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Epidemiology

Jewish Day-Schooled Adolescents' Perceptions of Parental and Environmental Support of Physical Activity (pp. 243–250)
David Kahan

Few studies of religiosity and physical activity (PA) correlates have been conducted; thus, a cross-sectional survey of 367 more and less religious Jewish adolescents' (M age = 12.8 years, SD = 0.9) perceptions of parental and environmental support of PA was conducted at religious day schools in two large American cities. Maternal Support, Environmental Support, and Paternal Non-Support factors were verified through confirmatory factor analysis. Factor scores were analyzed through a 2 x 2 (gender x religiosity level) multivariate analysis of variance. A significant main effect for religiosity was obtained ($F = 6.93$, $p < .001$); however, a main effect for gender and an interaction effect were not. Post hoc discriminant analysis revealed Paternal Non-Support and Environmental Support factors as differentiating more and less religious adolescents.

Measurement and Evaluation

Comparison of Accelerometer and Pedometer Measures of Physical Activity in Boy and Girls, Ages 8–10 Years (pp. 251–257)
Ann V. Rowlands and Roger G. Eston

Accelerometers record total physical activity and time spent at different intensities. Pedometers indicate total activity only. The aim of this study was to assess the relationship between pedometer counts and attainment of > 60 min of moderate activity. Thirty-four children, ages 8–10 years, wore a Tritrac accelerometer and Yamax pedometer. Published recommendations of steps per day were compared to attainment of > 60 min moderate activity. Boys who accumulated 13,000 steps.d -1 and girls who accumulated 12,000 steps.d -1 engaged in > 60 min moderate activity. However, 23% of boys and 15% of girls did not reach the pedometer thresholds but did engage in > 60 min moderate activity. In conclusion, these pedometer thresholds provide a reasonable estimation when assessment of physical activity intensity is not possible.

Motor Control and Learning

Programming and Reprogramming Sequence Timing Following High and Low Contextual Interference Practice (pp. 258–266)
David L. Wright, Curt E. Magnuson, and Charles B. Black

Individuals practiced two unique discrete sequence production tasks that differed in their relative time profile in either a blocked or random practice schedule. Each participant was subsequently administered a "precuing" protocol to examine the cost of initially compiling or modifying the plan for an upcoming movement's relative timing. The findings indicated that, in general, random practice facilitated the programming of the required movement timing, and this was accomplished while exhibiting greater accuracy in movement production. Participants exposed to random practice exhibited the greatest motor programming benefit, when a modification to an already prepared movement timing profile was required. When movement timing was only partially constructed prior to the imperative signal, the individuals who were trained in blocked and random practice formats accrued a similar cost to complete the programming process. These data provide additional support for the recent claim of Immink & Wright (2001) that at least some of the benefit from experience in a random as opposed to blocked training context can be localized to superior development and implementation of the motor programming process before executing the movement.

Physiology

Heat Production and Storage Are Positively Correlated With Measures of Body Size/Composition and Heart Rate Drift During Vigorous Running (pp. 267–274)
Robert Buresh, Kris Berg, and John Noble

The purposes of this study were to determine the relationships between: (a) measures of body size/composition and heat production/storage, and (b) heat production/storage and heart rate (HR) drift during running at 95% of the velocity that elicited lactate threshold, which was determined for 20 healthy recreational male runners. Subsequently, changes in skin and tympanic temperatures associated with a vigorous 20-min run, HR, and VO 2 data were recorded. It was found that heat production was significantly correlated with body mass (r = .687), lean mass (r = .749), and body surface area (BSA, r = .699). Heat storage was significantly correlated with body mass (r = .519), fat mass (r = .464), and BSA (r = .498). The percentage of produced heat stored was significantly correlated with body mass (r = .427), fat mass (r = .455), and BSA (r = .414). Regression analysis showed that the sum of body mass, percentage of body fat, BSA, lean mass, and fat mass accounted for 30% of the variability in heat storage. It was also found that HR drift was significantly correlated with heat storage (r = .383), percentage of produced heat stored (r = .433), and core temperature change (r = .450). It was concluded that heavier runners experienced greater heat production, heat storage, and core temperature increases than lighter runners during vigorous running.

Psychology

The Career Planning, Athletic Identity, and Student Role Identity of Intercollegiate Student Athletes (pp. 275–285)
Patricia S. Lally and Gretchen A. Kerr

The purpose of this study was to examine the career planning of university student athletes and relationships between their career planning and athletic and student role identities. Two retrospective in-depth interviews were held with four male and four female university student athletes. Participants entered university with vague or nonexistent career objectives and invested heavily in their athletic roles. In the latter years of their college career, the participants discarded their sport career ambitions and allowed the student role to become more prominent in their identity hierarchies. The current findings support Brown and Hartley's (1998) suggestion that student athletes may invest in both the athlete and student role identities simultaneously and that investing in the latter may permit the exploration of nonsport career options.

The Parent-Coach/Child-Athlete Relationship in Youth Sport: Cordial, Contentious, or Conundrum? (pp. 286–305)
Maureen R. Weiss and Susan D. Fretwell

The roles of coach and parent are often synonymous in youth sport, but little data-based research has been conducted on the parent-coach/child-athlete relationship. Six boys in U–12 competitive soccer were interviewed regarding positive and negative aspects about playing for their father-coach. Similar questions were posed to father-coaches and two teammates. Inductive content analysis indicated that, among the benefits, sons identified perks, praise, technical instruction, understanding of ability level, insider information, involvement in decision making, special attention, quality time, and motivation. Costs of being coached by one's father included negative emotional responses, pressure/
expectations, conflict, lack of understanding/empathy, criticism for mistakes, and unfair behavior. For father-coaches, positive themes included taking pride in son's achievements, reason for coaching, positive social interactions, opportunity to teach skills and values, enjoying coaching son, and quality time. Negatives included inability to separate parent-child from coach-player role, placing greater expectations and pressure on son, and showing differential attention toward son. While teammates perceived some favoritism by the parent-coach, they cited mostly positive instructional experiences. Results are discussed within motivational theories that highlight the influence of significant adults on children's psychosocial development in the physical domain.

Deliberate Imagery Practice: The Reliability of Using a Retrospective Recall Methodology (pp. 306–314)
Jennifer Cumming, Craig Hall, and Janet L. Starkes

This study examined the reliability of a retrospective recall methodology for providing evidence of deliberate imagery practice. A secondary purpose was to determine which imagery activities constituted the sport-specific definition of deliberate practice (Starkes, Deakin, Allard, Hodges, & Hayes, 1996). Ninety-three Canadian athletes from one of three different competitive levels (regional, provincial, and national) completed the Deliberate Imagery Practice Recall Questionnaire, which was specifically designed for the present study. The athletes also completed a 1-week imagery diary to assess their use of 14 different imagery activities. The results of the study indicated that the athletes were able to reliably estimate their use of imagery over a short recall interval. Four imagery activities were also determined to fulfill the sport specific definition of deliberate practice.

Comparability and Reliability of Paper- and Computer-Based Measures of Psychosocial Constructs for Adolescent Physical Activity and Sedentary Behaviors (pp. 315–323)
Gregory J. Norman, James F. Sallis, and Ronnesia Gaskins

This study assessed the comparability and reliability of paper-based and computer-based administration of psychosocial construct measures related to adolescents engaging in physical activity and sedentary behaviors. Adolescents (n = 76; 55% girls, 49% Hispanic, 18% non-Hispanic-white; M age = 13 years) completed measures of behavior change strategies, self-efficacy, decisional balance, family and peer influences, enjoyment, activity choices, and environmental influences. Overall, the adolescents provided equivalent responses on paper and computer formats. Reliability estimates were generally good for the multiple-item constructs, but single-item measures tended to demonstrate low reliability. Average scale internal consistency was significantly higher for measures administered with the computer format compared to the paper format, but test-rest reliability estimates were not significantly different between formats.

Volunteer Youth Sport Coaches' Perspectives of Coaching Education/Certification and Parental Codes of Conduct (pp. 324–338)
Lenny D. Wiersma and Clay P. Sherman

The vast majority of youth sport programs in the United States relies primarily on parent volunteers to serve as coaches. Unfortunately, most of these volunteer coaches have not received formal training to prepare them adequately for the role of youth sport coach. To exacerbate the issue, according to the popular media, parents and other adults can commit belligerent and even violent acts around, and often resulting from, poorly managed youth sport events. Although some efforts have been made to standardize curricula, provide training for coaches, and contain or prevent inappropriate parent behaviors, few efforts have been directed at investigating the self-described needs and concerns of the coaches from their perspectives. The purpose of the current study was to investigate the concerns and issues of youth sport coaches related to coaching and parental education. Five focus group interviews with 25 volunteer youth sport coaches were conducted to investigate these issues. Results were organized around four higher order themes that emerged from inductive content analyses: (a) coaching education content areas of need, (b) barriers and problems of offering coaching education, (c) coaching education format recommendations, and (d) efficacy of parental codes of conduct. Results were discussed in terms of the potential impact administrators, coaches, and parents could have in implementing formal coaching education programs and developing their coaching education practices.

Test-Retest Stability of the Task and Ego Orientation Questionnaire (pp. 339–348)
Andrew M. Lane, Alan M. Nevill, Neal Bowes, and Kenneth R. Fox

Establishing stability, defined as observing minimal measurement error in a test-retest assessment, is vital to validating psychometric tools. Correlational methods, such as Pearson product-moment, intraclass, and kappa are tests of association or consistency, whereas stability or reproducibility (regarded here as synonymous) assesses the agreement between test-retest scores. Indexes of reproducibility using the Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda & Nicholls, 1992) were investigated using correlational (Pearson product-moment, intraclass, and kappa) methods, repeated measures multivariate analysis of variance, and calculating the proportion of agreement within a referent value of +1 as suggested by Nevill, Lane, Kilgour, Bowes, and Whyte (2001). Two hundred thirteen soccer players completed the TEOSQ on two occasions, 1 week apart. Correlation analyses indicated a stronger test-retest correlation for the Ego subscale than the Task subscale. Multivariate analysis of variance indicated stability for ego items but with significant increases in four task items. The proportion of test-retest agreement scores indicated that all ego items reported relatively poor stability statistics with test-retest scores within a range of +1, ranging from 82.7–86.9%. By contrast, all task items showed test-retest difference scores ranging from 92.5–99%, although further analysis indicated that four task subscale items increased significantly. Findings illustrated that correlational methods (Pearson product-moment, intraclass, and kappa) are influenced by the range in scores, and calculating the proportion of agreement of test-retest differences with a referent value of +1 could provide additional insight into the stability of the questionnaire. It is suggested that the item-by-item proportion of agreement method proposed by Nevill et al. (2001) should be used to supplement existing methods and could be especially helpful in identifying rogue items in the initial stages of psychometric questionnaire validation.

Research Notes

The Effect of Venue and Wind on the Distance of a Hammer Throw (pp. 347–351)
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Active Transportation to School: Findings From a National Survey (pp. 352–357)
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Validation Evidence for the Netherlands Physical Activity Questionnaire for Young Children: The Iowa Bone Development Study (pp. 363–369)
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