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Capturing the peer context: Developmental issues, statistical methods, and new directions[☆]

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The study of adolescents' relationships with their peers has flourished over the past 30 years. At the same time, there have been marked shifts in the orientation of peer research. In the 1970s and 1980s, research tended to focus on the importance of friendship and the social status of children and adolescents within their group of peers. Key measurement techniques developed during these decades were based on self- as well as peer-reports about classmates. Since the early-1990s, however, there has been a surge of interest in dating and romantic relationships during adolescence and emerging adulthood, and this has become a significant area of developmental research by itself.

By the late 1990s, renewed interest in [Moreno's \(1934\)](#) framework, [Sullivan's \(1953\)](#) conceptualizations, and [Dunphy's \(1963\)](#) paradigmatic study, as well as many new theories of peer relationships and social development (e.g., [Davila, 2008](#); [Dishion, Spracklen, Andrews, & Patterson, 1996](#); [Furman, Brown, & Feiring, 1999](#); for review, see [Rubin, Bukowski, & Parker, 2006](#)), resulted in further shifts in the focus of research. These shifts included an increasing emphasis on mapping social networks, as well as more efforts towards understanding how friendships and the peer group are related to and transform into romantic relationships ([Connolly, Furman, & Konarski, 2000](#); [Furman et al., 1999](#); [Furman & Collins, 2009](#)), how romantic relationships can be added and change existing friendships ([Brown, 1999](#); [Connolly et al., 2000](#); [Connolly & Goldberg, 1999](#); [Zimmer-Gembeck, 1999](#)), how multiple peer-relational forms exist within peer networks, and how there are multiple ways to capture the important influential elements in even a single relational form ([Collins, 2003](#); [Connolly et al., 2000](#); [Zimmer-Gembeck, Siebenbruner, & Collins, 2001](#)). However, despite the broadened interests, it remains quite rare for studies of peer groups and friendships to sit side-by-side with studies of romantic relationships in a Special Issue on the peer context and peer influence. A central aim of this Special Issue was to include studies of the many aspects of adolescents' peer relationships to show how work in one domain adds to, and can be useful for work in another. We will address such synergies in our Epilogue at the end of this issue.

Much of the research in this area also has undergone a transformation through the now widespread availability of statistical techniques that can capture and analyze individual factors at the same time as capturing complex group and dyad level phenomena. Such software is indispensable for researchers who need to test both group level and individual correlates of behaviors, emotions and cognitions (for a review, see [Rubin et al., 2006](#); also see [Card, Selig, & Little, 2009](#); [Kenny, Kashy, & Cook, 2006](#)). The sophistication of available analytical methods continues to challenge existing conceptualizations of peer relationships and contexts, and researchers may need to formulate theoretical and conceptual accounts to keep pace with the methodological developments. We include studies in this Special Issue that have used a range of established and newer techniques, while also inviting commentary to highlight the strengths, as well as the continuing limitations, of all of our methods ([Laursen, 2010](#)).

Although rapid development in a field is exciting, there is a danger that conceptual integration may come to lag behind analytical advancement and that research areas continue to be split up into subspecialties that produce their own dynamics. One main goal of this Special Issue, *Capturing the Peer Context*, was to underscore common threads and to illustrate how current methodological developments permeate research on peer relationships at different ages and in different target

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populations, even when studies focus on different kinds of relationships. A second goal was to illustrate how new methods of analysis are being applied to classic and new questions about the importance of socialization (by peers and romantic partners) of individual behavior. A third goal was to emphasize the varying factors that might contribute to friend or partner similarity. Although relationship partners might be selected on the basis of similarity to oneself, they can also show common features because judgments are filtered through individual perceptions and influenced by self-perceptions. The final goal was to draw attention to data collection methods and highlight the fact that most methods still rely on the perspective of the reporter. Keeping this in mind is crucial as it means that researchers must continue to consider and re-consider how best to capture multiple perspectives within groups or dyads, as well as higher order “group” or “dyad” level phenomena.

Overview of the papers in this special issue

The authors of the eight studies in this Special Issue tackle complex developmental issues in peer relationships, focus on different age ranges, facets of developmental processes, particular social relationships, and conceptual and methodological angles, and use a range of advanced statistical techniques in the study of relationships. We hope that inherent linkages between the many levels of peer relationships will become apparent, although there is some uniqueness across these research studies. We have encouraged this volume in order for this information across levels to advance research more rapidly. In addition, with rapid expansion of each of the specific research areas, the time seemed right to weigh the streams of emergent thinking on how to capture the various levels of the peer context. Hence, the papers in this issue include studies that illustrate how different dimensions of the peer context may be captured simultaneously to provide more comprehensive views of adolescent developmental processes or outcomes. It becomes clear that “multiple levels” and “capturing the peer context” have been conceptualized in various ways – for some it was capturing levels of the group or dyad versus the individual, for others it was measuring different types or different perspectives on relationships or another person, and for still others it was identifying multiple aspects within a relationship that might separately or together have implications for development and functioning. Adding another layer of complexity, all of the studies have implicitly developmental origins and most of the studies are explicitly developmental in that they study changes over time or age differences. Finally, because most authors have focused on theory coupled with illustrations of new measurement, design and/or analysis techniques, we hope that they can lead to applications in each of the areas of research on peer relationships.

The first three studies in the current volume focus on problem behaviors and how peers may be selected (as friends or partners) because of their similar behavior and how they may socialize each other over time. They also identify the important role of gender in these processes. In the first of these papers, Kelly Rulison and colleagues (Rulison, Gest, Loken, & Welsh, 2010) provide an example of how to apply the best of our methods to answer complex questions about the roles of the self and the peer group in the development of aggression and related aspects of adjustment over time. They demonstrate how multilevel modeling can be applied to data collected from multiple reporters over time. In their study of early adolescents (grades 3–7), we see the escalation of aggressive behaviors that co-occurs with affiliation with aggressive peer groups. We also see how such affiliation can increase rates of victimization and negatively impact on adolescents’ adjustment.

Noona Kiuru and her colleagues (Kiuru, Burk, Laursen, Salmela-Aro, & Nurmi, 2010) continue this theme by examining individual and peer group influences on behavior, but focus on the influence of selection of peers and socialization by peers on alcohol and tobacco use among secondary school students. They apply advanced statistical techniques (SIENA), finding drinking to be a product of both selection and socialization and tobacco use to be a product of selection but not socialization.

Gender moderation is considered in the analyses reported by Kiuru et al. (2010) and is also addressed by Rulison et al. (2010). Rulison and colleagues found that girls were more disadvantaged than boys when they had aggressive friends. In particular, although both girls and boys in aggressive peer groups were more aggressive than their nonaggressive peers, boys were not as disadvantaged as girls in areas such as social prominence and self-worth. Kiuru and colleagues found fewer gender differences overall, but greater similarity in drinking within girls’ peer groups than in boys’ peer groups.

Finally, Julie Wargo Aikins and her colleagues (Wargo Aikins, Simon, & Prinstein, 2010) also examine peer selection and socialization in relation to behavior problems and substance use, but illustrate how these processes might emerge in romantic relationships, too. Given that romantic relationships may be even more developmentally graded during adolescence than other relationships, and the fact that they are added to the existing network of peers and friendships, the authors also make it a point to examine grade level differences and to consider friendship as well as romantic partner socialization. This illustrates how multiple relational forms can be included in a single study and how romantic relationships may be a particularly influential form of relationship among middle school students.

In the fourth paper, Wyndol Furman and Jessica Winkles (Furman & Winkles, 2010) acknowledge the influence of peers on romantic relationship development and provide an example of how to capture multiple aspects of romantic relationships and link each to specific individual and peer factors. In their study of high school students (most in grade 12; age 18), they highlight how adolescents may be similar to their friends in the incidence of romantic involvement. They also report findings that show ways of thinking about relationships with parents to be linked to romantic qualities and friend factors to be linked to romantic styles.

The next two papers turn to a relatively new area of research on friendship formation and maintenance in which individual and group level motivational forces are expected to be central to friendship selection, maintenance, engagement, influence, and individual functioning over time. Tiina Ojanen and colleagues (Ojanen, Sijtsema, Hawley, & Little, 2010) continue the theme of how friendships are formed and how peers influence each other, but they focus on individual friendship motivations

that may guide selection, influence and quality of friendships. In their study of elementary school students transitioning to middle school, adolescents did have multiple motivations for making and maintaining friends and these did play an important role in their friendship activities.

In the sixth paper, *Carrie Furrer (2010)* also proposes a motivational perspective on friendship and peer relationships, and captures a group level motivational property referred to as friendship group engagement versus disaffection. In this paper, individuals are not only shown to have their own motivations for friendship formation and maintenance, but a group motivational property is captured that is expected to be a foundation for friendship maintenance versus dissolution. This paper makes it clear that what is often conceptualized as an individual factor may actually be better captured as a dyad or group level factor.

Similar to understanding individual and group level motivations for friendship selection and engagement, the final two papers incorporate the importance of the individual, as well as the interdependencies within a group – in these cases the groups are romantic dyads. Manfred van Dulmen and Elizabeth Goncy (*van Dulmen & Goncy, 2010*) applied the Actor–Partner Interdependence Model, whereas Melanie Zimmer-Gembeck and Wendy Ducat (*Zimmer-Gembeck & Ducat, 2010*) applied a similar model, the Agreement–Bias Model. In each paper, linkages between individual behavior, cognition or well-being, and romantic relationship satisfaction or quality are reported. Together, these two papers show the importance of considering reports from each partner in a romantic relationship, with the first illustrating each couple member's effects on externalizing behavior and the second drawing attention to how reports about a partner may depend on individual characteristics, such as age and well-being, as well as being associated with features of the relationship. The final paper also suggests that similarity and agreement between partners may be low, especially in new relationships or younger participants, once intercorrelations between reports about the self and the partners are considered. These findings show that individual development, as well as relationship development, may be associated with reporting about the relationship, and that considering age, relationship time or relationship history might be important when studying selection, socialization and group level phenomena.

Looking forward

For many decades, developmental psychology has almost exclusively been interested in how adults and adult-led institutions influence the developing child and adolescent. Children or adolescents do not typically select such contexts for themselves. In comparison, peer groups are typically self-selected; adolescents themselves have some choice in determining the specific kinds of social influences they want to subject themselves to. Thus, developmentalists are challenged to follow up empirically on the promise of early theorizing on various forms of peer influences (e.g., Piaget, Baldwin, Sullivan, Vygotski; see also *Collins, Welsh, & Furman, 2009; Furman & Collins, 2009*).

Recent methodological developments appear to greatly enhance the effectiveness of such efforts. However, they also have the potential to separate the field of peer research into subspecialties; in some of those, the new methods can be readily applied, in others, it may be less apparent how to apply them. With this Special Issue, we hope to present methodological advances that show important directions for the field. The presented methodological advances highlight efforts to capture peer contexts in ways that bridge individual research areas and encourage researchers to make use of the potential of synergistic effects. Our hope is that the powerful and sophisticated papers in this Special Issue increase the chance that studying adolescents' peer experiences remains a conceptually coherent and productive area, and an area which continues to build a foundation of basic knowledge that will eventually assist practitioners who wish to improve relationships across the lifespan.

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