

- [Articles](#)
- [Research Notes](#)

ARTICLES

313

Epidemiology

Enablers and Constraints to Walking for Older African American and American Indian Women: The Cultural Activity Participation Study Karla A. Henderson and Barbara E. Ainsworth

Walking is a significant physical activity undertaken by a range of women from different ages, economic backgrounds, and family situations. The purpose of this analysis was to examine what conditions enabled walking to occur and what constraints prevented some older African American and American Indian women from walking as a physical activity. A descriptive analysis emerged related to three dimensions: the context of walking, how walking was enabled, and constraints to walking more or achieving greater satisfaction with walking as a physical activity. As more is known about how and why a behavior such as walking occurs, more can be done to raise the physical and mental quality of life for all people, regardless of race or gender.

322

Measurement and Evaluation

Examination of the Validity of the Social Support Survey Using Confirmatory Factor Analysis Tim Rees, Lew Hardy, David K. Ingledew, and Lynne Evans

The Social Support Survey (SSS), validated by Richman, Rosenfeld, and Hardy (1993), is a multidimensional self-report measure of social support tested with student athletes. The SSS contains eight dimensions of support. For each dimension of support the same four questions are posed. The SSS could, therefore, be scored in two ways: (a) to derive a score for the support dimensions; (b) to derive a score for the questions posed across all eight support dimensions. Confirmatory factor analyses of the SSS on 416 university athletes revealed poor fits to models for both the eight support dimensions and the four questions across all eight dimensions. This problem was clarified by using a multitrait-multimethod model, which led to improved model fit but revealed that most of the SSS items were two-dimensional. Caution should, therefore, be exercised in using the SSS as a measure of multidimensional social support.

331

Motor Control and Learning

Can Observational Practice Facilitate Error Recognition and Movement Production?

Charles B. Black and David L. Wright

Two experiments are reported that examined the usefulness of observational learning for acquiring both error detection and movement production capabilities. In both experiments, individuals were assigned to a no-practice, physical-practice, or observational practice condition. Those assigned to a physical-practice condition acted as models for those assigned as observers. In both experiments, models were administered a random practice of three serial key-press tasks that had the same spatial pattern and same relative timing requirement but differed in the overall time

goal. During the retention test, individuals provided estimates of their overall time after each trial. Data from these experiments revealed that error detection and overall time specification were similar following observation and physical practice. However, data from Experiment 2 indicated that physical practice offered an advantage beyond that afforded via observation, with regard to acquiring the appropriate relative time pattern. These data are discussed with respect to the role of observation for learning movement recognition and production processes.

340

Alterations in Bilateral Force Judgment Following Strenuous Eccentric Exercise H. K. Vincent, C. Carlson, J. P. K. Hyatt, L. Yihua, and K. R. Vincent

This study investigated the effects of strenuous eccentric exercise on bilateral force-matching ability. After unilaterally performing 50 maximal eccentric elbow actions, participants were evaluated for bilateral force-matching ability. Participants were asked to match a reference force held by the control (CNT) arm with their exercised (EXD) arm. The experimental condition was then reversed. Constant error (bias) of the EXD arm was increased through 5 days postexercise, when it underestimated the CNT force in all trials. In contrast, an overestimation of the EXD force by the CNT arm resulted in an increased constant and variable error (variability around the bias) through 5 days postexercise, when the EXD arm served as the force reference. Strenuous eccentric exercise severely compromises bilateral force-matching ability, regardless of whether the EXD attempted to match the reference force or served as the force reference, indicating central or peripheral alterations to force judgment.

349

Effects of Modeled Auditory Information on a Sequential Timing Task Qin Lai, Charles H. Shea, and Mark Little

The purposes of the present experiment were to determine (a) whether an auditory model enhanced relative or absolute timing, (b) the extent to which the reduced frequency presentation of the auditory model resulted in enhanced retention, and (c) the degree to which executing the timing sequence was independent of the role of the effectors in carrying out the movement sequence. Participants (N = 45) were asked to alternately press two keys on a computer keyboard in an attempt to match the goal intervals presented on the computer monitor. Groups differed in terms of the frequency with which an auditory model (100, 50, or 0%) was presented. The results indicated that the auditory model (100% or 50% groups) enhanced relative timing performance and learning but not the learning of absolute timing. In addition, the 50% group did not appear to become dependent on the auditory model. However, significant decrements in performance were seen for the 100% group when the model was withdrawn. Last, participants were able to execute the timing sequences equally well when they reversed the hand used to execute the timing sequence. This was interpreted as strong evidence for the effector independence (Schmidt, 1975, 1988) and modularity of the timing sequence (Keele, Davidson, & Hayes, 1998).

357

Pedagogy

Examination of Expert and Novice Teachers' Constructivist-Oriented Teaching Practices Using a Movement Approach to Elementary Physical Education Weiyun Chen and Inez Rovigno

The purpose of this study was to describe the characteristics of expert and novice teachers' constructivist-oriented teaching practices while using a movement approach to teach elementary physical education. Three expert and three novice teachers' constructivist-oriented teaching practices (18 lessons, 3 each) were

evaluated using the Educational Games Observation Rubric (EGOR), a rubric specifically designed and validated for this study. Data sources included transcripts of two formal interviews with each teacher, transcripts of the 18 videotaped lessons, and coding from the EGOR. The expert teachers were more likely than the novice teachers to facilitate students' self-regulation and critical thinking about movement quality, to link new learning to students' prior knowledge and emerging relevance, and to guide students' social interaction. As with the expert teachers, the novice teachers encouraged students to engage in, elaborate on, and share ideas about movement variety tasks

373

Psychology

An Investigation of the Dynamics of Aggression: Direct Observations in Ice Hockey and Basketball Barry Kirker, Gershon Tenenbaum, and Jan Mattson

There have been significant problems in the study of sports aggression, and they are linked to how aggression has been defined, measured, and analyzed. Following a review of the whole domain, this study aimed to construct a theoretically coherent and ecologically valid framework for research on processes underlying sports aggression and to contribute to the advancement of knowledge in the area. An exploratory method using computer observational analysis as the primary research method, along with complementary questionnaires and personal reflections, considered aggression in two comparison sports: ice hockey and basketball. Data were compiled and classified by involved and independent experts relative to factors and behaviors associated with sports aggression derived from a comprehensive review of the literature. Among the study's findings were that: (a) aggression was instrumental in nature two-thirds of the time; (b) aggressive acts typically occurred in clusters and varied in frequency according to game circumstances; and (c) multiple variables and aggression theories were related to severely aggressive acts. The complex dynamics of sports aggression via similar naturalistic methodologies is discussed.

387

Motivation Profiles in Sport: A Self-Determination Theory Perspective Symeon P. Vlachopoulos, Costas I. Karageorghis, and Peter C. Terry

The present study examined the link between motivation profiles among adult sports participants and the consequences of enjoyment, effort, positive and negative affect, attitude toward sport participation, intention to continue sport participation, satisfaction, and frequency of attendance in sport. Two samples of participants ($n = 590$ and $n = 555$) completed the Sport Motivation Scale and a range of self-report measures to assess the outcome variables. Exploratory cluster analyses applied to Sample 1 and confirmatory cluster analysis applied to Sample 2 identified two clusters of sport participants. The first comprised participants with high scores on both nonself-determined and self-determined motives. The second comprised participants with high scores on self-determined motives but low scores on nonself-determined motives. Participants in the first cluster scored higher on all outcome variables. The results are discussed with reference to a more in-depth understanding of the motivation dynamics of sport participation based on Self-Determination Theory

RESEARCH NOTES

p. 398

The Benefits of Random Variable Practice for Accuracy and Temporal Error Detection

in a Rapid Aiming Task

Spencer Green and David E. Sherwood

p. 403

The Acute Response of the Immune System to Tennis Drills in Adolescent Athletes

David C. Nieman, Michael W. Kernodle, Dru A. Henson, Gerald Sonnenfeld, and Darla S. Morton

Commentary

p. 409

Erratum

Index

p. 410

List of Reviewers

p. 412

Index, Volume 71