Original article

Physical Activity in Adolescents: Examining Influence of the Best Friend Dyad

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A B S T R A C T

Purpose: The aim of this study was to determine the influence of dyadic friendship relationships on adolescent physical activity (PA) behavior. Unique to this study was examination of the “best friend” dyad.

Methods: Participants were 268 adolescents (13–18 years of age) of both sexes (boys n = 140, girls n = 128), constituting 134 best friendship dyads; 84 were reciprocal best friends and 50 were not. PA was evaluated with the short version of the International Physical Activity Questionnaire. The Actor-Partner Interdependence Model was tested using a hierarchical linear model. First, a null model was run to calculate intraclass correlation coefficient for each type of PA. Next, sex, age, and reciprocity in friendship were included in the model as PA predictors.

Results: The null models revealed significant intraclass correlation coefficient values for vigorous PA (VPA) (.32), moderate PA (MPA) (.31), and sitting behavior (.21), but not for walking. Age was the only predictor for VPA, whereas for MPA the predictors were sex and age of the partner. Reciprocity in friendship (best friend) was not a significant predictor for PA.

Conclusions: These results indicate a high degree of similarity between best friend dyad in PA, except for walking. The age and sex of the best friend (partner) were important predictors of MPA. The reciprocity in friendship (being reciprocal best friends) was not a relevant variable.

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Physical activity (PA) is associated with the prevention of several chronic diseases including cardiovascular diseases, type 2 diabetes, and obesity among children and adolescents [1–3]. In addition, PA is linked to mental well-being and development of social skills [4]. In spite of these benefits, research indicates that most adolescents do not spend enough time in PA [5]; that is, at least 60 minutes per day [6].

PA is a complex multifactorial behavior that is influenced by a variety of biological, behavioral, and environmental factors and interactions. Several variables have been found to be consistently associated with adolescents’ PA [7]; namely, sex (male), ethnicity (white), age (inverse), perceived activity competence, intentions, depression (inverse), previous physical activity, community sports, sensation seeking, sedentary after school and on weekends (inverse), parent support, support from others, sibling physical activity, direct help from parents, and opportunities to exercise.

Another potential factor, and the focus of the present study, is the influence of friends in adolescents’ attitudes, behavior, and development [8,9]. Friends are typically similar on a wide range of characteristics such as gender, age, socioeconomic background, attitudes, and interests [9–14]. The research question driving the present study related to the likelihood that friends, especially “best friends,” also influence PA. This study differentiates the term “friends” from peers with the idea that