Mentally Strong Finnish

A large sample of participants (N = 3403, ages 25–64 yrs) responded to a battery of questionnaires that included the Beck Depression Inventory, the State-Trait Anger Scale, the Cynical Distrust Scale, a single-item rating scale of perceived stress, and scales measuring locus of control, sense of coherence, social integration, and perceived health and fitness. In addition, the participants responded to the question, “How often do you exercise physically in your spare time for at least 20–30 minutes to the extent that you at least slightly lose your breath and perspire?” The response options included “daily,” “2–3 times per week,” “once a week,” “2–3 times per month,” “a few times a year,” or “cannot exercise due to illness or handicap.” Depression scores increased as frequency of exercise decreased, but those who exercised daily had higher scores than those who exercised only once or 2 to 3 times per week. On the other hand, those who exercised daily had the lowest anger scores and reported the lowest stress. Those who exercised a few times per week had the lowest cynical distrust scores. Those who exercised the least attributed the control of their health to luck, whereas those who exercised more perceived that they were in control. The more frequent exercisers also had a higher sense of coherence, a stronger sense of social integration, and perceived that they were in better health and of superior fitness. Overall, exercise was consistently associated with psychological well-being.


Change of Pace

Residents of Jyväskylä, Finland, were interviewed in 1988 and again in 1996 (N = 1224 and 663, respectively). They responded to a modified version of the Beck Depression Inventory and a 7-point scale assessing the intensity of their habitual exercise. On the basis of the responses to this scale, three intensity groups were formed: (a) necessary chores only, (b) regular walking (at least weekly), and (c) strenuous exercise leading to perspiring and heavy breathing. By comparing the responses across the two assessment periods, the participants were also separated into those who increased, decreased, or remained at the same level of exercise intensity. During the 8-year period, the number of people classified into the chores-only group increased, whereas those classified into the vigorous exercise group decreased (only 30% remained). The walkers were the largest group at both time points. Those who remained in the chores-only group reported more depressive symptoms at follow-up than did those who increased their exercise intensity. Of the walkers, those who moved to the chores-only group reported the most symptoms and a significant increase in symptoms over time. On the other hand, those who increased their intensity did not report increased symptoms. Those in the strenuous exercise group who decreased their intensity at follow-up had the most
depressive symptoms and experienced an increase in symptoms over time. Those who remained vigorously active had very low symptoms at both times. Having depressive symptoms at baseline, being physically inactive, and having three or more chronic somatic conditions increased the risk of depressive symptoms after 8 years.


Only the Lonely

Elderly participants (mean age = 65 yrs) were randomized into an aerobic walking group or a stretching-and-toning group. Both groups exercised 3 times a week for 6 months. At the beginning and at the end of these treatments, and at follow-up 6 months later, they responded to the Memorial University of Newfoundland Scale of Happiness, the Satisfaction with Life Scale, and the UCLA Loneliness Scale. Two weeks into the treatments, they also responded to the Social Provisions Scale, a measure of social support, which was modified to reflect support from the exercise group. The data were analyzed using latent growth curve modeling. Results showed significant increases in happiness and life satisfaction at the end of the treatments (with no difference between treatment groups) and significant decreases at follow-up. Loneliness showed the reverse pattern, with an initial decrease and a subsequent increase. Changes in social support and frequency of exercise participation did not predict changes in happiness, but they did predict improvements in satisfaction with life. Frequency of exercise did not predict changes in loneliness. Higher initial social support and changes in social support during the interventions were associated with reductions in loneliness.


Be Still, My Heart

Heart rate variability (HRV) can be used as a noninvasive index of the autonomic nervous system’s modulation of heart rate. During supine rest, the low-frequency component is believed to be under parasympathetic control. Normotensive volunteers (N = 92) responded to the Taylor Manifest Anxiety Scale and Cohen’s Perceived Stress Scale, had a 5-min EKG assessment while resting supine, and participated in tests of cardiorespiratory fitness and body composition. Anxiety and perceived stress were related to each other (r = .57) but not to indices of HRV. However, a regression analysis showed that, along with male gender and older age, higher perceived stress was associated with a lower normalized high-frequency component of HRV, an index of parasympathetic nervous system activity. No such effect was found for trait anxiety. A blunted parasympathetic modulation of heart rate is a possible mechanism by which stress might affect cardiovascular health.

Breakfast Club

Eleven healthy women participated in four experimental conditions: (a) cycling for 40 min at 70% VO\textsubscript{2}max plus a high-energy breakfast (EHB condition); (b) cycling plus a low-energy breakfast (ELB condition); (c) no exercise with a high-energy breakfast (NEHB); and (d) no exercise with a low-energy breakfast (NELB). Responses on visual analogue scales of mood (contentment, lethargy, tension, irritability) and motivation to eat (desire to eat, fullness, thirst) were monitored hourly from 8 a.m. to 5 p.m. In the morning the participants were less content in the NELB condition. Contentment increased between 10 a.m. and noon in the ELB condition only. After lunch, contentment increased and was similar in all conditions. In the morning the participants were less lethargic in the exercise conditions. In the no-exercise conditions only the high-energy breakfast induced a drop in lethargy. There were no differences between conditions in the afternoon. Irritability increased in the NELB but decreased in the ELB condition. The desire to eat was higher and fullness was lower after the low-energy breakfasts. Exercise did not have an effect on desire to eat. In the high-energy breakfast conditions, fullness was higher in the absence of exercise, whereas in the low-energy breakfast conditions fullness was higher after exercise. In general, any mood disturbances disappeared in the afternoon, after an ad libitum lunch. Overall, in young and healthy women, the condition that led to the largest energy deficit (ELB) was not associated with the worst mood state.


The Importance of Significance

The purpose of this study was to determine if there is publication bias in the sport and exercise psychology literature. Publication bias exists when journals favor studies that find significant differences and, at the same time, reject studies with nonsignificant results based on the assumption that the methodology is weak. Articles from the 1987, 1992, and 1997 issues of the Journal of Sport & Exercise Psychology, the Journal of Applied Sport Psychology, The Sport Psychologist, the Journal of Sport Behavior, and the International Journal of Sport Psychology were examined. Findings indicated that approximately 98% of the published papers had at least one significant finding, and approximately 80% rejected the primary null hypothesis. The authors compared these data to a sample of unpublished dissertations and theses and found that publication bias is alive and well in the sport and exercise psychology literature. The results are discussed in terms of the “publish or perish” phenomenon, the potential for bias in meta-analyses, and the overestimation of intervention effectiveness. The authors suggest that our journals serve as a good vehicle for disseminating information about successful intervention trials but not about unsuccessful intervention trials, even when the same intervention is involved. Thus, by only reading published research, practitioners may get a mistaken impression about the effectiveness of a given intervention strategy.

Learning to Make Decisions

The authors continue a line of research focusing on the nature and development of tactical and strategic knowledge in team sports. In this paper they address the learning of decision-making through physical education among children 10 to 18 years of age. Elements underlying decision-making, including expert perception, interpretation, and anticipation of important stimuli, are discussed. Individual and collective aspects of decision-making in team sport are also addressed. From a teaching perspective, observation and verbalization emerge as key strategies for eliciting critical thinking and the development of strategic and tactical knowledge. A dynamic model is then presented that attempts to exploit (a) action settings, (b) observation settings, and (c) debate-of-ideas settings for the purpose of constructing strategic and tactical knowledge in team sports. The authors echo the view that it takes 10,000 hours (or about 10 years) of practice to become an expert, and they challenge physical educators to develop effective strategies for constructing knowledge about decision-making within the time constraints imposed by school-based programs.


Signs, Symbols, and Sport

This paper by Weiss considers the symbolic interactionist perspective with respect to identity formation. It is suggested that the mechanism of role adoption is a constituent of identity reinforcement or social recognition in sport. It enables actors (athletes) to realize and confirm their identities. This can occur because sport is a culturally specific and clearly visible activity. As sport takes place unequivocally within the context of society’s significant symbols (objects, signs, statistics that share a socially created meaning), it can have an impact on the actor’s self-perceptions, self-esteem, and self-worth. In other words, according to Weiss, sport has a vital social dimension because ideally it combines self-recognition with social recognition (i.e., recognition as a member of a group, in an assigned role, in an acquired role, in a public role, and personal identity). Role analysis and symbolic interactionism therefore have considerable potential for informing us about these processes and about the place of sport in modern societies.


Climate Control

This paper is one of six addressing motivational climate in sport and physical education (PE) that appeared in a special issue of the new on-line *European Journal of Sport Science*. The purpose of the paper was to review research on the interaction of dispositional (goal orientations) and situational (motivational climate) factors in achievement motivation. Studies addressing the relative influence of significant others such as parents, coaches, teachers, sport heroes, and sport scientists were examined in connection with the development of achievement motivation. In general, results suggest: (a) decreasing parental influence as children mature; (b) increasing peer influence during adolescence; (c) teachers and coaches
operating as secondary (but sometimes primary) influences during childhood and adolescence; and (d) an indirect but substantial social influence from media depictions of sport heroes across developmental stages. Additional data suggest that sport scientists may play an important role in the creation of motivational climates, especially during rehabilitation. The authors also comment on the methodological issues in achievement motivation research and practical issues related to the creation of optimal motivational climates in sport and physical education.


**Handball Tantrums**

The purpose of this investigation was to study the characteristics of sportspersonship in elite Norwegian team handball players. Data were collected for 8 months via participant observation and semistructured interviews. Results revealed a negative relationship between observed behavior and sportspersonship. This was especially evident with regard to players’ respect for officials, rules, and opponents. Strong ego-oriented goal perspectives were identified as having a negative influence on sportspersonship. Moreover, social expectations significantly influenced player attitudes and their moral behavior. The coach was a major source of influence along these lines, especially for the less experienced players. Sportspersonship was heavily dependent on subjective assessments of utility, which predisposed the players to act out of self-interest and the interests of their team. The findings are discussed in terms of the literature on motivational climate and its implications for creating ethical environments in sport.