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Burnout Syndrome: population-based study on public servants

ABSTRACT

OBJECTIVE: To identify predictors of Burnout syndrome among workers in the public sector.

METHODS: Cross-sectional study with a representative sample consisting of 879 municipal civil servants in a city of the metropolitan region of Porto Alegre, Southern Brazil. In order to measure the demographic variables and related characteristics of work we used a questionnaire developed for this purpose. The perception of the work environment was measured by the Work Atmosphere Scale. The Maslach Burnout Inventory was used to assess burnout syndrome. Three multiple stepwise linear regression tests were performed, in which each dimension of the syndrome was considered outcome while the other variables were estimated as predictors, adjusted for gender and age.

RESULTS: The variables related to perceptions of work environment were the ones which most contributed to the occurrence of burnout. Perceiving work as stressful and the presence of people who negatively affect the work environment contributed to the explanatory model of the three dimensions. There were nine variables which comprised a predictive model which explained 43% of Emotional Exhaustion. The variable 'perceives how stressful the job appeared to be' had the highest explanatory power. In Despersonalization, eight variables comprised 25% of the model and, once again, 'perceives how stressful the job appeared to be' was the variable with the highest explanatory power. 'Low Professional Fulfillment' revealed a set of variables with an explanatory power of 20%; a working environment considered to be good showed a higher weighting, showing it to be inversely associated.

CONCLUSIONS: Public servants' perceptions of their work environment play an important role as a predictor of burnout. Viewing work as stressful and the presence of people who negatively affect the environment proved to be the elements of greatest importance.

DESCRIPTORS: Burnout, Professional, epidemiology. Public Administration. Job Satisfaction. Working Conditions. Occupational Health.

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INTRODUCTION

The importance of personnel management in the public sector is increasing as these institutions are faced with demands to improve the quality of the services provided within the context of scarce resources. Brazilian public organisations suffer from a lack of suitable management tools, centralised decision making with little opportunity for local administration, paternalism and significant political influence on personnel management.¹⁸ These factors, allied with precarious working conditions, may place civil servants at risk of burnout syndrome.

Burnout syndrome is a psychosocial phenomenon, which arises as a response to chronic, interpersonal stressors, present at work. It has three dimensions: emotional exhaustion – lack of energy, enthusiasm and a feeling of depleted mental resources; depersonalization – the worker treats clients, colleagues and the organisation itself in an impersonal way, distancing themselves; and low professional fulfilment – the worker tends to evaluate themselves negatively, feeling unhappy and dissatisfied with their professional development.^{11,13}

Pioneering studies on the topic appeared in the 1970s and were based on the experiences of workers whose tasks entailed caring for people and meeting their needs, such workers in the teaching and health sector. These studies concentrated on the provider-recipient dyad. However, research was also carried out within organisations with hierarchies, functions, roles, resources and interpersonal relationships (colleagues, bosses, the public), and the context in which the activity was carried out should be taken into account.¹¹

Burnout syndrome is the result of chronic stress, typical of day-to-day work, mainly when under excessive pressure and conflict with low levels of emotional reward and recognition.¹¹ One of the main factors in its occurrence is a lack of community spirit in the organisation, i.e. lack of quality interpersonal interactions, constant conflict, lack of support, cliques and difficulties working as a team.¹³

Burnout rates may differ according to individual variables,¹⁶ work context,¹¹ the way work is organised¹⁷ and the country.²⁴ Burnout syndrome is associated with feeling exhausted, insomnia, migraines, chronic fatigue, muscular tension,¹¹ cardiovascular problems,²² depression, anxiety and increased tranquiliser and anti-depressant use.¹ It is also strongly associated with workers feeling undervalued, absenteeism, high staff turnover,^{15,17} negative organisational results and low levels of commitment at work.²⁰

Even though burnout syndrome is recognised as a significant problem in the health of the workforce, there

are few populational studies on civil servants. Varhama & Bjorkqvist²³ found 29% of individuals were burnt out and 50% had witnessed examples of burnout in colleagues in a Finnish municipality. In Brazil, lack of knowledge on the part of health professionals increases the difficulty of identifying the problem.⁵

With the aim of contributing to increasing knowledge of this problem and providing a basis for preventative measures, this study aims to identify predictive factors of burnout syndrome in civil servants.

METHODS

The data analysed are part of a wider investigation entitled “Mobbing, gender and culture”.^a A cross-sectional study was used, with a representative sample of 879 municipal civil servants from a medium sized city in Porto Alegre area between 2006 and 2007. The target population was made up of 4,304 civil servants, working in the municipality in January 2005. In order to calculate the sample size we used parameters of 50% estimated prevalence, error 3 and 95% confidence level, making 833 subjects. We added 10% to this to make up for potential losses, making a total of 925 participants. The subjects were selected via their civil servant registration numbers, which were drawn from the Excel® programme from information provided by the Municipal Administration Secretary.

Contact was made with 927 workers and 879 took part in the study: 48 (5.2%) were counted as losses: 17 (1.8%) refused to participate; we were unable to locate 10 (1.1%); 20 (2.2%) were on sick leave and one (0.1%) was deaf, dumb and functionally illiterate.

In order to collect the data, we used a self-reporting tool made up of four sections: 1) demographic variables: sex, age (in years) and marital status (with or without a partner); 2) work characteristics: length of time working in the institution (years); position in the organisational hierarchy (worker; supervisor; coordinator; director); hours worked weekly; own office or sharing with colleagues; dealing with the public (yes, no); supervisor, coordinator or boss present in the workplace (yes, no); interpersonal conflicts (yes, no) and physical risk (no, low, high); 3) perception of work: perceiving the work to be stressful, rating the atmosphere at work as good; feeling valued; rudeness; rating the work environment as democratic (participative); unfriendly colleagues; colleagues requiring you to do tasks that are not your responsibility; presence of individuals who negatively affect the working environment; cliques in the workplace; gossip; colleagues complaining for no

^a Study carried out by the Public Health Post Graduation Program of the Universidade Luterana do Brasil, from 2005 to 2008.

reason; chances to influence decision making; working with uncooperative individuals and 4) Maslach Burnout Inventory (MBI).

The section on perception of the workplace was drawn up based on the Work Atmosphere Scale of 13 questions to be responded to on a Likert type scale, varying from 0 to 4 (0 = never, 1 = rarely, 2 = sometimes, 3 = often and 4 = very often). This scale was translated into Portuguese and adapted for this study and had moderate internal consistency ($\alpha = 0.67$).

The MBI, translated and adapted for use in multifunctional samples,⁴ was used to evaluate burnout syndrome. It is made up of 22 items referring to the three dimensions of burnout: emotional exhaustion ($\alpha = 0.90$), depersonalization ($\alpha = 0.66$) and low professional fulfilment ($\alpha = 0.78$). A system using 1 to 5 points was used (1 = never; 2 = rarely 3 = sometimes; 4 = often and 5 = always).

We conducted a pilot study with 49 subjects in order to analyse the suitability of the questionnaire and the logistic of data collection. Each civil servant chosen by draw to take part was located and invited. The data were collected by a team of post-graduate and graduate students in the area of health from the Universidade Luterana do Brasil. They had been trained in order to ensure standardised procedures of data collection. Training took place over four weeks, with the help of an instruction manual. The team met weekly during the data collection period to hand in and check the completed questionnaires and to discuss any difficulties.

The data was inputted into the database and analysed using the SPSS, version 17.0 statistical package. Stepwise multiple linear regression analysis was carried out for each outcome, controlled for sex and age. The other variables were considered predictors. We used the variables of age and length of time working at the institution in continuous multivariate analysis. $P < 0.05$ was considered to be statistically significant.

This study was approved, after obtaining the consent of the Municipal Secretariat of Administration, by the Ethical Committee of the Universidade Luterana do Brasil (protocol nº 2005-056H). Participants signed consent forms. In order to guarantee the anonymity of the participants, the completed questionnaires were sealed in an envelope and deposited in an urn by the participant themselves.

RESULTS

The participants were predominantly female (69.2%), in the 40 to 49 age group (41.6%) and lived with a partner (64.0%). They had mainly been working in the institution for between one and 11 years (37.4%); the majority reported that they were civil servants (87.5%), worked a 40hr week (52.3%), shared an office with

colleagues (94.2%), dealt with the public (89.3%), had a supervisor, coordinator or boss located at their place of work (82.4%) and perceived low physical risk in their activities (48.4%) (Table 1).

As regards the points given to the dimensions, emotional exhaustion had the highest mean (M) (M: 2.23; SD: 0.91), followed by low professional

Table 1. Demographic and work characteristics for municipal civil servants. Rio Grande do Sul, Southern Brazil, 2006 to 2007 (n = 879).

Variable	n	%
Sex		
Male	270	30.8
Female	606	69.2
Age group (years)		
20 to 39	247	28.2
40 to 49	364	41.6
> 50	265	30.3
Marital status		
No partner	314	36.0
With partner	558	64.0
Length of time working in the institution (years)		
0	5	0.6
1 to 11	326	37.4
12 to 17	242	27.8
> 18	299	34.3
Position in the hierarchy		
Civil servant	763	87.5
Supervisor	39	4.5
Coordinator	31	3.6
Director	39	4.5
Weekly hours worked (hours)		
20	96	11.0
30	311	35.8
40	462	53.2
Work in an office		
Alone	50	5.8
With colleagues	814	94.2
Deal with the public		
No	93	10.7
Yes	778	89.3
Supervisor, coordinator or boss present in the workplace		
Never/rarely	153	17.6
Frequently	718	82.4
Physical risk		
No	230	26.3
Low	418	48.4
High	216	25.0

Totals vary according to the data ignored

fulfilment (M: 1.76; SD: 0.72). The lowest mean was that found for depersonalization (M: 1.53; SD:0.65).

There was a model composed of nine predictor variables in emotional exhaustion, which explained 43.0% of its occurrence: perceiving work as stressful was the variable with the greatest explanatory power. Being female, rudeness and individuals who negatively affected the working environment all participated directly in the model. Age, rating the atmosphere at work as good, democratic environment, sharing an office with colleagues and the chance to influence decision making were inversely associated with emotional exhaustion. In other words, when the age was lower, the atmosphere perceived to be worse, having their own office and the lower the chance of participating in decision making were, the greater the rate for this dimension (Table 2).

Eight factors explained 25% of the depersonalization model; perceiving the work as stressful was the variable

with the greatest explanatory power. This variable and the presence of gossip, rudeness, interpersonal conflict and individuals who negatively affect the atmosphere at work contribute directly to the occurrence of this dimension. Age, dealing with the public and perceiving the atmosphere to be democratic were inversely associated, i.e. the younger the workers were, the less contact they had with the public and the lower the perception of the workplace as democratic, the higher the rate for this dimension.

Low professional fulfilment had a set of variables with an explanatory power of 20%. A good atmosphere and the chance of influencing decision making were the variables with the most weight. These variables, and sex, dealing with the public and perceiving the atmosphere to be democratic were inversely associated, i.e. rating the atmosphere as good, the chance of influencing decision making, being male, having contact with the public and perceiving the atmosphere to be democratic diminished the incidence of reduced personal

Table 2. Multiple linear regression for the three dimensions of Burnout syndrome, work variables and workplace atmosphere factors for civil servants, controlled by sex and age. Rio Grande do Sul, Southern Brazil, 2006 to 2007.

Variables	R	R ²	Beta	t	p
Emotional exhaustion					
Sex	0.20	0.04	0.12	3.99	0.00
Age	0.30	0.09	-0.14	-4.88	0.00
Stressful job	0.60	0.36	0.42	13.32	0.00
Good atmosphere in the workplace	0.62	0.39	-0.10	-3.14	0.00
Democratic atmosphere	0.64	0.41	-0.06	-1.91	0.05
Work in an office alone/with colleagues	0.65	0.42	-0.09	-3.35	0.00
Rudeness	0.65	0.43	0.08	2.64	0.01
Individuals who negatively affect the workplace atmosphere	0.66	0.43	0.11	3.27	0.00
Influence in decision making	0.66	0.43	-0.08	-2.48	0.01
Depersonalization					
Age	0.16	0.03	-0.07	-2.24	0.03
Stressful job	0.39	0.15	0.22	6.06	0.00
Gossip	0.45	0.20	0.12	2.94	0.00
Rudeness	0.47	0.22	0.11	2.88	0.00
Dealing with the public	0.48	0.23	-0.11	-3.37	0.00
Conflict	0.49	0.24	0.09	2.24	0.03
Democratic atmosphere	0.49	0.25	-0.08	-2.18	0.03
Individuals who negatively affect the workplace atmosphere	0.50	0.25	0.09	2.16	0.03
Low professional fulfilment					
Sex	0.07	0.00	-0.07	-2.12	0.03
Good atmosphere in the workplace	0.34	0.12	-0.19	-5.02	0.00
Influence in decision making	0.40	0.16	-0.19	-5.12	0.00
Individuals who negatively affect the workplace atmosphere	0.42	0.17	0.12	3.09	0.00
Dealing with the public	0.43	0.18	-0.10	-2.90	0.00
Stressful job	0.44	0.19	0.11	2.99	0.00
Democratic atmosphere	0.45	0.20	-0.08	-2.01	0.04

accomplishment. On the other hand, the presence of individuals who negatively affect the atmosphere at work, and perceiving the job to be stressful favoured the manifestation of low professional fulfilment.

DISCUSSION

The workers' perception of their work is fundamental in the appearance of burnout syndrome, mainly, as shown in this study and corroborated by other authors,^{7,9,16} when the activity is viewed as stressful or involves individuals who have a negative effect on the atmosphere. This may be because Burnout syndrome is a result of the quality of the relationship between the subject and the atmosphere of their workplace,¹¹ which can be understood as the way they interact with others, the management style and the values of the institution.^{11,18} Political interference from outside, discontinuity in management and in projects and the privileges that surround institutionalised norms predominate in many public institutions, which generates pressure and stress.¹⁸ The greater the incongruence between the workers' values, expectations and objectives and their work, the greater the likelihood of burnout.¹³

The characteristics of the workplace context possess an importance which permeates the profession and the characteristics of the position.¹³ This is in accordance with the results, as variables related to the characteristics of the task do not feature as predictors, with the exception of dealing with the public and the presence of conflict, both of which are to do with interpersonal relationships. The relationship between the individuals who make up the organisation is one of the most important factors in the occurrence of burnout syndrome, not just in relation to the clientele dealt with, but also, primarily, in relation to the quality of interactions with colleagues^{13,21} and superiors.⁶ This study's findings indicate that working with the public is related to lower scores for the syndrome.

Marital status is not part of the explicative model for the syndrome; sex is relevant in different ways to emotional exhaustion and low professional fulfilment and age was not part of the explicative model for low professional fulfilment in the sample we analysed. This suggests that the characteristics of the workplace atmosphere are those most strongly associated with burnout syndrome, rather than socio-demographic variables.^{11,19}

For emotional exhaustion, feeling worn out increases along with the perception of the job being stressful, with rudeness and the presence of individuals who negatively affect the working environment and having an office to themselves. However, it decreases when the atmosphere is rated as good and when the civil servant feels they can participate in the institution's decision making, which corroborates what other studies have reported.^{6,10}

Working in an office alone may indicate a lack of social support, a situation often associated with burnout.^{11,13} If the inability to cope with stress persists, this can develop into the syndrome.⁸ Sharing difficulties with co-workers and supervisors helps the professional and is an important protective factor.^{6,10} The possibility of influencing decision making strengthens the feeling of being valued and improves engagement and involvement at work.^{14,10}

Depersonalization is the dimension which best reflects the prevailing interpersonal context in the workplace. It represents a fundamental element of burnout syndrome, as it is characterised by the worker's negativity, indifference or distance towards both colleagues and aspects of the job itself.¹² In this study, the rates of depersonalization increased as the civil servant viewed the job as stressful, with the presence of gossip, rudeness, interpersonal conflicts and individuals who negatively affected the atmosphere of the workplace. When the worker viewed that atmosphere as democratic and participative, the levels for this dimension decreased.^{3,23,24}

A characteristic of the public sector in Brazil is that it is made up of two groups of civil servants: permanent (career) and non-permanent (who get in through political means). This can create protectionism, difficulty in defining positions and roles and poor interaction between colleagues. According to Maslach,¹² there is a strong link between the emotional exhaustion and depersonalization dimensions, as dysfunctional interpersonal relationships are generated by high levels of tension and difficulties young civil servants have in coping, as shown by this study. For the author, a certain amount of psychological distance may be viewed as a good individual response to stressful situations. However, if used to excess, this may have negative repercussions on the worker's interaction with colleagues and clients, contributing to the civil servant no longer being suitably involved with their work.

Low professional fulfilment is the dimension which shows negative self-evaluation on the part of the worker, with feelings of incompetence and that the job is not fulfilling.¹¹ This dimension appears more complex and, in some environments, appears as a consequence of the other two, or in parallel with them.¹² The more positive the perception of the workplace atmosphere and the more opportunities there are to participate in decision making, the greater the sensation of fulfilment and the lower the rates of low professional fulfilment. The opposite occurs when the civil servant perceives their job to be stressful, works with individuals who negatively affect the atmosphere and is unable to take part in institutional decision making.

Civil servants are more vulnerable to politically motivated interference, sometimes far from the objectives of the institution. This makes it more difficult for the

civil servant to manage the resources necessary for carrying out their work, in a context in which responsibility exceeds authority and autonomy.¹⁸ These are situations which act as stress factors, enabling the appearance of feelings of incompetence, especially in those individuals who feel responsible for producing results, but for whom the structure of the workplace itself does not provide them with the resources necessary to achieve them.¹¹ The result may be the emergence of tensions arising from dissatisfaction and frustration with personal and professional projects, placing the civil servants at risk of burnout syndrome.¹²

The levels of low professional fulfilment found in this study were lower among those who dealt with the public. It is possible that some workers, in order to cope with the negative feelings, prioritise their clients, developing relationships which help them overcome deficiencies within the workplace and the dysfunctional relationships with colleagues and superiors. Being male appeared in the predictive model related to low professional fulfilment. Men may feel more affected by frustrations at work which women, for cultural reasons related to need for status, do not feel.

The fact that data collection took place within the institution itself was a limitation of the study. Even with the emphasis on anonymity and procedures in place to ensure it, it is possible that some of the participants gave more positive responses as they worried about suffering reprisals were their identity to be revealed or

even that they gave more negative responses to attract the attention of those responsible.

Finally, there is a situation unique to transversal study, those who were not at work, usually as they were on sick leave, did not participate, leading to “healthy worker effect”.¹⁴ This may mean that the contribution of each variable to the model was underestimated. The results obtained corroborate data from other studies and reinforce the idea that identifying predictors is fundamental to achieving organisational change, aimed at improving both the workers' health and the quality of service they provide to society.

Brazilian literature on burnout syndrome in public servants is incipient, which makes comparing national studies difficult. Carlotto & Câmara⁵ stated the need to broaden national research on the topic, as it is a field which has been little explored and has important social repercussions.

In many public institutions, bureaucracy, politically motivated interference, centralised decision making, paternalism, the disruption of long-term projects with conflicts of objectives and sometimes unprofessional management are prevalent.¹⁸ This organisational atmosphere may place any civil servants at risk of developing health problems, such as burnout syndrome. According to Maslach¹², interventions focussing on the individual are not effective, it is necessary to put in place preventative strategies which act directly on the organisation and the workplace atmosphere.

REFERENCES

1. Ahola K, Väänänen A, Koskinen A, Shirom A. Burnout as a predictor of all-cause mortality among industrial employees: a 10-year prospective registerlinkage study. *J Psychosom Res.* 2010;69(1):51-7. DOI:10.1016/j.jpsychores.2010.01.002
2. Bjorkqvist K, Österman K. Scales for research on Interpersonal Relations Faculty of Social and Caring Sciences. Turku: Åbo Academy University Printing House; 1998. (Pro Facultate, 4).
3. Borritz M, Rugulies R, Bjorner JB, Villadsen E, Mikkelsen OA, Kristensen TS. Burnout among employees in human service work: design and baseline findings of the PUMA study. *Scand J Public Health.* 2006;34(1):49-58. DOI:10.1080/14034940510032275
4. Carlotto MS, Câmara SG. Propriedades Psicométricas do Maslach Burnout Inventory em uma amostra multifuncional. *Estud Psicol (Campinas).* 2007;24(3):325-32. DOI:10.1590/S0103-166X2007000300004
5. Carlotto MS, Câmara SG. Análise da produção científica sobre a Síndrome de Burnout no Brasil. *Psico-PUCRS.* 2008;39(2):152-8.
6. Escribà-Agüir V, Martín-Baena D, Pérez-Hoyos S. Psychosocial work environment and burnout among emergency medical and nursing staff. *Int Arch Occup Environ Health.* 2006;80(2):127-33. DOI:10.1007/s00420-006-0110-y
7. Fournel I, Pilleron S, Lémyer B, Millot I, Gisselmann A. Psychosocial risks, perceived health status and working conditions of a local council's employees. *Sante Publique.* 2008;20(Suppl3):99-107. DOI:10.3917/spub.083.0099
8. Kokkinos CM. Job stressors, personality and burnout in primary school teachers. *Br J Educ Psychol.* 2007;77(pt 1):229-43. DOI:10.1348/000709905X90344
9. Laranjeira CA. O contexto organizacional e a experiência de estresse: uma perspectiva integrativa. *Rev Salud Publica.* 2009;11(1):123-33. DOI:10.1590/S012400642009000100013
10. Lindblom NS, Reuterwall C, Höög J, Lindahl B, Janlert U, Birgander LS. Burnout, working conditions and gender – results from the Northern Sweden MONICA Study. *BMC Public Health.* 2010;10:326. DOI:10.1186/1471-2458-10-326
11. Maslach C, Schaufelli WB, Leiter MP. Job burnout. *An Rev Psychol.* 2001;52(1):397-422. DOI:10.1146/annurev.psych.52.1.397
12. Maslach C. Job burnout: new directions in research and intervention. *Curr Dir Psychol Sci.* 2003;12(5):189-92. DOI:10.1111/1467-8721.01258
13. Maslach C, Leiter MP. Early predictors of job burnout and engagement. *J Appl Psychol.* 2008;93(3):498-512. DOI:10.1037/0021-9010.93.3.498
14. Mc Michael AJ. Standardized mortality ratios and the healthy worker effect: scratching beneath the surface. *J Occup Med.* 1976;18(3):165-8. DOI:10.1097/00043764-197603000-00009
15. Moreira DS, Magnago RF, Sakae TM, Magajewski FRL. Prevalência da Síndrome de Burnout em trabalhadores de enfermagem de um hospital de grande porte da região sul do Brasil. *Cad Saude Publica.* 2009;25(7):1559-68. DOI:10.1590/S0102-311X2009000700014
16. Pavlakis A, Raftopoulos V, Theodorou M. Burnout syndrome in Cypriot physiotherapists: a national survey. *BMC Health Serv Res.* 2010;10:63. DOI:10.1186/1472-6963-10-63
17. Peterson U, Demerouti E, Bergström G, Åsberg M, Nygren Å. Work characteristics and sickness absence in burnout and nonburnout groups: a study of Swedish health care workers. *Int J Stress Manage.* 2008;15(2):153-72. DOI:10.1037/1072-5245.15.2.153
18. Pires JCS, Macedo KB. Cultura organizacional em organizações públicas no Brasil. *Rev Admin Publica.* 2006;40(1):81-105. DOI:10.1590/S0034-76122006000100005
19. Shirom A. Reflections on the study of burnout. *Work Stress.* 2005;19(3):263-70. DOI:10.1080/02678370500376649
20. Su-fen C, Miao-Ching T. Relationships among Burnout, job involvement, and organizational citizenship behavior. *J Psychol.* 2006;140(6):517-30. DOI:10.3200/JRLP.140.6.517-530
21. Tamayo M R. Burnout: Implicações das fontes organizacionais de desajuste indivíduo-trabalho em profissionais da Enfermagem. *Psicol Reflex Crit.* 2009;22(3):474-82. DOI:10.1590/S0102-79722009000300019
22. Toppinen-Tanner S, Ojajarvi A, Väänänen A, Kalimo R, Jäppinen P. Burnout as a predictor of medically certified sick-leave absences and their diagnosed causes. *Behav Med.* 2005;31(1):18-27. DOI:10.3200/BMED.31.1.18-32
23. Varhama LM, Bjorkqvist K. Conflicts, workplace bullying and burnout problems among municipal employees. *Psychol Rep.* 2004;94(3 Pt 2):1116-24. DOI:10.2466/pms.110.2.463-468
24. Varhama LM, Báguena MJ, Toldos MP, Beleña MA, Roldán MC, Díaz A. Dysfunctional workplace behavior among municipal employees in Spanish and Finnish cities: a cross-national comparison. *Percept Mot Skills.* 2010;110(2):463-8. DOI:10.2466/pms.110.2.463-468