Understanding Popularity in the Peer System

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ABSTRACT—*Much research has focused on youth who are rejected by peers; who engage in negative behavior, including aggression; and who are at risk for adjustment problems. Recently, researchers have become increasingly interested in high-status youth. A distinction is made between two groups of high-status youth: those who are genuinely well liked by their peers and engage in predominantly prosocial behaviors and those who are seen as popular by their peers but are not necessarily well liked. The latter group of youth is well known, socially central, and emulated, but displays a mixed profile of prosocial as well as aggressive and manipulative behaviors. Research now needs to address the distinctive characteristics of these two groups and their developmental precursors and consequences. Of particular interest are high-status and socially powerful aggressors and their impact on their peers. The heterogeneity of high-status youth complicates the understanding of the social dynamics of the peer group, but will lead to new and important insights into the developmental significance of peer relationships.*

KEYWORDS—*peer relations; popularity; social status*

Developmental psychologists continue to be interested in the social structure and dynamics of the peer group in childhood and adolescence. Peer status is an important construct in their research. In the past, much of this research has been driven by a concern for children and adolescents with low social status, who operate at the fringe of the peer system and may be categorized as rejected. As a result, much has been learned about the origins of peer rejection and its effects on development (Asher & Coie, 1990). More recently, researchers have become increasingly interested in peer-group members with high social status. Interestingly, high-status children and adolescents do not form a uniform group.

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For example, consider the profiles of two eighth graders, Tim and Jason. Tim is well liked by his peers. He is genuinely nice to others and helps out when needed. Tim is athletic but does not use his physical abilities to aggress against others. In fact, Tim tends to avoid even verbal confrontations when possible, preferring instead to find prosocial ways of solving conflicts. Compared with Tim, Jason is better known by his classmates but he is not necessarily well liked. Even peers who do not know him personally know who he is. Many of Jason's classmates imitate his style of dress and taste in music and would like to be better friends with him so they could be part of the in-crowd. Jason can be very nice to other kids but can also intimidate them when provoked or angry, or can manipulate social situations to his advantage.

Developmental psychologists know a fair amount about youth like Tim. Youth who are well liked by others are categorized by peer-relations researchers as *sociometrically popular*. Sociometrically popular youth generally display high levels of prosocial and cooperative behavior and low levels of aggression (Rubin, Bukowski, & Parker, 1998). But although developmentalists would refer to Tim as sociometrically popular, he is not the type of person most youth would consider one of their "popular" peers. They think of popular peers as those who, like Jason, are well known, socially central, and emulated (Adler & Adler, 1998). In recent years, developmentalists have begun to study more seriously youth like Jason, referring to them as *perceived popular*, rather than sociometrically popular. Although evidence suggests that perceived-popular youth have aggressive traits in addition to prosocial ones, youth aspire to be popular like Jason more than they aspire to be like Tim (Adler & Adler, 1998). Accordingly, it is important to consider seriously the meaning and function of these divergent forms of popularity.

In this article, we consider how perceived-popular youth are similar to and different from sociometrically popular youth. Specifically, we discuss: (a) the conceptualization and measurement of sociometric and perceived popularity, (b) the social behavior of sociometrically and perceived-popular youth, and (c) the adjustment outcomes for the two groups. We conclude by outlining important directions for future research.

SOCIOMETRIC VERSUS PERCEIVED POPULARITY

Traditionally, the study of peer relations has focused on sociometric status, how well liked (or rejected) youth are by their peers (Asher & Coie, 1990; Coie & Cillessen, 1993). Several decades of research have provided data on the behavioral and adjustment correlates of sociometric status (Kupersmidt & Dodge, 2004). This research provides a crucial foundation for understanding peer relations.

Recently, researchers have begun to examine perceived popularity as a unique but equally important dimension. Educational sociologists have long recognized the social power (influence over others) of perceived-popular youth as evidenced by qualitative descriptions of them by their peers (Adler & Adler, 1998; Eder, 1985). Only in the past 5 to 10 years have researchers begun to study perceived popularity with quantitative methods.

Sociometric popularity is usually assessed with a peer-nomination procedure, in which participants are asked to name the peers in their grade who they like most and like least. Nominations for each question are counted and adjusted for grade size so that the data are comparable across grades (Coie, Dodge, & Coppotelli, 1982). Sociometric popularity for each person is represented with a score on a continuous scale (social preference) calculated by using the number of liked-most nominations minus the number of liked-least nominations he or she received. Alternatively, rather than using such scores, researchers may employ a categorical approach and identify sociometrically popular youth as those with many liked-most and few liked-least nominations.

In early qualitative research, educational sociologists using ethnographic methods identified perceived-popular youth by simply observing which classmates were referred to as popular by their peers (Adler & Adler, 1998; Eder, 1985). In recent quantitative studies, however, perceived popularity has been derived from peer nominations (i.e., participants name who they see as most popular and who they see as least popular; Cillessen & Mayeux, 2004; LaFontana & Cillessen, 2002; Parkhurst & Hopmeyer, 1998; Rose, Swenson, & Waller, 2004). Scores on a continuous scale of perceived popularity have been derived from the number of most-popular nominations or the number of most-popular minus least-popular nominations. In other studies, researchers have taken a categorical approach and identified youth with high perceived popularity as those with many most-popular nominations and few least-popular nominations. Interestingly, in neither the original ethnographic research nor the recent quantitative studies did researchers provide participants with an a priori definition of popularity; rather, they relied on the participants' intuitive understanding of the concept. Recently, researchers have begun to map the meanings children and adolescents ascribe to "popularity," again without providing an a priori definition (e.g., LaFontana & Cillessen, 2002). Findings from these studies show that children and adolescents associate a mixture of prosocial and antisocial traits and behaviors with perceived popularity.

Although there is overlap between sociometric and perceived popularity, the constructs are not redundant (LaFontana & Cillessen, 2002; Rose et al., 2004). Consider one study that employed a categorical approach to identify sociometrically popular and perceived-popular youth (Parkhurst & Hopmeyer, 1998). Only 36% of sociometrically popular students were also perceived popular, and only 29% of perceived-popular students were also sociometrically popular. There is enough distinction between the two constructs to determine similarities as well as differences between the characteristics of sociometrically popular and perceived-popular youth.

BEHAVIORAL PROFILES

Research on the behavioral profiles of sociometrically and perceived-popular youth has revealed similarities and differences. Both kinds of youth are found to be prosocial and cooperative. However, whereas sociometrically popular youth score very low on aggression, perceived popularity is positively associated with aggression (see Rubin et al., 1998, for a review of the behavioral profiles of sociometrically popular youth).

In quantitative studies on how perceived popularity correlates with behavior, researchers have typically measured overt and relational aggression separately. Overt aggression refers to physical assaults and direct verbal abuse. Relational aggression is aimed at damaging relationships and includes behaviors such as ignoring or excluding a person and spreading rumors (Crick & Grotpeter, 1995). Both overt and relational aggression are related to perceived popularity. For example, Parkhurst and Hopmeyer (1998) found that youth who were perceived popular but not sociometrically popular were overtly aggressive. Rodkin, Farmer, Pearl, and Van Acker (2000) empirically discriminated a subgroup of "model" popular youth with high scores for affiliative (e.g., friendly) behaviors and low scores for overt aggression from a subgroup of "tough" popular youth with high scores for overt aggression and average scores for affiliative behavior. Studies in which both overt and relational aggression were assessed and in which perceived popularity was measured as a continuous variable demonstrated positive associations of both forms of aggression with perceived popularity (LaFontana & Cillessen, 2002; Rose et al., 2004).

Why would presumably aversive aggressive behaviors be associated with high status as indicated by perceived popularity? It may be that some children or adolescents use aggression in certain situations (e.g., when publicly provoked) or against certain people (e.g., competitors for social status) strategically to achieve or maintain perceived popularity. For example, perceived-popular youth may use overt or relational aggression to intimidate and deter competitors or other youth who in some way threaten their social standing. Consistent with this idea, a study by Vaillancourt, Hymel, and McDougall (2003) revealed

an association between bullying and perceived popularity. Moreover, perceived-popular youth use a strategic combination of both aggressive and prosocial behaviors to manipulate peers in ways that result in high status (Hawley, 2003).

Recent longitudinal research supports the hypothesis that some youth deliberately act aggressively to enhance their perceived popularity. This research also suggests an especially important association between relational aggression and perceived popularity. In a 5-year longitudinal study (Cillessen & Mayeux, 2004), relational aggression was found to be more strongly related to later perceived popularity than was overt aggression. Similarly, another study (Rose et al., 2004) found that relational aggression was more strongly related to perceived popularity 6 months later than was overt aggression. Overt aggression may be related to perceived popularity because youth can display dominance through overtly aggressive acts. However, relational aggression may be especially effective for managing social power. For example, by selectively excluding others, youth may influence who is in the popular crowd and keep out those who threaten their social status. Engaging in other relationally aggressive behaviors, such as spreading rumors, affords one a degree of anonymity and therefore the opportunity to strategically hurt other people while hiding the appearance of being mean.

Research further indicates that the relation between aggression and perceived popularity may vary by age and gender. In our research, we found positive associations between overt and relational aggression and perceived popularity in 12- to 15-year-old adolescents (grades 6–9), but not in 9- to 11-year-old children (grades 3–5). This shift coincided with the transition from elementary school to middle school and may have been due to the fact that the social skills required to act aggressively in ways that lead to high status are complex and develop with age (LaFontana & Cillessen, 2002; Rose et al., 2004).

We also found that the link between relational aggression and perceived popularity was stronger for girls than for boys (Cillessen & Mayeux, 2004; Rose et al., 2004). Figure 1 illustrates this finding for data collected in eighth grade (Cillessen & Mayeux, 2004), but the pattern was similar across grades six through nine. As can be seen in Figure 1, relational aggression was positively associated with perceived popularity for both boys and girls but was a particularly strong predictor of high status for girls.

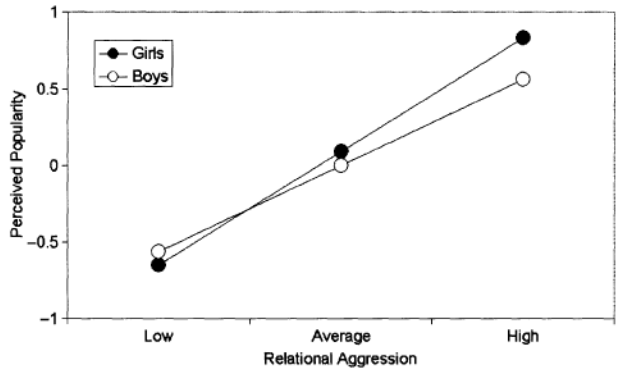

Fig. 1. Perceived popularity of girls and boys who exhibit low, average, and high levels of relational aggression (Cillessen & Mayeux, 2004).

ADJUSTMENT OUTCOMES

An important reason for studying peer relations is that experiences with peers may be predictive of personal adjustment. Accordingly, much research has addressed how sociometric status correlates with adjustment, and the research consistently indicates that sociometric popularity is predictive of positive adjustment both concurrently and in the future (Rubin et al., 1998). For example, sociometrically popular youth tend to be well adjusted emotionally and to have high-quality friendships.

Considerably less is known about the adjustment of perceived-popular youth. Previous research on status and behavior in the peer group leads to opposing expectations. On the one hand, because aggression is associated with behavior problems, one would expect similar behavior problems for popular youth who are aggressive. On the other hand, because high status in the peer group is associated with being well adjusted, one would expect that perceived popularity, even if achieved through aggressive means, is associated with positive adjustment. The limited evidence available at this time seems to favor the second expectation—that perceived popularity has immediate rewards (Hawley, 2003) without concurrent negative consequences (Rodkin et al., 2000). Hawley's (2003) research indicates that a mixture of prosocial behavior and coercive or aggressive behavior makes youth effective at getting what they want in social contexts. And the tough popular youth identified by Rodkin and his colleagues (2000) did not demonstrate elevated symptoms, such as depression or anxiety. The contradictory expectations may be reconciled if perceived-popular and aggressive youth experience benefits in the immediate social context of the adolescent peer group, but pay a price in terms of their long-term adjustment beyond adolescence.

Thus, we hypothesize that for perceived-popular youth, short-term advantages may be combined with long-term disadvantages. Establishing whether this is true will require long-term follow-up studies of such youth. Just as there are tough and model high-status subgroups (Rodkin et al., 2000), there may be two diverging developmental paths that popular youth follow into young adulthood. In one path, perceived-popular youth may continue to be influential and serve in leadership roles in later peer groups. In the other, they may no longer be socially central and successful when they move into new social contexts that have different reward structures and different criteria for social prominence. Which of these two pathways an individual follows may depend on whether he or she is able to strike the optimal, delicate balance between prosocial and Machiavellian be-

haviors, to gain both social preference as well as influence in new groups. Discovering how this balance may be achieved developmentally and how it may affect what pathway is followed in later life is an exciting avenue for future research.

CONCLUSIONS

Decades of research on sociometric popularity have produced consistent and important findings with potential practical application. Recent research suggests that the complex construct of perceived popularity needs to be incorporated into this research. Given all that is known about the negative developmental consequences of aggression, researchers need to learn why aggression sometimes leads to high status in the form of perceived popularity. Moreover, it will be important to learn whether aggressive perceived-popular youth are on a positive or negative developmental trajectory. Although they seem to benefit in the short term in the immediate social context of the peer group, the longer-term outcomes associated with their status and behavior are not yet known.

Researchers also must learn about the impact of perceived-popular aggressors on the development and adjustment of their peers. Of particular concern are youth who are victimized by them. The negative consequences of victimization may be exacerbated when the aggressor is socially central and powerful and therefore can easily engage other people in the victimization. Furthermore, perceived-popular youth may influence the development of antisocial behavior among their peers. Because perceived-popular youth are emulated, their antisocial or risky behaviors may disperse through the peer group especially quickly. Clearly, the function and impact of popularity in the peer context are complex; learning more about these processes will be challenging, but will yield important new insights into the social dynamics of peer groups across the life span.

Recommended Reading

Adler, P.A., & Adler, P. (1998). (See References)
Asher, S.R., & Coie, J.D. (1990). (See References)
Kupersmidt, J.B., & Dodge, K.A. (Eds.). (2004). (See References)

REFERENCES

Adler, P.A., & Adler, P. (1998). *Peer power: Preadolescent culture and identity.* New Brunswick, NJ: Rutgers University Press.

Asher, S.R., & Coie, J.D. (1990). *Peer rejection in childhood.* New York: Cambridge University Press.

Cillessen, A.H.N., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development, 75,* 147–163.

Coie, J.D., & Cillessen, A.H.N. (1993). Peer rejection: Origins and effects on children's development. *Current Directions in Psychological Science, 2,* 89–92.

Coie, J.D., Dodge, K.A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology, 18,* 557–570.

Crick, N.R., & Grotpeter, J.K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development, 66,* 710–722.

Eder, D. (1985). The cycle of popularity: Interpersonal relations among female adolescents. *Sociology of Education, 58,* 154–165.

Hawley, P.H. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted Machiavellian. *Merrill-Palmer Quarterly, 49,* 279–309.

Kupersmidt, J.B., & Dodge, K.A. (Eds.). (2004). *Children's peer relations: From development to intervention to policy.* Washington, DC: American Psychological Association.

LaFontana, K.M., & Cillessen, A.H.N. (2002). Children's stereotypes of popular and unpopular peers: A multi-method assessment. *Developmental Psychology, 38,* 635–647.

Parkhurst, J.T., & Hopmeyer, A.G. (1998). Sociometric popularity and peer-perceived popularity: Two distinct dimensions of peer status. *Journal of Early Adolescence, 18,* 125–144.

Rodkin, P.C., Farmer, T.W., Pearl, R., & Van Acker, R. (2000). Heterogeneity of popular boys: Antisocial and prosocial configurations. *Developmental Psychology, 36,* 14–24.

Rose, A.J., Swenson, L.P., & Waller, E.M. (2004). Overt and relational aggression and perceived popularity: Developmental differences in concurrent and prospective relations. *Developmental Psychology, 40,* 378–387.

Rubin, K.H., Bukowski, W.M., & Parker, J.G. (1998). Peer interactions, relationships, and groups. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (5th ed., pp. 619–700). New York: Wiley.

Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. In M.J. Elias & J.E. Zins (Eds.), *Bullying, peer harassment, and victimization in the schools: The next generation of prevention* (pp. 157–176). New York: Haworth Press.