

## **Uptake and Effects of a New Sport Program at a School in a Disadvantaged Locality**

**Introduction.** On any day, about 55 % of 11–13-year-olds play some kind of sport. However, recent research has shown that there are demographic effects on the activity patterns of children, with youth from lower socio-economic and single-parent family structures less likely to participate. This study investigated the uptake by 11-12 year olds in a disadvantaged locality of a new sport involving a modified, low-risk form of boxing (Box'Tag), and assessed the outcomes of their involvement.

**Methods.** All grade 7 students (N = 146) from an urban Queensland primary school were invited to participate in an 8-week, lunchtime sport program consisting of 3 sessions per week. Prior to commencement of the study, senior teaching staff dichotomized all children as either “at risk” or “not at risk” of social disengagement based on each child's observed behaviour. In July 2011, 35% of children (51/146) volunteered to participate. A total of 47 of the 51 volunteers (92%) completed the 8-week program and on average attended 70% of the sessions. No injuries resulting from participation in the program occurred. The Brunel Mood Scale (BRUMS) and the Strengths and Difficulties Questionnaire (SDQ) were administered at baseline (T1), 4 weeks (T2), 8 weeks (T3) and 12 weeks (T4). Participants completed a shuttle run test at T1 and T3.

**Results.** In contrast to previous research in which participation in voluntary sport programs was typically higher among boys, the proportion of males and females nominating for this study was not significantly different to that of the entire grade ( $\chi^2 = 0.75, p = .39$ ). Whereas 27% (40/146) of grade 7 children were identified as “at risk” of social disengagement, 43% of the volunteers for the program (22/51) were in this category, which was significantly more than expected ( $\chi^2 = 68.0, p < .001$ ). The Box'Tag group showed greater improvement in shuttle run performance than controls ( $F = 4.64, p = .038, d = .69$ ). No significant differences were found for BRUMS or SDQ scores, although the Box'Tag group reported more positive trends than controls for total mood disturbance from T1 to T2. Subjective reports from teachers indicated that several students showed substantial improvements in general behaviour.

**Discussion.** The findings suggest that this new sport program not only appeals to school age children of both sexes but specifically engages children at risk of social disengagement, may have positive effects on their aerobic fitness and mood responses, and for some may yield overall behavioural benefits.

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