THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

Purpose

Godin Leisure Time Exercise The Questionnaire (GLTEQ) has been a commonly applied measure of physical activity in research among persons with multiple sclerosis (MS) over the past decade. This paper provides a systematic and in-depth description of application and inclusion in its research on physical activity in MS.

Godin Leisure-Time Exercise Questionnaire

following kinds of exercise for more than 15 minutes during your free time (write on each line				
200	the appropriate number).			
			Times Bor	
			Times Fer	
-1			week	
a)	STRENUOUS EXERCISE			
	(HEART BEATS RAPIDLY)			
	(e.g., running, jogging, hockey,	tootball, soccer,		
	squash, basketball, cross count	ry skiing, judo,		
	roller skating, vigorous swimmin	ıg,		
	vigorous long distance bicycling	3)		
b)	MODERATE EXERCISE			
	(NOT EXHAUSTING)			
	(e.g., fast walking, baseball, ten	nis, easy bicycling,		
	volleyball, badminton, easy swir	nming, alpine skiing,		
	popular and folk dancing)			
C)	MILD EXERCISE			
	(MINIMAL EFFORT)			
	(e.g., yoga, archery, fishing from river bank, bowling,			
	horseshoes, golf, snow-mobiling, easy walking)			
2. 1	During a typical 7-Day period (a week), in your leisure time, how often do you engage in ar			
100	regular activity long enough to work up a sweat (heart beats rapidly)?			
	OFTEN	SOMETIMES	NEVER/RARELY	
		- F	o 17	

Methods

We included that papers were 2017, 1985 published between involved participants with MS as a primary population, measured physical activity, cited one of the two original Godin papers, and were written in English.

We categorized papers by purpose into six primary areas: psychometric properties, patterns of physical activity, correlates and determinants of physical activity, outcomes and consequences of physical activity, physical activity interventions, and other.

Elizabeth M. Sikes, Emma V. Richardson, Katie J. Cederberg, Jeffer E. Sasaki, Brian M. Sandroff, and Robert W. Motl*

Category	Sub Category	#	
Psychometric Properties	Convergent validity	8	С
	Divergent Validity	2	
	Reliability	1	
Patterns of Physical Activity	Longitudinal	9	N
	MS vs Healthy Controls	7	S
	MS vs Other Conditions	3	No Sigi
	Cross-Sectional	3	
Correlates and Determinants of Physical Activity	Theoretical Constructs	11	Co Co
	MS Symptoms	11	Corr
	Functional/Behavior al Outcomes	10	im
	Demographic/Clinic	10	Corr
	al Characteristics		ther
Outcomes and Consequences of Physical Activity	Symptoms	11	Сс
	Function	9	Сс
	Quality of Life	7	
	Comorbidities	3	(
	Physical Fitness	2	Сс
Physical Activity Interventions		16	
Other		3	ิ ทเ

emyelinating syndrome; BMI: body mass index; HC: healthy control; IPAQ: International Physical Activity Questionnaires; MD: muscular dystrophy; MSWS-12: Multiple Sclerosis Walking Scale; PDDS: Patient Determined Disease Steps; POMS: pediatric onse



Use of the Godin Leisure Time Exercise Questionnaire in Multiple **Sclerosis Research: A Comprehensive Narrative Review**

Conclusions

orrelated with accelerometry, pedometry, IPAQ, and 7-Day PAR

Not correlated with PDDS and MSWS-12 Reliable over 6 mos

No change after 6 mos, 12 mos, or 24 mos

Significant difference between MS and HC

difference between MS and MD, PPS, SCI; nificant difference between POMS and ADS

Average score of 48.9 ± 37.7

orrelated with constructs related to Social ognitive Theory and Theory of Unpleasant Symptoms

related with fatigue, depression, and quality of life

Correlated with self-reported walking pairment, walking endurance, and exercise history

related with neurological disability, age, BMI, mosensitivity, education, and marital status orrelated with disease specific and generic symptoms

orrelated with perceived deficits, balance, endurance, and walking speed

Correlated with quality of life

Correlated with number of comorbidities

orrelated with VO_{2peak}, BMI, anthropometric measures

Measured intervention outcomes

Jsed as inclusion criteria, correlated with utritional behavior, and measured lifestyle factors

A final 84 sample of papers was 2). Papers included (Figure were categorized as follows: Psychometric **Properties (10%), Patterns of Physical** Activity (25%), Correlates and Physical Activity **Determinants** of (33%), Outcomes and Consequences of Physical Activity (33%), Physical Activity Interventions (18%), and Other (4%). See Table 1 for details.

The GLTEQ is an appropriate, simple, and effective tool for describing patterns of physical activity, and examining correlates and outcomes of physical activity. The GLTEQ provides a sensitive outcome for measuring change in physical activity after an intervention.

Knowledge that will change your world



Results

Conclusion