Psychometric Properties of the "Spanish Burnout Inventory" in Chilean Professionals Working to Physical Disabled People

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While the most commonly employed burnout measure has been the Maslach Burnout Inventory (MBI), researchers have been troubled by some of the psychometric limitations of this instrument. The aim of this study was to analyze the psychometric properties of the "Spanish Burnout Inventory" (SBI). The psychometric properties were analysed with data from a sample of 277 Chilean professionals working to physical disabled people. The psychometric properties of the SBI were examined through the following analyses: confirmatory factor analysis, reliability Cronbach's alpha, and concurrent validity with the MBI. The hypothesized four factor model obtained an adequate data fit for the sample ($\chi^2_{(164)}$ = 285.32, p < .001, GFI = .96, RMSEA = .052, NNFI = .93, CFI = .94). Results confirmed the hypothesis formulated. The Cronbach's alpha coefficient was higher than .70 for the four scales of the instruments. Results supported the concurrent validity with the MBI. As a whole, the results of these study provided evidence on the adequate psychometric properties of the SBI for the study of burnout in the Chilean cultural context.
Keywords: burnout, Spanish Burnout Inventory, job stress, confirmatory factor analysis.

El instrumento utilizado con más frecuencia para la evaluación del síndrome de quemarse por el trabajo es el *Maslach Burnout Inventory* (MBI). Sin embargo, presenta algunas insuficiencias psicométricas. El objetivo del estudio fue analizar las propiedades psicométricas del "Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo" (CESQT). La muestra estuvo formada por 277 profesionales chilenos que trabajaban hacia personas con discapacidad física. Los análisis realizados fueron: análisis factorial confirmatorio, fiabilidad alfa de Cronbach, y análisis de la validez concurrente con el MBI. El modelo de cuatro factores hipotetizado obtuvo un ajuste adecuado ($\chi^2_{(164)}$ = 285.32, p < .001, GFI = .96, RMSEA = .052, NNFI = .93, CFI = .94). Los resultados confirmaron la hipótesis formulada. El coeficiente alfa de Cronbach obtuvo valores superiores a .70 para las cuatro escalas del cuestionario. Los resultados apoyaron la validez concurrente con el MBI. Se concluye que el CESQT presenta propiedades psicométricas adecuadas para estimar el síndrome de quemarse por el trabajo en el contexto cultural chileno.
Palabras clave: síndrome de quemarse por el trabajo, CESQT, estrés laboral, análisis factorial confirmatorio.

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Social, economic and technological changes have resulted in a new context for occupational organizations nowadays, causing a series of psychosocial problems particularly in issues related to job stress considered one of the main disorders affecting people's physical and physic health (Jawahar, Stone, & Kisamore, 2007). Within this general framework, health problems coming from job stress, especially the burnout syndrome, become increasingly important to consider in the labor world because of its impact on individual's well being and its consequences in national health systems.

Burnout can be defined as a response to chronic job stress that occurs when the individual feels overwhelmed and powerless to face up to difficulties that work environment, especially the social one, presents him. A well known definition comes from Maslach and Jackson (1981), who defined burnout symptoms as: a) reduced personal accomplishment, understood as the professionals' tendency to evaluate oneself negatively, particularly their work with clients, b) emotional exhaustion, in which professionals feel they are no longer able to give of themselves at a psychological level, and c) depersonalization, defined as negative and cynical attitudes and feelings about one's clients.

In this general context, burnout has been conceptualized as a process that occurs especially among professionals working with people, or whose job involves people, but it can be also observed in other professions (Maslach, Schaufeli, & Leiter, 2001). Some research carried out in different countries demonstrate that the continuous contact with other people and the high emotional load favor a great deterioration of these workers' mental health, who feel frustration and ambiguity about their professional situation, which leads to a high risk of developing burnout (Maslach, 1998).

Among professional risk groups, employees working to disabled people (physical or psychological) present a high incidence of burnout symptoms (Molina, Iáñez, & Iáñez, 2005). When initiating their professional career, these workers must adapt themselves facing hard work conditions and have professional relationships affected by interpersonal conflicts, which determines their behavior to a large extent, and thus the difference between their expectations and reality contributes to the stress they suffer (Guerrero & Vicente, 2002). They are usually requested to spend a considerable time of intense dedication with users needing help, frequently in a dependence situation, where this established relationship can be full of frustration, fear, disappointment, and aggression (Guerrero & Vicente, 2002; Jackson & Ashley, 2005). This leads to the development of burnout and a deterioration in the quality of the service provided (Wisniewski & Gargiulo, 1997).

The psychometric instrument that has been employed with the greatest frequency to evaluate burnout with an international acceptance (Schaufeli, 2007) is the Maslach

Burnout Inventory (MBI) (Maslach & Jackson, 1981). Although some studies have concluded that Spanish adaptation of this instrument is valid and reliable (Gil-Monte, 2005b), the MBI has some limitations that require using it with caution out of the American and Anglo-Saxon context: a) some items and a factor structure with a theoretical basis different from that provided by the Manual show factor ambiguity items (Kristensen, Borritz, Villadsen, & Christensen, 2005; Sonnentag, 2005); b) the internal consistency coefficients of the scale Depersonalization are low, particularly when applied out of USA, and in non-English samples (Van Horn, Schaufeli, & Enzmann, 1999); c) low discriminant validity of other related concepts (e.g. depression) (Shimon & Ezrachi, 2003); or d) the proposal of theoretical models different from versions of the MBI (MBI-HSS, MBI-GS) (Demerouti, Bakker, Vardakou, & Kantas, 2003).

Other instruments widely used in evaluation of burnout have been the Burnout Measure (BM) (Pines, Aronson, & Kafry, 1981) and the Shirom-Melamed Burnout Measure (SMBM) (Shirom, Nirel, & Vinokur, 2006). These questionnaires focus on evaluating emotional exhaustion (Moreno-Jiménez, 2007), and although also include some evaluation of physical fatigue, they do not evaluate the attitudinal symptoms of burnout. This means a limitation for the psychometric evaluation of burnout, because the employee's attitudinal deterioration is one of the characteristics of the syndrome, which makes possible to establish some differences from other work-related health problems.

Limitations identified in the above questionnaires have encouraged to develop some alternative measures of burnout in the last years, in order to solve those limitations (Kristensen et al., 2005; Demerouti et al., 2003), such as the Spanish Burnout Inventory (SBI) (Gil-Monte, 2005a).

The theoretical model underlying the SBI considers burnout as a response to chronic job stress related to problematic interpersonal work relationships, and it is observed in individuals working towards people and in direct contact with them. Burnout is characterized by cognitive deterioration (low enthusiasm towards the job), emotional deterioration (psychological exhaustion), and attitudes and behaviors of indifference and indolence towards clients of the organization. In some cases, feelings of guilt can appear (Maslach, 1982). These symptoms constitute four dimensions of the inventory.

The theoretical model distinguishes two different profiles of individuals who develop burnout. Profile 1 leads to the appearance of a series of feelings and behaviors related to job stress that cause a moderate discomfort. Despite these problems, the individual is still able to do his or her work, although he or she could do it better. This profile is characterized by the presence of low enthusiasm towards the job with high levels of psychological exhaustion and indolence; however, workers do not present high levels of

feelings of guilt. In contrast, individuals who show Profile 2 are affected more strongly by those symptoms, have difficulties carrying out their job appropriately and tend to develop feelings of guilt (Gil-Monte, 2005a). In previous studies, exploratory factor analyses (EFA) obtained factor structures which adequately reproduced the four dimensions of the SBI. Those studies included data samples of Spanish staff nurses ($n = 201$) (Gil-Monte, 2008), and Chilean public service professionals ($n = 116$) (Olivares & Gil-Monte, 2007). In these studies, the amount of variance explained by the four factors was 60.88 % and 59.07 % respectively. In the study conducted with Spanish staff nurses, item 11 (*I feel like being sarcastic with some patients*)[1] showed the lowest factor loading (.45), but the factor loadings in the rest of the factors were not superior to .30. In the study conducted with Chilean professionals, item 11 and item 14 (*I label or classify the clients according to their behavior)* showed some problem with the factor loadings, because besides loading in the factor Indolence (.58 and .53 respectively), item 11 also presented an important factor loading in the factor Enthusiasm towards the job (-.49), and item 14 in the factor Psychological exhaustion (.46).

Results have been replicated by confirmatory factor analysis (CFA), obtaining empirical support for the four-factor structure model across countries and occupational groups: a) Spanish professionals working with intellectually disabled people ($n = 338$) (Gil-Monte et al., 2006), b) Mexican doctors ($n = 110$) (Gil-Monte & Zúñiga-Caballero, 2010), c) Mexican teachers ($n = 698$) (Gil-Monte, Unda, & Sandoval, 2009), d) Brazilian teachers ($n = 714$) (Gil-Monte, Carlotto, & Gonçalves, 2010), and e) Portuguese teachers (Gil-Monte & Figueiredo-Ferraz, 2010).

In studies conducted in Spain and Portugal, and in the study of Mexican teachers, the lowest item-factor relationship was obtained for item 11 which belongs to the Indolence scale ($\lambda = .39$, $\lambda = .53$, and $\lambda = .25$, respectively), whereas in studies with Mexican and Brazilian teachers, the lowest item-factor relationship was obtained for item 14 (*I label or classify students according to their behavior*) ($\lambda = .52$ and $\lambda = .51$, respectively), which also belongs to the Indolence scale.

Cronbach's alpha internal consistency values have been acceptable in all of the studies, achieving values higher than .70 (Nunnally, 1978), with some exceptions. Scale Indolence presents the lowest Cronbach's alpha values ranging from .66 (Gil-Monte, Carretero, Roldán, & Núñez-Román, 2005) to .80 (Gil-Monte et al., 2010), whereas scale Enthusiasm towards the job generally shows the highest values ranging from .72 (Gil-Monte & Zúñiga-Caballero, 2010) to .90 (Gil-Monte et al., 2005).

Values of concurrent validity with the MBI have been adequate for scales evaluating similar constructs. Values ranged from $r = .34$ (Olivares & Gil-Monte, 2007/2008) to $r = .61$(Gil-Monte et al., 2005) for the correlation between Enthusiasm towards the job and Personal accomplishment; from $r = .74$ (Olivares & Gil-Monte, 2007) to $r = .83$ (Gil-Monte et al., 2005) for the correlation between Psychological exhaustion and Emotional exhaustion; and from $r = .40$ (Gil-Monte et al., 2005) to $r = .58$ (Olivares & Gil-Monte, 2007) for Indolence and Depersonalization. Importantly, scale Enthusiasm towards the job does not include self-efficacy, which is included in the MBI scale Personal accomplishment.

The SBI offers some advantages over other available instruments, from which the more significant are: a) it is based on a theoretical model developed prior to psychometric one, b) even though some dimensions are similar to that of the MBI-HSS, SBI includes feelings of guilt as a symptom, which allows to establish different profiles in the development of burnout and the individuals' level of strain, and c) it overcomes the theoretical and psychometric limitations of other instruments (Halbeslebem & Demerouti, 2005; Kristensen et al., 2005).

The aim of this study is to analyze the psychometric properties of SBI (factor structure through CFA and validity of its dimensions) in a Chilean professionals sample in order to test the cross-national validity of the instrument. On the basis of previous results and the factor structure of the instrument, a four-factor model was hypothesized.

Method

Participants

The sample consisted of 277 professionals working with physically disabled people at two private organizations in Valparaíso and Santiago (Chile). With regard to gender, 69 (24.91%) of participants were men and 208 (79.8%) women. The mean age was 37.44 years (maximum = 69 years, minimum = 19 years). The mean number of years at work was 12.79 (maximum = 44 years, minimum = 1 month). With regard to occupation, the highest percentage of participants worked as kinesiologists (15.5%), followed by teachers (15.2%), occupational therapists (11.9%), and doctors and staff nurses (9.4% and 9.0%, respectively). The remaining participants worked in orthopedics, speech and hearing therapy, patient handling and administration.

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[1] The word patients has been changed to clients in the SBI version for public service professionals, to disabled people in the SBI version for professionals attending this kind of people, and to students in the version for teachers.

Instruments

The data were obtained using the Spanish Burnout Inventory, professional who are working with disabled people version (SBI-DP) (Gil-Monte et al., 2006) (Annex). This instrument consists of 20 items distributed into four dimensions:

1. Enthusiasm towards the job (5 items). It is defined as the individual's desire to achieve goals at work because it is a source of personal pleasure. The individual considers his/her job attractive and achieving professional goals is a source of personal accomplishment. Due to the items in this dimension are formulated in a positive way, low scores indicate high levels of burnout. This scale is similar to that of the Personal accomplishment of the MBI.
2. Psychological exhaustion (4 items). It is defined as the appearance of emotional and physical exhaustion due to the fact that the job demands to deal daily with people who present or cause problems. This scale is similar to that of the Emotional exhaustion of the MBI.
3. Indolence (6 items). It is defined as the presence of attitudes of indifference and cynicism towards the organization's clients. Individuals scoring high in this dimension present insensitivity and indifference towards clients' problems. This scale is similar to that of the Depersonalization of the MBI.
4. Guilt (5 items). It is defined as the appearance of feelings of guilt about negative attitudes and behavior developed on the job, especially towards the people with whom s/he establishes work relationships.

Items are answered on a five-point frequency scale, ranging from 0 (Never) to 4 (Very frequently: every day) (range 0 - 4). Low scores on Enthusiasm towards the job, together with high scores on Psychological Exhaustion and Indolence, as well as on Guilt, indicate high levels of burnout.

Together with the SBI, Personal accomplishment (8 items, α = .79, range = 0-48) and Depersonalization (5 items, α = .52, range = 0-30) scales of the MBI-HSS were used (Maslach & Jackson, 1981), and Exhaustion scale (5 items, α = .86; range = 0-30) of the MBI-GS (Maslach, Jackson, & Leiter, 1996) were applied. Items are answered on a seven-point frequency scale, ranging from 0 (Never) to 6 (Every day).

Procedure

Data were collected in a non-random way. Participation was voluntary after Director of each center authorized the participation of their workers in the research. Questionnaires were filled out during non-working time. Data analysis was

conducted with the LISREL 8.30 program (Jöreskog & Sörbom, 1996), for structural equation model. The Weigthed Least Square (WLS) estimation method was employed, since some variables showed a slight deviation from normal distribution (Jöreskog & Sörbom, 1996, p. 239).

Because the Chi² test is sensitive to sample size, other fit indices were considered. The *Goodness of Fit Index* (GFI) is a measure of the relative amount of variance and covariance explained by the model. The *Non-Normed Fit Index* (NNFI) and the *Comparative Fit Index* (CFI) indicate the amount of variation and covariation accounted for by a particular model by comparing the relative fit of the given model with the fit of a baseline model. For these three indexes, values higher than .90 are considered as indicators of an acceptable fit of the model (Bentler, 1992; Hoyle, 1995). The *Root Mean Square Error of Approximation* (RMSEA) estimates the overall error amount in the model. Values between .05 and .08 indicate an adequate fit of the model (Browne & Cudeck, 1993; Hair, Anderson, Tatham, & Black, 1995).

Results

Item analysis

Descriptive statistics for the items are shown in Table 1. The highest mean values were reached by the items which belong to the Enthusiasm towards the job scale, characterized by high scores indicating low levels of burnout. The lowest mean values were obtained by item 11 (M = .17) (*I feel like being sarcastic with some disabled people*) and item 7 (M = .31) (*I think I treat some disabled people with indifference*), which belongs to the Indolence scale. In the case of the scale Psychological exhaustion, highest mean obtained by item 17 (M = 2.16) (*I feel physically tired at work*) stands out against the rest of items of the scale. With regard to scale Guilt, highest mean obtained by item 4 (M = 1.34) (*I worry about how I have treated some people at work*) stands out against the remaining items of the scale.

In most of the items, the corrected item-total correlation achieved values greater than .40. The exceptions were item 11 (r = .38) and item 4 (r = .32). All items contributed to increase the internal consistency of the scale to which they belong because its deletion reduced the Cronbach's alpha value of the scale. The only exception was item 4 because the Cronbach's alpha value in scale Guilt increased slightly from .74 to .76 if the item was deleted.

With regard to the skewness values, items from scale Enthusiasm towards the job reflected a negative skewness, and thus a tendency towards high-range scores, whereas the tendency was opposite with the remaining scales. From 20 items of the inventory, 8 items exceeded slightly the skewness range of ±1. The higher values were for item 11 (Sk = 3.52) and item 7 (Sk = 2.22)

Table 1
Descriptive statistics of SBI items

Subscale Item	M (SD)	Corrected item-scale correlations	Skewness	α if item deleted
Enthusiasm towards job				
1	3.25 (.85)	.50	-1.19	.71
5	3.34 (.93)	.53	-1.70	.70
10	3.34 (.79)	.48	-1.49	.72
15	3.43 (.73)	.60	-1.16	.69
19	2.67 (1.12)	.53	-.71	.71
Psychological Exhaustion				
8	1.60 (1.05)	.68	.28	.78
12	1.57 (1.02)	.67	.26	.78
17	2.16 (1.12)	.68	-.08	.78
18	1.79 (1.07)	.62	.12	.81
Indolence				
2	.68 (.80)	.63	1.00	.72
3	.57 (.82)	.54	1.72	.75
6	.79 (.80)	.51	.83	.75
7	.31 (.62)	.64	2.22	.73
11	.17 (.48)	.38	3.52	.78
14	.61 (.87)	.52	1.65	.75
Guilt				
4	1.34 (1.31)	.32	.81	.76
9	.97 (.91)	.61	.79	.61
13	.57 (.78)	.45	1.44	.67
16	.92 (.92)	.56	1.18	.63
20	.83 (.79)	.53	.84	.65

Note. The item number indicates the position of the item in the questionnaire.

In order to analyze the discriminating power of items, T-tests were calculated to compare the means between extreme groups, considering percentile 73 and 27 as cut scores. Test resulted significant for all items at $p < .001$ level.

As gender is a sociodemographic variable that could establish significant differences in the levels of burnout (Schaufeli & Greenglass, 2001), mean differences analysis were carried out according to that variable for all the items. Significant differences between men and women were obtained in only three items. In item 19 (*I feel enthusiastic about my job*) from scale Enthusiasm towards the job, men of the study sample presented significantly lower scores ($M = 2.39$) than women ($M = 2.76$) ($t = -2.14$, $p < .05$). Same tendency was observed in item 14 (*I label or classify disabled people according to their behaviour*) which belongs to the Indolence scale (.42 vs. .67; $t = -2.04$, $p < .05$). However, tendency was opposite with item 16 (*I think I should apologize to someone for my behaviour at work*), belonging to the Guilt scale, because men obtained significantly higher scores ($M = 1.17$) than women ($M = .83$) ($t = 2.69$, $p < .05$).

Factor analysis

The hypothesized model obtained an adequate data fit according to all the indexes, except for, $\chi^2_{164} = 285.32$, $p < .001$) which is affected by the sample size. The relative amount of variance explained by the model was adequate and the Goodness of Fit Index achieved a value higher than .90 (GFI = .96). The fit of the model was also adequate when the overall amount of error in the model was considered, because the Root Mean Square Error of Approximation showed a value lower than .08 (RMSEA$_{(.042 - .062)}$ = .052). Furthermore, values obtained for the indexes used for measuring the relative fit of the model, Non-Normed Fit Index and Comparative Fit Index, were also adequate because both indexes presented values higher than .90 (NNFI = .93 and CFI = .94).

All the item-factor relationships were significant. The lowest value was obtained by the relationship between item 4 (*I worry about how I have treated some people at work*) and factor Guilt. The value of the parameter for this relationship reached a value $\lambda = .33$ ($t = 6.90$, $p < .05$)

(Figure 1). Considering the standardized expected change for lambda when the item-factor relationship is released, only the relationship between item 13 and Indolence showed a value higher than .30 (λ = .41).

All the relationships between SBI dimensions were significant in the hypothesized model. According to the definition of the SBI dimensions, relationships between Enthusiasm towards job and the remaining scales were negative as expected, whereas relationships between the rest of the scales were positive. The strongest relationship was found between the scales Indolence and Guilt (.73, $p < .05$), and the lowest relationship was between the scales Enthusiasm towards the job and Guilt (-.35, $p < .05$) (Figure 1).
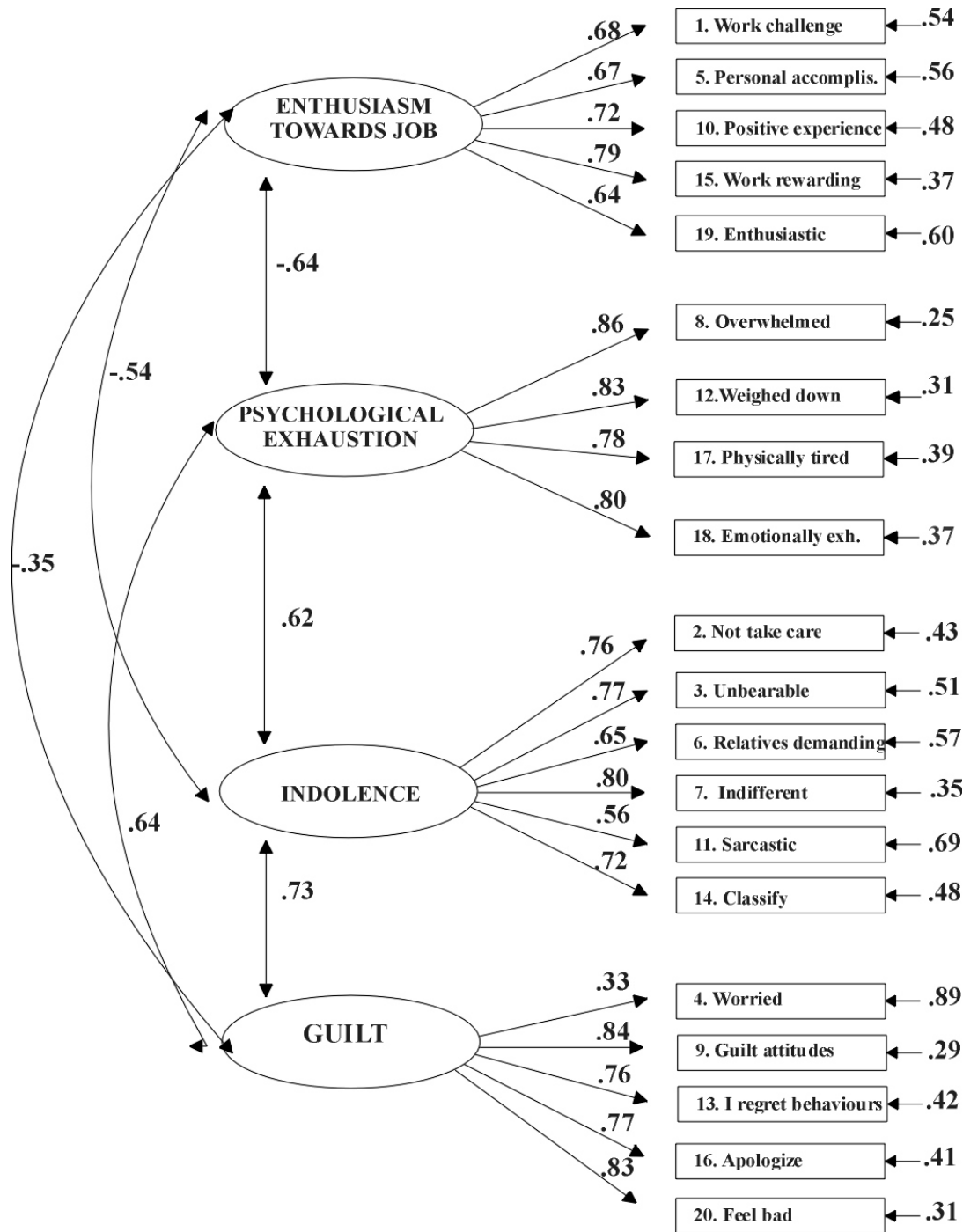

Figure 1. Confirmatory factor analysis of SBI-DP.

Table 2
Descriptive statistics for SBI and MBI dimensions, and correlations between dimensions of both inventories

	M (SD)	Sk	Ku	Range	1	2	3	4	5	6	7
1. Enthusiasm towards job	3.21 (.63)	-.95	1.14	0-4	(.76)						
2. Psychological Exhaustion	1.78 (.87)	.28	-.37	0-4	-.43**	(.83)					
3. Indolence	.52 (.52)	1.56	3.28	0-4	-.36**	.41**	(.79)				
4. Guilt	.93 (.65)	.58	-.01	0-4	-.15*	.28**	.42**	(.74)			
5. Personal accomplishment	37.88 (6.98)	-.90	.85	0-48	.35**	-.26**	-.35**	-.16*	(.79)		
6. Emotional exhaustion	12.84 (7.05)	.34	-.68	0-30	-.39**	.77**	.32**	.22**	-.22**	(.86)	
7. Depersonalization	3.34 (3.70)	1.30	1.82	0-30	-.34**	.33**	.39**	.26**	-.24**	.37**	(.52)

** $p < .001$; * $p < .01$
Note. The Cronbach's alpha values are in the diagonal of the correlation matrix.

Validity of the scales

Table 2 presents the descriptive statistics for the scales of the SBI. The scale Indolence showed a skewness value higher than 1 (Sk = 1.56). The kurtosis value was 3.28, which gives a leptokurtic distribution. Results for the remaining scales fitted to the normal distribution to a great extent, because the skewness value ranged between ±1, and regarding to kurtosis, presented values closed to 0 and a mesokurtic tendency.

The internal consistency values for all SBI scales showed values higher than .70 (Table 2). Comparing these values to the Cronbach's alpha values from the MBI scales, it can be observed that Personal accomplishment (α = .79), as well as Exhaustion (α = .86) scales presented adequate internal consistency values. However, the Cronbach's alpha value for the Depersonalization scale was relatively low and lower than .70.

Taking into consideration the correlation between SBI and MBI scales measuring similar constructs, the correlationship between Enthusiasm towards the job and Personal accomplishment was $r = .35$ ($p < .001$); between Psychological exhaustion and Exhaustion, $r = .77$ ($p < .001$); and between Indolence and Depersonalization, $r = .39$ ($p < .001$) (Table 2).

As well as for items, mean differences analyses were carried out for scales according to the gender variable. The mean difference was significant for the scale Guilt. The mean for men of the sample ($M = 1.09$) resulted significantly higher than for women ($M = .87$) ($t = 2.42$, $p < .05$). Significant differences for the remaining scales were not obtained.

Discussion

The purpose of this study has been to test the factorial validity of the Spanish Burnout Inventory (SBI), and to evaluate the internal consistency and concurrent validity of its dimensions in a sample composed of Chilean professionals working with physical disabled people. The results obtained indicate that the inventory psychometric properties are adequate in the study sample.

Based on the findings, it can be concluded that items present an adequate psychometric quality in relation to the scale to which they belong. All of them discriminate significantly between individuals with low and high scores in the item, and all item-scale correlationships have been adequate. Although some Enthusiasm towards the job items presented skewness values exceeding the range ±1, which is usually accepted to conclude about the fit to a normal distribution, skewness values exceed the value ±2 in no case, therefore it can be stated that this deviation is not important (Miles & Shevlin, 2005, p.74).

Nevertheless, there are two items deserving a comment. In the scale Indolence, item 11 (*I feel like being sarcastic with some disabled people*) showed the lowest value in the mean of the 20 elements of the inventory. This finding is similar to that obtained with samples of Mexican doctors (Gil-Monte & Zúñiga-Caballero, 2010) and teachers (Gil-Monte et al., 2009). In the study conducted with Spanish professionals working with intellectually disabled people (Gil-Monte et al., 2006), this item also presented a relatively low item-factor relationship (λ = .39) regarding to the remaining items of the questionnaire showing values higher than .50. However, this item does not have presented striking psychometric values in studies conducted with teachers in Portugal (Gil-Monte & Figueiredo-Ferraz, 2010) and Brazil (Gil-Monte et al., 2010). This result leads to conclude that item wording in Spanish could have a social desirability bias for the term *sarcastic*, which leads to answer with low scores.

In the other hand, item 4 which belongs to the Guilt scale has presented the highest item mean for the items which belong to this scale, and the internal consistency of Guilt scale improved deleting that item. In previous studies results for the mean have been similar, using the Spanish version of the SBI (Gil-Monte et al., 2009; Gil-Monte & Zúñiga-Caballero, 2010) as well as the Portuguese version

(Gil-Monte et al., 2010; Gil-Monte & Figueiredo-Ferraz, 2010), although the item did not contributed to the internal consistency of the scale in a negative way. This result can be justified by the fact that the item wording does not make explicit reference to the feelings of guilt as the remaining items of the scale. However, findings obtained by CFA and EFA, just as the internal consistency values for the scale Guilt in previous studies, reflect that item 4 contributes significantly to the variance of this scale.

The results confirmed the hypothesized factor structure. The model fit was adequate according to GFI index and satisfactory according to NNFI and CFI indexes which presented values higher than recommended threshold for accepting the CFA model fit (Bentler, 1992; Hoyle, 1995). The fit of the model was good considering the residuals, because the value of the RMSEA index was below .08 (Browne & Cudeck, 1993; Hair et al., 1995), and even lower than the more restrictive threshold of .06 recommended by Hu and Bentler (1999). Moreover, results from relationships between items and factors allow conclude that the instrument does not have significant cross-loading problems. This result contributes to the cross-national factor validity of the SBI, which showed an adequate factor structure in previous studies carried out by CFA in samples of Brazil (Gil-Monte et al., 2010), Spain (Gil-Monte et al., 2006), Mexico (Gil-Monte & Zúñiga-Caballero, 2010; Gil-Monte et al., 2009), and Portugal (Gil-Monte & Figueiredo-Ferraz, 2010).

All the scales have reached adequate Cronbach's alpha reliability values higher than .70 (Nunnally, 1978), which also gives internal consistency to the SIB dimensions used in Chile. This finding replicate results obtained in Chilean previous studies with public service professionals working on a social security company (Olivares & Gil-Monte, 2007/2008).

Obtained results according to the gender variable for difference of means in items and scales allow concluding that the influence of that variable in the inventory is low. Similarly, Maslach et al. (2001) have indicated that the gender variable is not a strong predictor of burnout. Results for difference of means indicate that only for three items of the inventory the difference was significant (items 14, 16 and 19). This finding did not affect the obtained result for the Enthusiasm towards the job scale (item 19) nor for the Indolence scale (item 14), in which the difference of means according to the gender variable was not significant, neither in the Psychological exhaustion scale.

For the Guilt scale in which item 16 belongs, significant differences related to gender were obtained, in the same direction of that obtained in this item, with significantly higher scores in the men group than in the women. Although the majority of studies on the guilt and gender relationship concludes that women present higher scores in the Guilt scales than men (Etxebarria, Ortiz, Conejero, & Pascual, 2009), some studies indicate that this result could

be influenced by the exposure frequency to events of an interpersonal nature (Etxebarria, Isasi, & Pérez, 2002), the instrument used in measuring guilt and the patterns of gender role socialization can affect those results (Benetti-McQuoid & Bursik, 2005). In this way, men developing female roles (e.g., taking care) with a high number of events of an interpersonal nature can present higher scores in some guilt aspects. However, our results could be influenced by difference in size groups. The men group of the study sample showed a low number of participants ($n = 69$) compared to the women group ($n = 208$). Therefore, these analyses should be replicated with a similar number of participants in both groups -i.e., men vs. women- in order to conclude about the influence of gender on Guilt variable estimated by the SBI.

When analyzing the correlationships between SBI and MBI scales measuring similar constructs, it was obtained that the correlationship between Enthusiasm towards the job and Personal accomplishment, and between Indolence and Depersonalization were moderated, whereas the correlationship between Psychological exhaustion and Exhaustion was strong (Cohen, 1988). In the case of the first variables, the moderate correlation can be observed when the scale Enthusiasm towards the job does not incorporate any self-efficacy indicator (e.g., to understand easily how recipients feel about things, to deal very effectively with the recipients's problems, to create easily a relaxed atmosphere between recipients, or to deal with emotional problems very calmy).

The moderate correlationship between Indolence and Depersonalization can be affected by the relatively low internal consistency value obtained for the Depersonalization scale. This is one of the main problems affecting the MBI as instrument for measuring burnout (Schaufeli & Enzmann, 1998, p. 51) and implies a relevant limitation for its use. In the other hand, the obtained results are in line with that of previous studies, in which the strongest correlation is observed between Psychological exhaustion and Exhaustion, with values higher than $r = .70$. These results offer support in order to conclude on the concurrent validity between the SBI and the MBI.

A limitation of this study is that the sample was mostly composed of women, which might affect results. This is why it is recommended widening the sample in future studies and developing comparative studies which consider some sociodemographic variables affecting significantly on burnout, such as gender or nationality. At the mid eighties, Sarason (1985) indicated that social values, economic conditions and historical events are decisive for explaining the process of burnout, because this phenomenon is a complex of psychological characteristics reflecting broad structures of a particular society. Most recently, Moreno, Garrosa, Benevides-Pereira, and Gálvez (2003) consider that burnout should not be understood as intrapsychic processes, but as social practices, that is, in cultural, economic and political terms.

On the basis of this study results, it can be concluded that SBI is a reliable and valid instrument to assess burnout in Chilean professionals working to physical disabled person and the cross-national validity of the instrument is strong, because it has proved to have adequate validity indexes with samples presenting population and cultural differences.

As recommendations for further validation of the SBI's theoretical model, studies contributing to the criteria identification for classifying individuals in the inventory dimensions levels should be carried out in order to determine the prevalence and incidence of burnout and to help to know the development of this process. The theoretical model underlying the SBI (Gil-Monte, 2005a) provides related information, therefore longitudinal studies are also recommended to analyze the antecedents-consequences relationship between dimensions of the inventory in an empirical way. This may facilitate the diagnosis and prevention of burnout.

References

Benetti-McQuoid, J., & Bursik, K. (2005). Individual differences in experiences of and responses to guilt and shame: Examining the lenses of gender and gender role. *Sex Roles, 53*, 133-142. doi:10.1007/s11199-005-4287-4

Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psycholical Bulletin, 112*, 400-404. doi:10.1037/0033-2909.112.3.400

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & L. S. Long (Eds.). *Testing Structural Equation Models* (pp.136-162). Newbury Park, CA: Sage.

Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Asses*sment*, 19*, 12-23. doi:10.1027//1015-5759.19.1.12

Etxebarria, I., Isasi, X., & Pérez, J. (2002). The interpersonal nature of guilt-producing events. Age and gender differences. *Psicothema, 14*, 783-787.

Etxebarria, I., Ortiz, M. J., Conejero, S., & Pascual, A. (2009). Intensity of habitual guilt in men and women: Differences in interpersonal sensitivity and the tendency towards anxious-aggressive guilt. *The Spanish Journal of Psychology, 12*, 540-554.

Gil-Monte, P. R. (2005a). *El síndrome de quemarse por el trabajo ("burnout"). Una enfermedad laboral en la sociedad del bienestar* [Burnout: An occupational illness in the well-being society]. Madrid: Pirámide.

Gil-Monte, P. R. (2005b). Factorial validity of the Maslach Burnout Inventory (MBI-HSS) among Spanish professionals. *Revista de Saúde Pública, 39*, 1-8. doi:10.1590/S0034-89102005000100001

Gil-Monte, P. R. (2008). Evaluación psicométrica del síndrome de quemarse por el trabajo (burnout): el cuestionario "CESQT" [The assessment of burnout: The SBI questionnaire]. In J. Garrido (Comp.), *¡Maldito trabajo!* [Damned job!] (pp. 269-291). Barcelona: Granica.

Gil-Monte, P. R., Carlotto, M. S., & Gonçalves, S. (2010). Validation of the Brazilian version of the "Spanish Burnout Inventory" in teachers. *Revista de Saúde Pública, 44*, 140-147. doi:10.1590/S0034-89102010000100015

Gil-Monte, P. R., Carretero, N., Roldán, M. D., & Núñez-Román, E. (2005). Prevalencia del síndrome de quemarse por el trabajo (burnout) en monitores de taller para personas con discapacidad [Prevalence of burnout in educators working with intellectually disabled persons]. *Revista de Psicología del Trabajo y de las Organizaciones, 21*, 107-123.

Gil-Monte, P. R., & Figueiredo-Ferraz, H. (2010). *Psychometric properties of the "Spanish Burnout Inventory" (SBI) among Portuguese teachers.* Manuscript submitted for publication.

Gil-Monte, P. R., García-Juesas, J. A., Núñez, E. M., Carretero, N., Roldán, M. D., & Caro, M. (2006). Validez factorial del Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo (CESQT) [The factorial validity of the Spanish Burnuot Inventory (SBI)]. *Psiquiatria.com, 10*(3). Retrieved from http://www.psiquiatria.com/revistas/index.php/psiquiatriacom/article/view/511/491/

Gil-Monte, P. R., Unda S., & Sandoval J. I. (2009). Validez factorial del "Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo" (CESQT) en una muestra de maestros mexicanos [Factorial validity of "Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo" (CESQT) in a sample of Mexican teachers]. *Salud Mental, 32*, 205-214.

Gil-Monte, P. R., & Zúñiga-Caballero, L. C. (2010). Validez factorial del "Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo" (CESQT) en una muestra de médicos mexicanos [Factorial validity of the "Spanish Burnout Inventory" (SBI) in a sample of Mexican doctors]. *Universitas Psychologica, 9*, 169-178. doi:10.1590/S0034-89102010000100015

Guerrero, E., & Vicente, F. (2002). Abordaje del burnout en profesionales del campo de la discapacidad [The treatment of burnout among professionals working with disabled persons]. In J. N. García-Sánchez (Ed.), *Aplicaciones de intervenciones psicopedagógicas* [Psychoeducational interventions] (pp. 327-337). Madrid: Pirámide.

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

Hair, J. H., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis* (4ª ed.). Englewood Cliffs, NJ: Prentice-Hall.

Hoyle, R. H. (1995). The Structural Equation Modeling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural Equation Modeling: Concepts, Issues, and Applications* (pp. 1-15). Thousand Oaks, CA: Sage.

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,* 1-55. doi:10.1080/10705519909540118

Jackson, M., & Ashley, D. (2005). Physical and psychological violence in Jamaica's health sector. *Pan American Journal of Public Health, 18*, 114-121. doi:10.1590/S1020-4989 2005000700006

Jawahar, I., M., Stone, T. H., & Kisamore, J. L. (2007). Role conflict and burnout: The direct and moderating effects of political skill and perceived organizational support on burnout dimensions. *International Journal of Stress Management, 14*, 142-159. doi:10.1037/1072-5245.14.2.142

Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago, IL: Scientific Software International.

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

Maslach, C. (1982). *Burnout: The cost of caring.* New York, NY: Prentice Hall Press.

Maslach, C. (1998). Chronic outcomes: Burnout. In J. M. Stellman (Ed.), *Encyclopedia of Occupational Health and Safety*, (Vol. 2, pp. 34-64) (4ª ed.). Geneva: International Labour Office.

Maslach, C., & Jackson, S. (1981). *Maslach Burnout Inventory Manual* (2nd ed. 1986). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3ª ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422. doi:10.1146/ annurev.psych.52.1.397

Miles, J., & Shevlin, M. (2005). *Applying regression & correlation. A guide for students and researchers.* London: Sage.

Molina, J., Iáñez, M., & Iáñez, B. (2005). El apoyo social como modulador de la carga del cuidador de enfermos de Alzheimer [Social support to regulate the burden supported by caretakers of patients with Alzheimer' disease]. *Psicología y Salud, 15*, 33-43.

Moreno-Jiménez, B. (2007). Evaluación, medidas y diagnóstico del síndrome de burnout [Assessment, instruments, and diagnosis of burnout syndrome]. In P. R. Gil-Monte, & B. Moreno-Jiménez (Comp.), *El síndrome de quemarse por el trabajo (burnout): grupos profesionales de riesgo* [The burnout syndrome: Risk occupational groups] (pp. 43-70). Madrid: Pirámide.

Moreno, B., Garrosa, E., Benevides-Pereira, A. M., & Gálvez, M. (2003). Estudios transculturales del burnout: los estudios transculturales Brasil-España [Cross-cultural studies of burnout: Cross-cultural Brazil-Spain studies]. *Revista Colombiana de Psicología, 12*, 9-18.

Nunnally, N. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

Olivares, V., & Gil-Monte, P. R. (2007). Análisis de las propiedades psicométricas del Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo (CESQT) en profesionales chilenos [An exploratory factor analysis of the Spanish Burnout Inventory (SBI) in a Chilean sample]. *Ansiedad y Estrés, 13*, 133 -289.

Olivares, V. E., & Gil-Monte., P. R. (2007/2008). Prevalencia del síndrome de quemarse por el trabajo (*burnout*) en trabajadores de servicios en Chile [Prevalence of burnout in Chilean service professional workers]. *Informació Psicológica, 91/92*, 43-52.

Pines, A. M., Aronson, E., & Kafry, D. (1981). *Burnout: From tedium to the personal growth*. New York, NY: Free Press.

Sarason, S. B. (1985). *Caring and compassion in clinical practice*. San Francisco, CA: Jossey Bass.

Schaufeli, W. B. (2007). Burnout in health care. In P. Carayon (Ed.). *Handbook of human factors and ergonomics in health care and patient safety* (pp. 217-232). Mahway, NJ: Lawrence Erlbaum.

Schaufeli, W. D., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis.* London: Taylor & Francis.

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

Shirom, A., & Ezrachi, J. (2003). On the discriminant validity of burnout, depression and anxiety. *Anxiety, Stress, and Coping, 16*, 83-99. doi:10.1080/1061580021000057059

Shirom, A., Nirel, N., & Vinokur, A. D. (2006). Overload, autonomy, and burnout as predictors of physicians' quality of care. *Journal of Occupational Health Psychology, 11*, 328-342. doi:10.1037/1076-8998.11.4.328

Sonnentag, S. (2005). Commentary. Burnout research: Adding an off-work and day-level perspective. *Work & Stress, 19*, 271-275. doi:10.1080/02678370500386473

van Horn, J. E., Schaufeli, W. B., & Enzmann, D. (1999). Teacher burnout and lack of reciprocity. *Journal of Applied Social Psychology, 29*, 91-108. doi:10.1111/j.1559-1816.1999.tb01 376.x

Wisniewski, L., & Gargiulo, R. M.(1997). Occupational stress and burnout among special educators: A review of the literature. *The Journal of Special Education, 31*, 325-346. doi:10.1177/002246699703100303

APPENDIX

SPANISH BURNOUT INVENTORY-DP FORM. (ENGLISH TRANSLATION)

0	1	2	3	4
Never	Rarely: a few times a year	Sometimes: a few times a month	Frequently: a few times a week	Very frequently: every day

1. I find my work is a stimulating challenge.	0 1 2 3 4
2. I don't like taking care of some disabled people.	0 1 2 3 4
3. I think many disabled people are unbearable.	0 1 2 3 4
4. I worry about how I have treated some people at work.	0 1 2 3 4
5. I see my job as a source of personal accomplishment.	0 1 2 3 4
6. I think the relatives of disabled people are very demanding.	0 1 2 3 4
7. I think I treat some disabled people with indifference.	0 1 2 3 4
8. I feel I am overwhelmed by work.	0 1 2 3 4
9. I feel guilty about some of my attitudes at work.	0 1 2 3 4
10. I think my job gives me positive experiences.	0 1 2 3 4
11. I feel like being sarcastic with some disabled people.	0 1 2 3 4
12. I feel weighed down by my job.	0 1 2 3 4
13. I regret some of my behaviours at work.	0 1 2 3 4
14. I label or classify disabled people according to their behaviour.	0 1 2 3 4
15. I find my work quite rewarding.	0 1 2 3 4
16. I think I should apologize to someone for my behaviour at work.	0 1 2 3 4
17. I feel physically tired at work.	0 1 2 3 4
18. I feel emotionally exhausted.	0 1 2 3 4
19. I feel enthusiastic about my job.	0 1 2 3 4
20. I feel bad about some of the things I have said at work.	0 1 2 3 4