

## HOW CAN WOMEN WITH FIBROMYALGIA TO CONTROL THE INTENSITY OF THEIR DAILY PHYSICAL ACTIVITY?

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To examine the validity of a simple tool based on perceived exertion (RPE) scales in women with fibromyalgia syndrome (FM) during treadmill exercise.

### METHODS

Women (N = 32, age = 53.26 ± 6.61 years old) were assigned into two different groups in order to their functional capacity and symptomatology and they were asked to use an RPE scale (Borg 6-20RPE) during incremental treadmill exercise test. Exercise intensity was increased until participants achieved volitional exhaustion (VO<sub>2max</sub>). Expired respiratory gases, ventilatory parameters and heart rate (HR) were measured continuously during exercise and RPE was assessed each minute during the test. Reliability of the RPE scales was assessed using Pearson and Cronbach coefficients in test-retest. Validity estimates were calculated using

Pearson product moment correlations, with % HRmax, VE, RR, RQ and % VO<sub>2max</sub> as criterion measures.

### RESULTS

Reliability estimates were  $r_{xx} = 0.71$  in group 1 and  $r_{xx} = 0.81$  in group 2 compared with the Borg scale. Validity coefficients ( $r_{xy}$ ) were high for most of the physiological parameters (VE, RER, HR, VO<sub>2</sub>), Rho = 0.58 - 0.87 in group 1 and Rho = 0.43 - 0.86 in group, comparing with 6-20RPE.

### CONCLUSION

The 6-20RPE scale was found to be reliable and valid for use with fibromyalgia women. This tool let the patients to exercise in an independent way and to the professionals to prescribe the exercise with a high security and control.

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## OBSAH

Introduction of the chairman of the 5 <sup>th</sup> International Conference Movement and Health 2007 <i>Bohuslav Hodaň</i> .....	13
<b>Abstracts of keynote lectures</b>	
The relationship between movement and health is a sociocultural problem <i>Bohuslav Hodaň</i> .....	17
Morality, medicine and meaning – toward an integrated justification of a physically active life <i>Sigmund Loland</i> .....	18
Dose-response of physical activity and health as the basis for public health recommendations <i>Pekka Oja</i> .....	19
Multiple environmental factors are needed to support walking and physical activity: An 11 country study <i>James F. Sallis, Heather Bowles, Adrian Bauman, Barbara E. Ainsworth, Fiona C. Bull, Michael Sjostrom, Cora L. Craig</i> .....	20
<b>Abstracts of oral and poster presentations</b>	
Physical fitness of young footballers in six month training period <i>Marcin Andrzejewski, Dariusz Posiadala</i> .....	23
Physical activity promotion in a spa setting <i>Maria Auer, Gerlinde Grasser</i> .....	24
Effects of physical effort on balance preservation in standing position in patients suffering from chronic obstructive pulmonary disease <i>Dawid Bączkiewicz</i> .....	25
Influence of yogic exercise on biochemical variables of senior school boys <i>Sameer E. Bhagirathi</i> .....	26
Locomotor possibilities for visually handicapped inhabitants in region of Ústí nad Labem <i>Ladislav Bláha, Věra Macháčová</i> .....	27
Monitoring of autonomic nervous system activity during recovery period after marathon run by spectral analysis of heart rate variability: A case study <i>Michal Botek, Pavel Stejskal, Filip Neuls</i> .....	28
Problems of talent identification and selection in artistic gymnastics <i>Jiří Buben, Juraj Kremnický</i> .....	29
The effect of 8 week pulmonary rehabilitation programme on ventilatory parameters, chest mobility and quality of life in patients with COPD <i>Kateřina Burianová, Eva Zdařilová, Renata Vařeková, Ivan Vařeka</i> .....	30
Analysis of the paddle tennis practice: A healthful sport for all <i>Luis Carrasco, Borja Sañudo Corrales, Moisés De Hoyos Lara</i> .....	31
Physical activity levels of Turkish university students with respect to gender, residence and field of study <i>Cevdet Cengiz, M. Levent Ince, Seref Cicek</i> .....	32

Differences in FITT characteristics of physical activity in Czech smokers and non-smokers <i>František Chmelík et al.</i> .....	33
Physical activity among Flemish preschoolers in relation to their movement skill development <i>Wouter Cools, Kristine De Martelaer, Bart Vandaele</i> .....	34
Do we need to establish subgroups when we prescribe physical activity to woman with fibromyalgia? <i>Borja Sañudo Corrales, Delfín Galiano</i> .....	35
How can women with fibromyalgia to control the intensity of their daily physical activity? <i>Borja Sañudo Corrales, Delfín Galiano</i> .....	36
Validity of the OMNI-RES scale of perceived exertion for resistance exercises among the elderly <i>Borja Sañudo Corrales, Moisés de Hoyo Lora, Federico París García</i> .....	37
Evaluation of some attributes of test of gross motor development - 2 in Czech Republic: Preliminary study <i>Ladislav Čepička</i> .....	38
An overview of research methods and shortcomings in the study of physical activity among preschoolers <i>Kristine De Martelaer, Wouter Cools, Christiane Samaey, Caroline Andries</i> .....	39
Classical ballet - not only for professional dancers <i>Tomáš Derka, Tomáš Lehotský</i> .....	40
Urbanistic background of municipalities as an indicator of frequency of municipal citizens' physical activity <i>Tomáš Dohnal, Vladimír Hobza, Jaroslav Čihovský</i> .....	41
Body composition of young volleyball players <i>Iva Dostálová, Jarmila Riegerová, Miroslava Přidalová</i> .....	42
Movement activity and body stability as a part of life style in different age <i>Anna Famula, Olga Nowotny-Czupryna, Janusz Nowotny, Maciej Płaszewski</i> .....	43
Structure of PA in 25-69 year old population in the Czech Republic <i>Karel Frömel et al.</i> .....	44
Formation of the handball players' game and tactical thinking in the process of long term training <i>Ivan Glasyrin, Józef Wojnar, Ludmila Frolova, Dariusz Nawarecki, Bożena Wojciechowska-Maszkowska, Roman Basanskiy</i> .....	46
Relationships among pain intensity, dizziness, nausea and disability in patients with cervical derangement syndrome <i>Grażyna Guzy, Bogusław Frańczuk, Wojciech Kilijan</i> .....	47
Benchmarking analysis of community recreation management system in selected municipalities <i>Zdeněk Hamřík, Michal Kalman, Jan Pavelka, Tomáš Dohnal, Vladimír Hobza</i> .....	48
General life satisfaction and motivational factors in females aged 40-65 to adopt regular physical activity <i>Jana Harvanová, Dana Štěrbová, Radka Hrubá</i> .....	49
Recreational cycling throughout the life span: Health benefits and physiological data in recreational athletes aged 11 to 62 years <i>Jan Heller, Pavel Vodička</i> .....	50