

# Friendship Selection and Influence Processes for Physical Aggression and Prosociality: Differences between Single-Sex and Mixed-Sex Contexts

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**Abstract** The present study examined to what extent selection and influence processes for physical aggression and prosociality in friendship networks differed between sex-specific contexts (i.e., all-male, all-female, and mixed-sex classrooms), while controlling for perceived popularity. Whereas selection processes reflect how behaviors shape friendships, influence processes reveal the reversed pattern by indicating how friends affect individual behaviors. Data were derived from a longitudinal sample of early adolescents from Chile. Four all-male classrooms ( $n = 150$  male adolescents), four all-female classrooms ( $n = 190$  female adolescents), and eight mixed-sex classrooms ( $n = 272$  students) were followed one year from grades 5 to 6 ( $M_{\text{age}} = 13$ ). Analyses were conducted by means of stochastic-actor-based modeling as implemented in RSIENA. Although it was expected that selection and influence effects for physical aggression and prosociality would vary by context, these effects showed remarkably similar trends across all-male, all-female, and mixed-sex classrooms, with physical aggression reducing and with prosociality increasing the number of nominations received as best friend in all-male and particularly all-female classrooms. Further, perceived popularity increased the number of friendship nominations received in all contexts. Influence processes were

only found for perceived popularity, but not for physical aggression and prosociality in any of the three contexts. Together, these findings highlight the importance of both behaviors for friendship selection independent of sex-specific contexts, attenuating the implications of these gendered behaviors for peer relations.

**Keywords** Physical aggression · Prosociality · Stochastic-actor based modeling (RSIENA) · Same-sex/mixed-sex contexts · Social networks · Selection · Influence · Perceived popularity

Early adolescence is a critical time in the development of friendships (Steinberg 2007). Friends become more important for the provision of emotional support (Bukowski and Sippola 2005), identity development (Bagwell and Smith 2011), and bridging individuals' experiences with participation in a wider peer culture (Espelage et al. 2007). Friendships are also important for adolescents' engagement in and development of behaviors (Brechwald and Prinstein 2011). The interplay between the development of behaviors and friendships captures two fundamental processes in adolescents' peer contexts: friends' influence and friendship selection. Influence suggests that friendships shape adolescents' individual behaviors. Selection implies that adolescents change their friendships in accordance with their behaviors (or characteristics), also referred to as selection-similarity (Veenstra et al. 2013). In addition, selection processes encompass the effect of behaviors (or characteristics) on being nominated as a friend (capturing attractiveness, known as alter effects), and on nominating friends (capturing activity, known as ego-effects). Together, these processes tend to result in the same phenomenon: befriended adolescents are likely to be similar to each other in behaviors and characteristics— among those aggression (Dijkstra et al. 2011; Sijtsema et al. 2010a, b) and prosocial behavior (Logis et al. 2013).

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