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Cultural adaptation and psychometric properties of Brazilian Need for Recovery Scale

Adaptação cultural e parâmetros psicométricos da versão brasileira da "Need for Recovery Scale"

ABSTRACT

OBJECTIVE: To translate the Need for Recovery Scale (NFR) into Brazilian Portuguese and culturally adapt it and assess the stability, internal consistency and convergent validity of the Brazilian scale among industrial workers.

METHODS: The translation process followed the guidelines for cultural adaptation of questionnaires including the steps of translation, synthesis, back translation, expert committee review, and pre-testing. The Brazilian Portuguese NFR, final version (Br-NFR) was assessed for stability (n=52) and internal consistency (n=192) and for convergent validity through simultaneous assessment with other instruments: the Borg Scale (n=59); the Chalder Fatigue Questionnaire (n=57) and 3 subscales of the SF-36 (n=56).

RESULTS: Stability and internal consistency met the criterion for a reliable measure (ICC=0.80 and Cronbach's alpha =0.87, respectively). The convergent validity between Br-NFR and other instruments also showed good results: Borg Scale (r= 0.64); Chalder Questionnaire (r= 0.67); SF-36 subscales: vitality (r= –0.84), physical functioning (r= –0.54), and role-physical (r= –0.47).

CONCLUSIONS: The Br-NFR proved to be a reliable instrument to evaluate work-related fatigue symptoms in industrial workers. Furthermore, it showed significant and good correlations with well-established instruments such as the Borg Scale, the Chalder Questionnaire and SF-36 vitality subscale, supporting the validity of the Br-NFR.

DESCRIPTORS: Fatigue, diagnosis. Questionnaires. Translations. Working Conditions. Reproducibility of Results. Validity of Tests.

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RESUMO

OBJETIVO: Traduzir a escala *Need for Recovery Scale* para a língua portuguesa visando a adaptação cultural e apresentando a estabilidade, consistência interna e validade convergente da versão brasileira em trabalhadores da indústria.

MÉTODOS: A tradução da escala seguiu normas para adaptações culturais de questionários, que envolveu as etapas de tradução, síntese, retro-tradução, revisão por especialistas e pré-teste. A versão final da escala em português, denominada Escala de Necessidade de Descanso foi avaliada pelos testes de estabilidade (n=52) e de consistência interna (n=192) e quanto à validade convergente em avaliações simultâneas com outros instrumentos: Escala de Borg (n=59), Questionário de Fadiga de Chalder (n=57) e escalas do *Short Form*-36 (n=56).

RESULTADOS: A estabilidade e consistência interna da escala atingiram o critério de medida confiável (ICC=0,80 e α de Cronbach=0,87, respectivamente). A validade convergente entre a versão brasileira da escala e os outros instrumentos também apresentaram bons resultados: Escala de Borg (r=0,64); Questionário de Fadiga de Chalder (r=0,67); escalas do *Short Form*-36: vitalidade (r=-0,84), capacidade funcional (r=-0,54) e aspectos físicos (r=-0,47).

CONCLUSÕES: A versão brasileira da escala *Need for Recovery Scale* apresentou boa confiabilidade para avaliação de sintomas de fadiga relacionada ao trabalho. Além disto, apresentou correlações satisfatórias e significativas com outros instrumentos aceitos pela literatura, o que valida a escala para utilização em trabalhadores de perfil semelhante ao estudado.

DESCRITORES: Fadiga, diagnóstico. Questionários. Tradução (Produto). Condições de Trabalho. Reprodutibilidade dos Testes. Validade dos Testes.

INTRODUCTION

Fatigue at work is a common complaint that requires attention in occupational health services due to its high prevalence rates and its association to severe dysfunctions among workers.[14] Fatigue can be understood as a continuum: it begins as a weak feeling of tiredness that can progress to a severe condition of fatigue.[15] The initial stage of fatigue, so-called acute fatigue, is a normal phenomenon in healthy workers that is reversed after a period of rest. However, in later severe stages, chronic fatigue is characteristically more irreversible because it does not respond to changes in workload and rest, as in acute fatigue.[19] During the chronic stage, people may have sleep disturbances, psychosomatic complaints, and mental overload,[11,20] which can affect worker's quality of life and lead to sick leave and work disability.[13,14] In this context, methods that assess work-related fatigue are necessary to maintain working capacity and prevent chronic fatigue.

As fatigue is a complex phenomenon, it can be assessed through its different attributes.[19] Different questionnaires have been proposed to evaluate fatigue, which is essentially a subjective experience. The Need for Recovery Scale (NFR)[22] is a scale from the Questionnaire on the Experience and Evaluation of Work (*Vragenlijst Beleving en Beoordeling van de Arbeid*, VBBA), which has been used to assess work-induced fatigue and quality of worker's recovery time.[6,22]

The concept of the scale is based on the Effort-Recovery Model by Meijman.[22] According to this model, if recovery from the working day effort has not been enough, a residual fatigue will be present at the start of the next working day. In this way, a cumulative process is started and if this process persists, it may lead to long-term effects and the development of chronic fatigue symptoms.[11,20] In this sense, the NFR assesses short-term effects of work-induced fatigue, such as lack of attention, irritability, social withdrawal, reduced performance, and the quality of recovery time after work.[12,22,23] It assesses fatigue symptoms that lie in an intermediate position between the experience of work-related efforts and the effects of prolonged fatigue exposure.[20] NFR is thus a powerful predictor

of cumulative effects of work that could lead to long-term effects on worker's health and consequently to sick leave and worker's retirement.[13]

The NFR has been applied on different occupations and activities, such as among construction workers, drivers and nurses,[20] as well as in business, agriculture, tourism, public sector, and education personnel.[7] The evaluation of NFR quality among workers revealed that the scale is sensitive to detect the occupational workload on an individual such as mental and physical demands, lack of decision latitude, and number of working hours.[6,20] The test-retest reliability of the scale has shown good to excellent results up to a two-year period, proving a valuable tool for occupational health professionals.[6] The scale have also showed good content and convergent validity with moderate to strong correlation with other fatigue questionnaires[7] and predictive validity regarding health complaints.[20]

In addition to health-related consequences, long-term fatigue is also associated with decreased work performance, increased susceptibility to errors in task execution as well as increased risk of work-related injuries.[21] According to Swaen et al[21] (2003), the relative risk for being injured in an occupational accident is 2.28 for workers with high scores on NFR. In the light of that, we proposed to translate the NFR into Brazilian Portuguese and culturally adapt it to Brazilian culture.

As in many countries, Brazilian workers in industries are susceptible to work-related injuries. This economic segment accounts for most work-related injuries reported in 2006 in Brazil: 47.4% of all reports were in industries.[a] In this sense, the assessment of need for recovery could help identifying increased risk for work-related injuries among Brazilian industrial workers and support prevention actions.

The objective of the present study was to translate the NFR into Brazilian Portuguese and to culturally adapt it to Brazilian culture and assess its stability, internal consistency, and convergent validity among industrial workers.

METHODS

The study was performed in two stages. In the first stage, the scale was translated into Brazilian Portuguese and culturally adapted to Brazilian culture. In the second stage, it was tested among industrial workers to assess stability, internal consistency, and convergent validity of the Brazilian NFR.

The English version of NFR[22] was the original scale used for translation and adaptation. The original NFR comprises 11 questions with bimodal answers, which was changed to four answer choices in the Brazilian version, scored according to a Likert scale: never = 0; sometimes = 1; often = 2; and always = 3. The choice "always" indicates an unfavorable situation and its score is 3. The only exception is question 4, which has a reverse scoring. The total score ranges from 0 to 33, and it is then recoded to a scale ranging from 0 (minimum) to 100 (maximum), where higher scores indicate greater need for recovery.

The change from dichotomous to 4-choice answers has improved the scale characteristics in previous pilot studies.[23] Using a four-point scale, each answer choice constitutes a point on a continuum, which allows respondents to provide a more precise assessment than that seen in the dichotomous method.[17] Thus, this change was designed to improve the discriminatory power of the scale, which is especially important for applications at the individual level such as screening and monitoring of work-related fatigue among workers. The Brazilian NFR was called *Escala de Necessidade de Descanso* – ENEDE.

Cross-cultural adaptation process

The cross-cultural adaptation was performed following Beaton et al[2] (2000) guide for cross-cultural adaptation of self-report measures. It is recommended a five-stage process for cross-cultural adaptation: translation, synthesis, back translation, expert committee review and pre-testing. This process should adapt the concepts to the target population's culture and verify whether the connotative meaning is equivalent to the original scale.[10]

The initial translation into Brazilian Portuguese was performed together by two Brazilian physical therapists, specialists in ergonomics, and a native bilingual translator with no background in medical concepts. The physical therapists were familiar with the scale's concepts and the Effort-Recovery theory. They also had considerable experience in workers' health assessment using questionnaires. Three translators combine the three translations into one common translation based on the original scale. All decisions were made by consensus among the three translators.

The common translated/adapted version was then back translated into English by two bilingual native-speaking English translators. They worked independently. Also, they had neither any background on the medical concepts, nor did they know any details about the NFR scale or the Effort-Recovery theory.

A multiprofessional expert committee consisting of five experts — one senior ergonomics researcher, one

[a] Ministério da Previdência Social. Anuário Estatístico da Previdência Social 2006. Brasília; 2006 [cited 2008 Aug 08]. Available from: http://www1.previdencia.gov.br/aeps2006/15_01_20_01.asp

Brazilian language professional, one British language professional and the two physical therapists who participated in the first stage — reviewed and compared the common translation, the two back translations and the original scale to produce a pre-final Brazilian version of the NFR. The expert committee's decisions were made to achieve semantic, idiomatic, experimental, and conceptual cross-cultural equivalence.[2] The ergonomics researcher and the British language professional were only consultants to this project.

Pre-testing was performed in order to verify if this version was equivalent to the original scale and if the target group could understand it properly. A sample of industrial workers was asked to read the scale out, fully explain their answers, and to report any difficulty identified. According to Ciconelli et al[5] (1999), if 15% of the workers will have any difficulty understanding a particular question, it would be required to be reformulated. Also, if the question interpretation will not have an equivalent meaning of the original scale, the question would also require to be reformulated. The pre-final version of the scale was tested twice in a sample of industrial workers with college education. Beaton et al[2] (2000) recommendation of a minimum sample of 30 subjects for this stage was followed. Pre-testing was performed twice as consistent problems were reported by the first 13 workers interviewed (11 women and 2 men, mean age 33, SD=7 years). After amending these problems, a pre-final version was applied to another sample of 30 industrial workers (17 women and 13 men, mean age 36, SD=8 years) to complete the pre-testing stage.

Evaluation of psychometric properties

The study sample size was estimated as proposed by Terwee et al[24] (2007), i.e., at least 50 subjects for reliability and construct validity and at least 100 subjects for internal consistency. To test the psychometric properties of the Brazilian final version of the NFR (Br-NFR), a convenient sample including 194 out of 1,383 workers was selected from a wood manufacturing plant. Only two workers were excluded for not completing the entire scale. The sampling selection took into account the distribution of respondents across subgroups of workers in the different divisions (assembling, sorting, and maintenance) and their availability to stop their tasks in order to answer the questionnaire. The workers answered the scale at the workplace with no losses of either break time or wages.

NFR is a self-administered scale and each worker completed it individually with no assistance from researchers. Instructions to fill out the questionnaire were available in the front page.

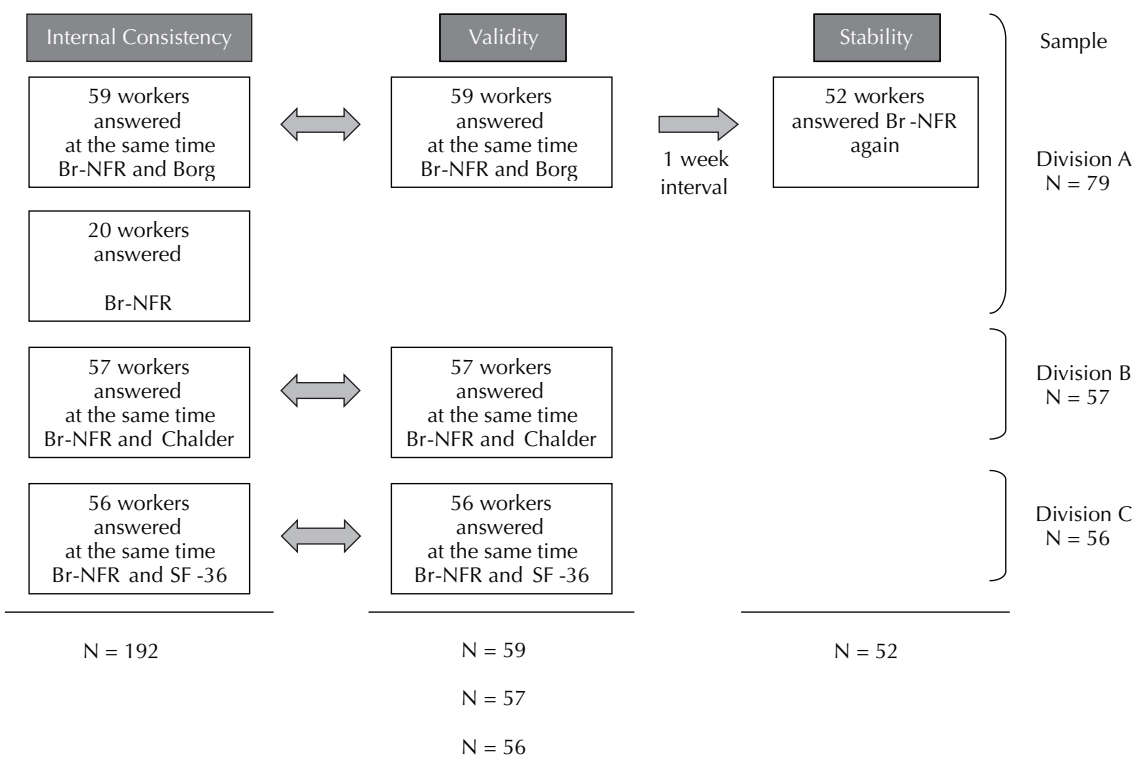

Figure. Sampling selection from different industry divisions to assess stability, internal consistency, and convergent validity of the Brazilian version of Need for Recovery scale.

The Br-NFR was applied in workers from three different divisions (A, B and C) of the plant studied (Figure) to test the convergent validity, stability, and internal consistency.

Construct validity represents the extent to which the results of the questionnaire are related to the theoretical concept to be measured. Construct validity includes the degree of correlation between an instrument and other measures that assess similar concepts (convergent validity); and the divergence from measures that are dissimilar (discriminant validity).[9] To assess convergent validity, the workers were asked to answer other three questionnaire instruments at the same time. Two of them were expected to have a positive correlation with NFR – the CR10 Borg Scale[1] to assess fatigue intensity and the Chalder Fatigue Questionnaire;[4] and one instrument was expected to have a negative correlation – the Short-form 36 (SF-36[5]). Convergent validity was examined by computing correlations[9] between the Br-NFR and the other instruments. There is no consensus in the literature on the criterion to determine when two measures should be considered correlated. The present study used Michielsen et al[16] (2003) criterion that consider high correlations above 0.60 between different fatigue measures.

Fifty-nine workers from division A answered the CR10 Borg Scale[1] as well as the Br-NFR scale at the same time: 38 women, mean age 38 (SD=7) and 21 men, mean age 35 (SD=7). Since need for recovery is observed during the last hours of work and immediately after work[22] and the Borg Scale provides an immediate measure of fatigue intensity,[1] the instruments were applied during the last three hours of the working day. This precaution allowed these instruments to assess fatigue for about the same period of the working day.

Fifty-seven workers from division B answered the Br-NFR and the Brazilian validity version of the Chalder Fatigue Questionnaire[4] at the same time: 45 women, mean age 33 (SD=8) and 12 men, mean age 32 (SD=7). The Chalder Fatigue Questionnaire comprises 11 questions with 4 choices to assess mental and physical fatigue. A Likert scale was used to score the Questionnaire and the final score was converted into a scale ranging from 0 (minimum) to 100 (maximum), such as the NFR.

Fifty-six workers from division C answered the Br-NFR as well as three subscales of the Brazilian Portuguese version of SF-36[5] (47 women, mean age 33 [SD=8] and 9 men, mean age 34 [SD=9]). According the literature, fatigue may affect quality of life,[3] so it is expected to find divergences between the Br-NFR and SF-36 subscales. The selected subscales of the SF-36 (physical function, role-physical and vitality) were supposed to be the most affected by fatigue conditions of all SF-36 subscales. The physical function subscale measures performance during physical activities, the role-physical subscale measures difficulty to perform daily activities, and the vitality subscale measures the feeling of pep and energy.[25]

Reliability refers to the consistency of a measurement, when all related conditions are held constant, and can be estimated through stability on the one hand and internal consistency on the other.[18]

Stability refers to the extent to which the same score is provided in two different occasions for the same conditions.[24] The subgroup of 52 workers from division A who answered the scale twice participated in this test. A one-week interval between the tests was given as recommended by Terwee et al[24] (2007) as it is considered long enough to prevent recall and at the same time is short enough to avoid changes in the work environment. The work pace and work routine were kept constant during this time interval. A minimum of 0.7 is recommended criterion for a reliable measure.[24]

To assess internal consistency,[9] all groups (n = 192) that participated in the validity tests were considered (141 women, mean age 35 [SD=8] and 51 men, mean age 33 [SD=8]). For the group that answered the scale twice (n=52) for the stability test, only the first score was considered in the analysis of internal consistency. A good internal consistency ranges between 0.7 to 0.95.[24]

The intraclass correlation coefficient (ICC) was used to verify the stability of the Br-NFR scale in the test and retest. The internal consistency was assessed using Cronbach's alpha for the 11 items. The analysis was also conducted excluding one item each time to check the contribution to that particular item to the homogeneity of the scale. Spearman's correlation coefficient was used to examine the convergent validity between the Br-NFR and a) Borg Scale, b) Chalder Fatigue Questionnaire and c) SF-36, as a normal distribution could not be demonstrated for any of these fatigue measures. The analyses were performed using SPSS 13.0 for Windows.

All workers were informed about the study procedures and all participants signed an informed consent form. This study was approved by the Research Ethics Committee of Universidade Federal de São Carlos, São Paulo, Brazil (Protocol No. 0054.0.135.000.07).

RESULTS

Cross-cultural adaptation process

In the synthesis process small discrepancies between translations were seen such as different prepositions, use of equivalent words or omitted words. The translators discussed every discrepancy and chose the most adequate terms to be used. Specifically, the expressions

"worn out" in question 2, "exhausted" in question 3, and "feel in good shape" in question 4 had to be reanalyzed. To reach a consensus between the available possibilities, the translators had to take into account workers' education and opted to use more common words. In question 11, the order of the sentences was changed to be more clearly understandable.

Considering the workers' education level, the expert committee gave priority to more colloquial terms when words of semantic equivalence caused discrepancies in the back translations. In addition, due to the change from dichotomous to four-point frequency-related answer categories, adverbs in the original questions that denoted frequency were removed from questions 4, 5, 8 and 10. The expert review committee found relevant differences between the back translations and the original NFR regarding the expressions "rather exhausted" in question 3, "feel in good shape" in question 4, and "to be left alone" in question 9. Considering the final version of the synthesis, the back translations and the original scale, the committee decided to change the expressions of the synthesis in question 3 and 4, but not in question 9.

In the first pre-testing, workers had difficulties to answer questions 4, 5, 6, and 11. In question 4, the reference time "after dinner" was not culturally the same for Brazilians and was changed. In question 5, the phrase was changed for another with experiential equivalence. In question 6, an equivalent term was added inside parenthesis after the verb "to concentrate" as its meaning was ambiguous and in question 11, the sentence required a complementation for better understanding.

In the second pre-testing workers found difficulties only in questions 6 and 8 (16.6% and 30%, respectively). In question 6, the verb "to concentrate" continued to be an issue, so the equivalent term was removed from the parenthesis and placed before the verb. Question 8 was complemented with a reference time ("after work") to avoid confusion with lunch time. It was also noticed during pre-testing that workers had difficulty remembering that questions 1, 6 and 7 were inquiring about their difficulty to perform some activity. Thus, workers mistakenly reversed the answers in these questions. For this reason, part of the questions was reproduced in the answers in order to stress their meanings. Based on the results of pre-testing, the final Br-NFR was proposed (Annex).

Psychometric properties

Significant ($p<0.01$) positive correlations were found between Br-NFR score and intensity of fatigue assessed by the Borg Scale ($r = 0.64$) and the Chalder Fatigue Questionnaire ($r = 0.67$). On the other hand, there were found significant negative correlations between the Br-NFR and the three SF-36 subscales ($p<0.01$). The level of correlation varied among the SF-36 subscales, the highest correlation was found with vitality ($r = –0.84$). The lowest correlation was found with role-physical ($r = –0.47$), followed by physical function ($r = –0.54$).

The Br-NFR showed good stability for the test-retest scores (ICC = 0.80; $p<0.01$) among 52 workers. The Br-NFR also showed a good internal consistency among 192 workers considering all 11 scale items (Cronbach's alpha = 0.87). Whenever one item was excluded alpha values did not reveal improved scale homogeneity (Table).

DISCUSSION

The translation into the Brazilian Portuguese and cultural adaptation to Brazilian culture of the NFR required a series of procedures[10] in order to preserve the measurement equivalence of the NFR. These procedures served as precautions to ensure that the Br-NFR was measuring the same phenomenon as the original scale, allowing comparisons between different cultures.[10]

The Br-NFR has proved a reliable instrument for the workers studied. The scale met the criteria for adequate stability (ICC = 0.8) and internal consistence (Cronbach's alpha = 0.87). These results are consistent with other tests of NFR in different groups of workers that found a stability (test-retest) within a 2 year-interval ranging from ICC = 0.3 to 0.8[6] and internal consistency varying from Cronbach's alpha = 0.81 to 0.92.[22]

The Br-NFR also showed adequate results regarding the convergent validity for the workers studied. The correlation found between the Br-NFR and the Borg Scale ($r = 0.64$) was similar to that described in other studies that used a visual analogue scale to test the validity of other translated fatigue instruments ($r = 0.62$).[8] The correlation between the Br-NFR and the Chalder Questionnaire ($r = 0.67$) was also similar to

Table. Results of Cronbach's alpha test while excluding one item of the scale at a time.

Deleted item	Cronbach's alpha
Question 1	0.86
Question 2	0.86
Question 3	0.86
Question 4	0.86
Question 5	0.87
Question 6	0.86
Question 7	0.86
Question 8	0.86
Question 9	0.86
Question 10	0.85
Question 11	0.86

that previously reported in different types of work (r = 0.68) including industrial workers. [7]

The highest and the lowest correlations were found between the Br-NFR and the SF-36 subscales. Vitality showed the highest correlation, which could be related to the higher sensitivity of the NFR to assess psychological demands during a working day.[12,22] Lower correlations were found between the Br-NFR and the role-physical subscale (r = –0.47) and the physical function subscale (r = –0.54). These SF-36 subscales seem to be more sensitive among patients suffering from chronic fatigue[3] while NFR would be more discriminative to assess short-term of effects fatigue and were not efficient to assess chronic fatigue symptoms.[22]

The process of translation and cultural adaptation of the Br-NFR, mainly regarding the change to a 4-point scale, resulted in some modifications in the scale. These modifications may limit comparisons between the results of the Br-NFR with those of other studies that used the dichotomous scales. But, on the other hand, it seems to have improved the scale's sensitivity. The stability, internal consistency and convergent validity showed adequate results, which supports a good quality of the scale although our sample is restricted and results could not be generalized to all workers. These results indicate that the translation and cultural adaptation reported in the present study found consistent psychometric properties. Future studies should be conducted among different groups of workers of different gender and education.

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Annex.

Escala de Necessidade de Descanso (Brazilian version of Need for Recovery Scale)

As questões nesta escala perguntam sobre a freqüência que você tem tido algum problema de cansaço, indisposição, ou para relaxar durante o último mês. Por favor, responda TODAS as questões abaixo simplesmente marcando com um X a resposta que mais diz a respeito de você. Para cada pergunta, escolha entre as seguintes alternativas: nunca; poucas vezes; freqüentemente ou sempre.

1. Eu acho difícil relaxar no fim de um dia de trabalho.
( ) nunca acho difícil relaxar.
( ) algumas vezes acho difícil relaxar.
( ) freqüentemente acho difícil relaxar.
( ) sempre acho difícil relaxar.

2. Ao fim do dia de trabalho eu me sinto realmente acabado(a).
( ) nunca me sinto realmente acabado(a).
( ) algumas vezes me sinto realmente acabado(a).
( ) freqüentemente me sinto realmente acabado(a).
( ) sempre me sinto realmente acabado(a).

3. Por causa do meu trabalho, ao fim do dia eu me sinto muito cansado(a).
( ) nunca me sinto muito cansado.
( ) algumas vezes me sinto muito cansado.
( ) freqüentemente me sinto muito cansado.
( ) sempre me sinto muito cansado.

4. À noite, após um dia de trabalho, eu me sinto bem disposto(a).
( ) nunca me sinto bem disposto.
( ) algumas vezes me sinto bem disposto.
( ) freqüentemente me sinto bem disposto.
( ) sempre me sinto bem disposto.

5. Eu preciso de mais de um dia de folga do trabalho para começar a me sentir relaxado(a).
( ) nunca preciso de mais de um dia de folga para começar a me sentir relaxado(a).
( ) algumas vezes preciso de mais de um dia de folga para começar a me sentir relaxado(a).
( ) freqüentemente preciso de mais de um dia de folga para começar a me sentir relaxado(a).
( ) sempre preciso de mais de um dia de folga para começar a me sentir relaxado(a).

6. Eu acho difícil prestar atenção ou me concentrar durante meu tempo livre depois de um dia de trabalho.
( ) nunca acho difícil prestar atenção ou me concentrar durante meu tempo livre.
( ) algumas vezes acho difícil prestar atenção ou me concentrar durante meu tempo livre.
( ) freqüentemente acho difícil prestar atenção ou me concentrar durante meu tempo livre.
( ) sempre acho difícil prestar atenção ou me concentrar durante meu tempo livre.

7. Eu acho difícil me interessar por outras pessoas assim que eu chego do trabalho.
( ) nunca acho difícil me interessar por outras pessoas.
( ) algumas vezes acho difícil me interessar por outras pessoas.
( ) freqüentemente acho difícil me interessar por outras pessoas.
( ) sempre acho difícil me interessar por outras pessoas.

8. Eu preciso de mais de uma hora para me sentir completamente descansado(a) depois de um dia de trabalho.
( ) nunca preciso de mais de uma hora para me sentir completamente descansado(a).
( ) algumas vezes preciso de mais de uma hora para me sentir completamente descansado(a).
( ) freqüentemente preciso de mais de uma hora para me sentir completamente descansado(a).
( ) sempre preciso de mais de uma hora para me sentir completamente descansado(a).

9. Quando eu chego em casa após o trabalho eu preciso ser deixado em paz por um tempo.
( ) nunca preciso ser deixado em paz por um tempo.
( ) algumas vezes preciso ser deixado em paz por um tempo.
( ) freqüentemente preciso ser deixado em paz por um tempo.
( ) sempre preciso ser deixado em paz por um tempo.

10. Depois de um dia de trabalho eu me sinto tão cansado(a) que não consigo fazer outras atividades.
( ) nunca me sinto tão cansado(a) que não consigo fazer outras atividades.
( ) algumas vezes me sinto tão cansado(a) que não consigo fazer outras atividades.
( ) freqüentemente me sinto tão cansado(a) que não consigo fazer outras atividades.
( ) sempre me sinto tão cansado(a) que não consigo fazer outras atividades.

11. Na última parte do meu dia de trabalho, o cansaço me impede de fazer meu trabalho tão bem quanto eu normalmente faria se não estivesse cansado(a).
( ) nunca o cansaço me impede de fazer meu trabalho tão bem quanto eu faria.
( ) algumas vezes o cansaço me impede de fazer meu trabalho tão bem quanto eu faria.
( ) freqüentemente o cansaço me impede de fazer meu trabalho tão bem quanto eu faria.
( ) sempre o cansaço me impede de fazer meu trabalho tão bem quanto eu faria.