Two-Wave Follow-Up of Enjoyment, Anxiety, and Associated Physical Activity Intensity in Emirati Female College Students

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Introduction: Regular physical activity is associated with numerous physical and mental health benefits, yet many female college students in the Middle East remain insufficiently active, emphasizing the need to understand the psychological determinants of participation. This study examined whether enjoyment and anxiety (somatic anxiety, worry, and concentration disruption) are associated with objectively measured physical activity intensity levels among female college students in the United Arab Emirates (UAE). Given the limited evidence from Middle Eastern populations and the reliance on self-reported physical activity in previous research, this study included repeated psychological assessments with device-based physical activity measures.

Methods: A two-wave study was conducted with 343 female college students (mean age = 20.40 ± 1.98 years). Enjoyment was assessed using the modified Sport Enjoyment Scale, and anxiety was measured using the Sport Anxiety Scale-2 at two time points with an eight-week interval. Physical activity intensity (sedentary, light, moderate, and vigorous) was objectively monitored using ActiGraph GT3X+ accelerometers worn for four consecutive days. Body mass index (BMI) was included as a covariate. A path model was conducted to test the research tasks.

Results: Approximately 65% of participants accumulated less than 150 minutes of moderate-intensity physical activity per week, and none achieved 75 minutes of vigorous activity. Concentration disruption was positively associated with sedentary time and negatively associated with both light- and moderate-intensity physical activity. Higher enjoyment was associated with lower sedentary time. Lower BMI was significantly associated with higher enjoyment but not with anxiety.

Conclusions: Enjoyment and concentration disruption are important psychological correlates of physical activity behaviour among female college students in the UAE. These findings advance physical activity research in an understudied population and suggest that interventions targeting enjoyment and attentional processes may help to reduce sedentary behaviour and promote participation in health-enhancing physical activity.