Deconstruction of Relatedness in Physical Activity Among Adolescents and Implications for Nurses

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Purpose:
Because of the insufficient amount of physical activity (PA) among adolescents, it is important for researchers interested in health-related behavior to consider possible contributors to PA during this important stage of development. A psychological construct that may be of particular importance during adolescence is relatedness in PA. Although relatedness, which is a main component of self-determination theory (SDT), has been associated with PA participation among adolescents, the instruments noted in the literature that were used to measure relatedness differ in terms of content and number of items. This information clearly indicates that there is a lack of consistency regarding what the concept of relatedness in PA really entails and how it is defined. Thus, a thorough analysis of relatedness in PA is needed to improve understanding of the concept within the PA context so that its empirical measurement can be refined and interventions to enhance relatedness in PA can ultimately result in increased PA.

Methods:
Rodger’s evolutionary method of concept analysis was used to identify the surrogate/related terms, antecedents, attributes, and consequences of relatedness in PA. A comprehensive literature search was conducted in CINAHL, PsycINFO and PubMed to identify relevant articles written in English and published before 2019. Keywords applied in the search were relatedness, physical activity, exercise, adolescents, and youth. A total of 113 abstracts were reviewed. Forty abstracts met the inclusion/exclusion criteria.

Results:
Based on the analysis, the following definition of relatedness in PA was established: an adolescent’s need to have a reciprocal social interaction with significant social agents that involves caring and trust within the context of PA. The following key attributes of relatedness in PA were derived from descriptions noted in the literature: caring, sense of belonging, internalization, interpersonal involvement, self-system process, trust, and reciprocal relationships. Furthermore, two significant surrogate/related terms identified from the literature were attachment and connectedness.

The antecedents of relatedness in PA are autonomy support, mastery motivation climate and strong quality relationships with significant people. Autonomy support involves social agents, such as family, teachers, or friends, who trust adolescents’
capabilities for PA and provide adolescents with choices in PA. These antecedents contribute to increased relatedness in PA among adolescents that then leads to greater intrinsic motivation for PA, self-determination, and PA enjoyment and engagement. Lastly, relatedness can build adolescents’ self-efficacy to engage in PA.

**Conclusion:**
Relatedness in PA with significant others may increase adolescents’ PA engagement by increasing their enthusiasm for and interest in the behavior. Nursing researchers and nurses who work within a healthcare system can benefit from this concept analysis, particularly if they are interested in increasing the level of PA among adolescents. Moreover, this concept analysis can guide future health-related research and intervention programs to promote positive behavior change. For example, nurses can advocate for community- or school-based intervention programs to encourage parents and teachers to foster relatedness in PA among adolescents to increase the behavior by providing the three main antecedents: autonomy support, mastery motivational climate, and strong quality relationships with significant others (e.g., peer acceptance).

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**Keywords:**
adolescents, concept analysis and physical activity

**Abstract Summary:**
Relatedness in PA is significant to foster intrinsic motivation of adolescents to engage in PA. Understanding relatedness in PA is important for adolescents with goal to integrate PA into their lifestyle. Conceptual clarity of relatedness in PA is needed for identifying its significance for developing PA among adolescents.

**References:**

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