridad y salud en el centro del futuro del trabajo. Aprovechar 100 años de experiencia*. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_687617.pdf

Papaefstathiou, E., Tsounis, A., Malliarou, M., & Sarafis, P. (2019). Translation and validation of the Copenhagen burnout inventory

amongst Greek doctors. *Health Psychology Research*, *7*(1), 15-20. https://doi.org/10.4081/hpr.2019.7678

Phuekphan, P., Aungsuroch, Y., Yunibhand, J., & Chan, S. W.-C. (2016). Psychometric Properties of the Thai Version of Copenhagen Burnout Inventory (T-Cbi) in Thai Nurses. *Journal of Health Research*, *30*(2), 135-142. https://doi.org/10.14456/jhr.2016.19

Portney, L. G. (2020). *Foundations of Clinical Research. Applications to Evidence-Based Practice* (Fourth Edi). F. A. Davis Company.

Raykov, T., & Marcoulides, G. A. (2015). A Direct Latent Variable Modeling Based Method for Point and Interval Estimation of Coefficient Alpha. *Educational and Psychological Measurement*, *75*(1), 146-156. https://doi.org/10.1177/0013164414526039

Rocha, F. L. R., de Jesus, L. C., Marziale, M. H. P., Henriques, S. H., Marôco, J., & Campos, J. A. D. B. (2020). Burnout syndrome in university professors and academic staff members: psychometric properties of the Copenhagen Burnout Inventory-Brazilian version. *Psicologia: Reflexao e Critica*, *33*(1). https://doi.org/10.1186/s41155-020-00151-y

Schaufeli, W. B. (2003). Past performance and future perspectives of burnout research. *SA Journal of Industrial Psychology*, *29*(4). https://doi.org/10.4102/sajip.v29i4.127

Schaufeli, W. B., & Greenglass, E. R. (2001). Introduction to special issue on burnout and health. *Psychology & Health*, *16*(5), 501-510.https://doi.org/10.1080/08870440108405523

Sestili, C., Scalingi, S., Cianfanelli, S., Mannocci, A., Cimmuto, A. Del, Sio, S. De, Chiarini, M., Di Muzio, M., Villari, P., Giusti, M. De, & Torre, G. La. (2018). Reliability and use of Copenhagen burnout inventory in Italian sample of university professors. *International Journal of Environmental Research and Public Health*, *15*(8), 1708. https://doi.org/10.3390/ijerph15081708

Shirom, A. (2005). Reflections on the study of burnout. *Work and Stress*, *19*(3), 263-270. https://doi.org/10.1080/02678370500376649

Taris, T. W., Le Blanc, P. M., Schaufeli, W. B., & Schreurs, P. J. G. (2005). Are there causal relationships between the dimensions

of the Maslach Burnout Inventory? A review and two longitudinal tests. *Work and Stress*, *19*(3), 238-255. https://doi.org/10.1080/02678370500270453

Walters, J. E., Brown, A. R., & Jones, A. E. (2018). Use of the Copenhagen Burnout Inventory with Social Workers: A Confirmatory Factor Analysis. *Human Service Organizations Management, Leadership and Governance*, *42*(5), 437-456. https://doi.org/10.1080/23303131.2018.1532371

Winwood, P. C., & Winefield, A. H. (2004). Comparing two measures of burnout among dentists in Australia. *International Journal of Stress Management*, *11*(3), 282-289. https://doi.org/10.1037/1072-5245.11.3.282

Wood, B. A., Guimaraes, A. B., Holm, C. E., Hayes, S. W., & Brooks, K. R. (2020). Academic Librarian Burnout: A Survey Using the Copenhagen Burnout Inventory (CBI). *Journal of Library Administration*, *60*(5), 512-531. https://doi.org/10.1080/01930826.2020.1729622

World Health Organization (WHO). (2013). Global and regional estimates of domestic violence: prevalence and health effects of intimate partner violence and non-partner sexual violence. *London School of Hygiene & Tropical Medicine*, *2008*, 55. www.who.int

World Health Organization (WHO). (2014). *Informe sobre la Situación Mundial de la Prevención de la Violencia 2014*.

Xiaoming, Y., Ma, B.-J., lisa Chang, C., & Shieh, C.-J. (2014). Effects of Workload on Burnout and Turnover Intention of Medical Staff: A Study. *Ethno Med, 8*(3).

Yeh, W. Y., Cheng, Y., Chen, C. J., Hu, P. Y., & Kristensen, T. S. (2007). Psychometric properties of the Chinese version of Copenhagen burnout inventory among employees in two companies in Taiwan. *International Journal of Behavioral Medicine*, *14*(3), 126-133. https://doi.org/10.1007/BF03000183