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The allure of a mean friend: Relationship quality and processes of aggressive adolescents with prosocial skills

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Recent theory on social dominance suggests that aggressive individuals should be socially successful if they also display prosocial behavior. The combination of coercive and prosocial strategies of resource control (i.e., bistrategic control) is thought to facilitate hierarchy ascension. Adolescents ($N = 929$, grades 7–10) were queried about the quality of their friendships and their friends' behavior towards them. The friendships of the aggressive bistrategic controllers (derived by peer nomination) were rated among the highest on intimacy, fun, and conflict. Additionally, bistrategic friendships had high levels of overt and relational aggression. Thus, bistrategic friendships yield high benefits but also costs. This study attempts to illuminate the *peer regard – aggression paradox* via an evolutionary approach to human status hierarchies.

Keywords: adolescents; aggression; friendship quality; MACS models; peer relations; social dominance

The allure of the mean friend

“Jackie Cohen . . . The meanest most popular girl. A shepherd among sheep . . .

Not just the name of the woman before me, but the name of something famous like a soft drink or a rock band.” (Glass, 2003)

There is a Jackie Cohen on every school yard and she confronts our traditionally held beliefs that “mean” people are disliked. Conventional wisdom dictates that social competence is about being agreeable, sympathetic, and compromising. Research on peer relationships and aggression has similarly held that aggressive behavior repels peers and, in turn, puts the child at risk for further developmental insult down the line. But how can Jackie Cohen’s “meanness” be reconciled with her popularity? We will argue that social dominance attracts social attention and is gained by individuals who possess highly attractive social skills as well as less pleasant aggressive attributes. By looking at relationship processes within mutual best-friendship bonds, we will explore the question, “What is the allure of a mean friend?”

Is aggression repellent?

The characterization of aggression in childhood and adolescence as universally repellent has hardly been questioned until fairly recently (e.g., Hawley, Little, & Rodkin, in press).

Traditionally, positive and negative behaviors (prosociality and antisociality) have been studied within separate traditions and have often been viewed as opposite ends of a single dimension. This view that positive, agreeable, and prosocial individuals are liked while hostile, pushy, and aggressive individuals are unskilled and therefore disliked may be an oversimplification. For example, work since the mid-1990s has shown that aggressors can be socially skilled (Hawley, 2003a, 2003b; Sutton, Smith, & Swettenham, 1999), can be socially attractive (Bagwell, Coie, Terry, & Lochman, 2000; Hawley 2003a, 2003b; Rodkin, Farmer, Pearl, & van Acker, 2000), can maintain (Cillessen & Mayeux, 2004) and improve social status (Luthar & McMahon, 1996; Sandstrom, 1999), and can have reciprocal friendships (Cairns & Cairns, 1994).

Social prominence versus social preference

Current perspectives in developmental and sociological circles may suggest that while Jackie Cohen may be socially prominent, she probably isn’t well liked. Ethnographic studies (Adler & Adler, 1995; Eder, 1985, 1995; Merten, 1997), for example, provide detailed accounts of adolescent status hierarchies characterized by competition for and defense of “popularity”. Of the several contributions of this work, two stand out as particularly relevant here. First, it has drawn attention to female–female competition. Females’ relational (Crick & Grotpeter, 1995) and social aggression (Underwood, 2003) appears to be associated with social prominence from

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preschool through adolescence (Adler & Adler, 1995; Eder, 1985; McGuire, 1973; Merten, 1997). Second, this literature highlights the fact that popularity and being liked are distinct: Being highly visible does not necessitate being beloved.

Recent work has shown that while social prominence and social preference may overlap, they have highly distinct features (e.g., Cillessen & Rose, 2005). Social prominence (i.e. perceived popularity), for example, appears to be positively associated with relational aggression, and becomes more strongly so as children progress from the 5th to 9th grade (Cillessen & Mayeux, 2004). On the other hand, the positive associations between social prominence and social preference (i.e., sociometric popularity) reduce over time, indicating that as children age, these two measures of peer status become more distinct (Cillessen & Mayeux, 2004; see also Parkhurst & Hopmeyer, 1998; Rose, Swenson, & Waller, 2004). Additionally, social preference (an aggregation of liked and disliked nominations; Coie & Dodge, 1983) appears to be negatively related to both relational and overt aggression in 4th through 8th graders (LaFontana & Cillessen, 2002).

The aforementioned work on social prominence addresses what we refer to as the *peer regard-aggression paradox* – the apparent social attractiveness of some aggressive individuals – by carefully teasing apart social preference and social prominence. The distinction is critical because sociometrically preferred youth enjoy present and future positive outcomes such as emotional adjustment and high quality friendships. Cillessen and Rose (2005) recently observed that relatively little is known about socially prominent (i.e., perceived popular) youths, and furthermore speculate that immediate status advantages may be followed by long-term adjustment difficulties in part because of the lower quality friendships these children probably bear.

Relationship quality

The variable-centered approaches described above (i.e., methods that focus on relationships among variables) suggest negative relations among indices of aggression and social preference. At the same time, however, many aggressive youths are not deficient in friendships (e.g., Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988; Ray, Cohen, Secrist, & Duncan, 1997; Rys & Bear, 1997). The quality of those friendships, however, is an important consideration for well-being outcomes (Berndt, 1996; Hartup & Stevens, 1999; Rubin, 1980). Consistent with the early theoretical work of Piaget (1932) and Sullivan (1953) which highlighted the development-enhancing positive features of relationships (e.g., intimacy, companionship, equality), many contemporary authors view high relationship quality to be characterized by such positive features absent the negative features (e.g., conflict, competition, and aggression; Berndt, 1996; Buhrmester, 1996). Accordingly, many exploring the driving forces behind interpersonal attraction reasonably assume that positive personal attributes associated with intimacy, reciprocity, and the control of aggression make one an attractive potential friend (Aboud & Mendelson, 1996).

However, the relations among “positive features”, “negative features”, and “quality” are somewhat ambiguous. For example, positive and negative features are only weakly negatively correlated (sharing at most 3% of their variance; Berndt, 1996; Berndt & Keefe, 1995). Additionally, some evidence suggests that aggression and related behaviors are positively

related to negative friendship features (e.g., conflict), but unrelated to positive features (e.g., warmth, closeness; Berndt & Keefe, 1995; see also Gillmore, Hawkins, Day, & Catalano, 1992). It may be that the presence of prosocial behaviors affects (e.g., moderates) the relations between aggressiveness and friendship quality (cf. Sebanc, 2003).

Resource control theory and social dominance

In contrast to predictions that arise from clinically-oriented perspectives, resource control theory posits that a subset of aggressive youth are not only socially prominent, but are liked by peers in part because they possess social skills that mitigate the negative effect of aggressive behavior. Here, social dominance is defined in terms of relative success at competition (cf. Bernstein, 1981). Accordingly, the theory proposes various behavioral strategies associated with resource acquisition and defense (see also Pellegrini & Bartini, 2001). Some of these strategies are direct and considered by many to be socially unappealing (i.e., ‘coercive strategies’ such as taking, threatening, deceiving). Coercive strategies of resource control, though indisputably effective, are generally held to be “antisocial” from conventional psychological perspectives. On the other hand, coercive strategies are similar to traditional conceptions of social dominance in the ethological literature which generally views agonism more neutrally (e.g., Bernstein, 1981; Pellegrini, 2004; Strayer & Strayer, 1976). Prosocial strategies, in contrast, win resources by forging alliances and other cooperative relationships that yield long-term benefit. They derive from evolutionary approaches to cooperation (Axelrod, 1997; Charlesworth, 1996). From this literature, reciprocity, cooperation, and mutual alliances (i.e., friendships) can serve successful resource acquisition, and as such, prosocial strategies are indirect and generally win group approval.

This emerging body of work examining various predictions based on resource control theory invites a more person-centered approach (i.e., focusing on different groups of individuals scoring similarly on a subset of variables). On the basis of the relative degree of endorsement (self-report) or employment (observation, other report) of the strategies, subgroups of individuals are defined; *bistrategic controllers* employ both strategies, *coercive controllers* employ coercive strategies over prosocial strategies, *prosocial controllers* employ prosocial strategies over coercive strategies, and *noncontrollers* employ neither (i.e., they are not resource-directed). Profiles of these resource control subtypes are emerging in terms of associated personality traits and social and personal outcomes resulting from successful/unsuccessful control and the strategy employed (Hawley, 2003a, 2003b; Hawley, Little, & Pasupathi, 2002). When the types are formed via self-report (e.g., Hawley, 2003b) or peer nomination (Hawley, Card, & Little, under review), for example, bistrategic controllers are the most successful at resource control by far, followed by prosocial and coercive controllers, with the non-controllers being the least successful. Thus, bistrategics are considered to be of the highest social dominance status and noncontrollers the lowest.

Bistrategic controllers are not only highly adept at resource control, they also challenge commonly-accepted views of social competence (Bukowski, 2003). They possess positive, relationship-enhancing attributes (e.g., they are socially skilled, morally astute, and extroverted) while at the same time, are among the most aggressive (Hawley, 2003b; Hawley et al., 2002). Nonetheless, bistrategic controllers – unlike unskilled

coercive controllers – appear to be well-liked by peers (Hawley, 2003a, 2003b), likely in part because they are social resources in and of themselves due to their evident social power.

In contrast to the neo-Sullivanian or neo-Piagetian approaches to friendship and intimacy favored by developmentalists, exchange theory perspectives (e.g., Thibaut & Kelley, 1959; Walster, Walster, & Berscheid, 1978) maintain that attitudes toward others (e.g., friends, or potential friends) are based to a large extent on the rewards they bestow (e.g., provisions; Ladd & Kochenderfer, 1996), and therefore, net gains derived from relationships are a function of rewards minus costs. In other words, because all relationships have costs, relationship quality is an economic balance between costs and rewards. Although the present theoretical perspective was not derived from social exchange theory, it shares some predictions based on the economics of interpersonal exchange (see also Laursen, 1996).

Hypotheses of study

The present study is one of a series that builds on the theoretical foundation of resource control theory (Hawley, 1999) and serves as both theoretical and methodological extensions by looking *within* social relationships to explore relationship quality and relationship dynamics as a function of resource control subtype.

Variable-centered hypotheses. Effective resource control should attract others (i.e., the social centrality hypothesis; Hawley, 1999). Accordingly, we hypothesize positive relations between resource control and measures of peer regard, especially friendship aspirations. Because bistrategic and coercive controllers score in opposite directions on positive peer regard variables, we do not expect strong negative correlations between positive peer regard and aggression (i.e., an aspect of the *peer regard–aggression paradox*). Because we claim that these processes maintain over the life span, we do not anticipate changes over time in these relationships (cf. Cillessen & Mayeux, 2004).

Resource control subtypes and friendship nominations. In contrast to variable centered approaches that assume aggression is generally repellent, we do not anticipate bistrategic controllers to experience deficits in friendship nominations (reciprocated or unreciprocated). We predict that bistrategic controllers – male and female – would enjoy as many, if not more, reciprocated best-friend relationships than typical, coercive, and non-controllers. Additionally, we predict that they will receive more (unreciprocated) nominations than average.

Friends of resource control subtypes. Resource control theory suggests that the social group is attracted to high ranking others and this attraction would lead to competition for access to those of higher rank. For this reason, we might expect high-ranked individuals to affiliate with others of high rank, leaving low-ranked individuals to affiliate with other less preferred low-ranked individuals (see also Eder, 1985). In other words, we expect a degree of homophily across the resource control subtypes (see also Farmer & Farmer, 1996; Gest, Graham-Bermann, & Hartup, 2001).

Relationship quality. Economic models suggest that bistrategic controllers make for potent alliance partners. Thus, we

believe the benefits of friendship with bistrategics outweigh the costs. In other words, friends of bistrategic controllers should view these relationships overall in positive terms. However, because bistrategics are aggressive, we anticipate mutual assessments of at least moderate conflict. In contrast, we anticipate that the relationships of coercive controllers will be low on positive features (though similarly highly conflictual). Because prosocial controllers are highly skilled and very socially attractive (e.g., Hawley, 2003b), we anticipate their relationships to be of the highest quality (i.e., low in conflict and high on positive features). As for non-controllers, we believe their relationships will be of the poorest quality as mutually described, even if these relationships are low in conflict, because these individuals bring little to the table and are accordingly low in social capital (Bourdieu, 1984).

Targets of aggression. Because a) a good deal of children's conflict occurs within their friendships (Laursen, 1996), b) bistrategic controllers are aggressive, and c) we believe friendships with bistrategics bear costs, we anticipate aggression to occur within reciprocal bistrategic friendships.

Method

Participants

Youths in Grades 7 through 10 (M age = 14.65 years, $s = 1.25$) were recruited to be representative of the four school types serving West Berlin, Germany (for a review of the German educational system, see Führ, 1997). Specifically, the schools represented vocationally-oriented schools (“Hauptschule”, 5.3% and “Realschule”, 20.3%), comprehensive school (“Gesamtschule”, 28.9%), and grammar school (“Gymnasium”, 45.5%). A native German-speaking member of the research team recruited students and only those who provided written informed parental consent participated (approximately 80% school-wide). A total of 929 children *with at least one reciprocal friend* (522 girls, 407 boys) were included in the present study. The sample was 80.6% ethnic German, 3.4% ethnic Turkish, and 16% other (e.g., Eastern and Western European, North African, Asian). The parents' socioeconomic backgrounds were lower to middle class (Hermann, Imme, & Meinschmidt, 1998).

Procedure

Data were collected in the spring of the 1998 academic year. Participants filled out a battery of randomly counterbalanced questionnaires during three 45-minute sessions spanning approximately 2 weeks in the presence of at least two proctors.¹ All measures were either translated into German from English (using back-translation and bilingual committee evaluation procedures) or adapted from established measures in the literature (except the aggression instrument which was co-developed in English and German).

¹ In Berlin, 7th graders are part of the high school system. For the majority of the sample (depending on school track), youths move across classes, but additionally have some subjects together. Participants were tested when they were in common classes. Additionally, we allowed cross-class nominations.

Sociometric assessment

To obtain peer-reports of peer regard, reputation, aggression, and resource control and strategies employed, we used standard within-classroom limited-choice nomination procedures where participants were asked to nominate up to three peers for each item. Nominations were standardized within classroom to control for class size and any differences in nomination rates among the pools.

In total, eight questions were used to measure various aspects of peer regard and peer status: Peer liking (“Who do you like the most?”, “Who do you like to hang out with?”; $\alpha = .58$), peer disliking (“Who do you like the least?”, “Who do you not like to hang out with?”; $\alpha = .81$), and perceived popularity (“Who do the others like the most?”, “Who is the most popular?”; $\alpha = .89$; Parkhurst & Hopmeyer, 1998). Additionally, two new items “Who would you like to hang out with that you don’t already hang out with?” and “Who do you wish was your friend?” were employed to assess who other youths aspire to be friends with (i.e., Friendship Aspiration $\alpha = .66$). This variable, to our knowledge, has not been used in prior research; however, we include it because it represents a meaningful component of social status in assessing the degree to which peers would affiliate with a child if circumstances allowed or, importantly, if their affinity were reciprocated.

Eight items assess peer-nominated aggression; four assessed overt aggression (“Who starts fights to get what they want?”, “Who pushes, kicks, or punches others because they’ve been angered by them?”; $\alpha = .88$; Little, Brauner, Jones, Nock, & Hawley, 2003) and four assessed relational aggression (e.g., “Who tells their friends to stop liking someone in order to get what they want?”, “Who gossips or spreads rumors about others if they’re mad at them?”; $\alpha = .82$). Two items assessed resource (material and social) control (“Who is best at getting what they want?”, “Who usually gets attention from others?”; $\alpha = .83$). Finally, two items assessed *prosocial strategies* (“Who do others choose to lead the group?”, “Who has good ideas or suggestions that the others like to follow?”; $\alpha = .78$; cf. Hawley, 2006a), and two items assessed *coercive strategies* (e.g., “Who makes others do what they want?”, “Who forces others to follow their plans?”; $\alpha = .85$; cf. Hawley, 2006a). The latter two constructs (i.e., prosocial and coercive strategies) were used to form the resource control subtypes (see below).

Person-centered analyses: Identification of resource control groups

Resource control groups were defined by dividing the distributions of peer-nominations of prosocial and coercive strategy-use constructs into thirds on the full sample (Hawley, 2003a, 2003b; Hawley et al., 2002) making it analogous to sociometric procedures (e.g., Coie & Dodge, 1983). We view this method as preferable to using absolute criteria because social dominance and strategy use is by our definition a relative differential (Hawley, 1999). The five groups were formed as follows: (a) bistrategic controllers (BCs) score in the top 66th percentile on both prosocial and coercive strategies ($n = 164$); (b) prosocial controllers (PCs) score in the top 66th percentile on prosocial control but average or low on coercive control ($n = 185$); (c) coercive controllers (CCs) score in the top 66th percentile on coercive control but average or low on prosocial control ($n = 156$); (d) typical controllers (TCs) score between the 33rd and 66th percentile on one and the lower 33rd

Table 1

Gender distribution for peer-reported resource control groups

	BC	PC	CC	TC	NC	Total
Boys	89 ⁺	71	80	118	49	407
Girls	75	114	76	190	67	522
Total	164	185	156	308	116	929

$\chi^2 = 16.94, 4 df, p < .01$

Note. BC denotes bistrategic controllers; PC denotes prosocial controllers; CC denotes coercive controllers; TC denotes typical controllers; and NC denotes non-controllers. Participants shown here are the 407 boys and 522 girls with at least one reciprocated friendship. Cells with a + superscript were significantly higher than expected by chance. The significant cell for bistrategic boys is primarily due to an over-representation of boys in the bistrategic category in the 8th grade.

percentile on the other ($n = 308$); and (e) non-controllers (NCs) score in the lower 33rd percentile on both dimensions ($n = 116$). Gender distributions for the groups are presented in Table 1. Supplementary analyses showed that the over-representation of boys in the bistrategic group is primarily due to the over-representation of bistrategic boys in the 8th grade.

Unreciprocated best-friend nominations and reciprocal best-friendship dyads. Each participant nominated up to three of their best friends (“Who is your best friend?”, “. . . your second best friend?”, “. . . your third best friend?”). In principle, participants’ names could appear in any one of the three positions from zero times to the number of youths in the class minus one (for the participant). Thus, the number of *unreciprocated best-friend nominations* was only limited by the class size. Pairs of participants were considered *reciprocal best friends* if they named each other as a best friend in any position. Thus, the number of reciprocal best friends a child could range from 0 to 3. Those without a reciprocal best friend were dropped from the present analyses.² Because we have reason to believe that cross-sex friendships differ in important ways from same-sex friendships (e.g., Maccoby, 1990), we included only same-sex dyads in the present study (95% of all reciprocal best friendships in the present dataset). In the end, we obtained friendship ratings on 1494 same-sex friendships (876 girl–girl friendship dyads, 618 boy–boy friendship dyads).

Measures of friendship features. Participants were asked to rate each of their nominated best friendships on general features of their friendships (e.g., closeness, fun, companionship, conflict). Each item was rated on a 4-point scale: “almost never”, “sometimes”, “often”, and “almost always”. *Closeness* was assessed by nine items across three domains (three items each for intimacy, communication, and liking). Examples for intimacy include “Do you share secrets with each other?”, “Do

² Of the original sample, 21.29% dropped from the present study because they did not have a reciprocal best friendship ($n = 430$). The lack of reciprocal relationships, however, was not due to lack of nominations (all participants received at least one best-friend nomination), but rather due to the nomination received not being reciprocated by the target child. Of the children with no reciprocal friends, 79.54% received one or two nominations, 18.61% received three to five, and 1.86% received more than five and up to ten. Children without reciprocal friends differed from children with reciprocal friends in terms of the number of like most and friendship aspirations nominations they received ($p < .01$).

you cheer each other up when one of you is sad?"; examples for communication include "When you have problems, do you talk about them with this friend?", "Is this friend open with you about his/her opinions and thoughts?"; and examples for liking include "How much do you like this friend?", "How much does this friend like you?" ($\alpha = .87$). *Fun* was assessed by three items, including "Do you joke around with this friend?", "Do you do fun things together with this friend?" ($\alpha = .67$). *Companionship* was assessed by four items, for example, "Do you get together with this friend after school?", "Do you do things together on the weekends?" ($\alpha = .87$). *Conflict* was assessed with three items, including "Do you ever argue with this friend?", "Are you ever angry with this friend?" ($\alpha = .76$).

Ratings of best friends' behavior toward the rater.

Ratings of best friends' control strategies over rater. To assess the degree to which control strategies are employed within the relationship, we asked each participant to rate each nominated best friend on the degree to which he/she is prosocially influenced by the named friend (e.g., "Do you look to this friend for answers and decisions?", "Do you like it when this friend makes the plans and decides what to do?"; $\alpha = .59$; cf. Hawley, 2006a) and/or coercively influenced by the named friend (e.g., "Does this friend bully you around?", "Does this friend make you follow his/her plans?"; $\alpha = .50$; cf. Hawley, 2006a).

Ratings of best friend's aggression towards rater. Each participant was asked to assess each of his/her best friend's aggressive behavior toward him or her (i.e., overt and relational aggression). Three items assessed overt aggression: "Does this friend fight with you?", "Does this friend hurt you to get what s/he wants", "Does this friend fight back when s/he feels hurt by you" ($\alpha = .62$). Similarly, three items assessed Relational Aggression: "Does this friend gossip or spread rumors about you?", "Does this friend tell you to stop liking someone to get what s/he wants", "Does this friend tell you that s/he won't be your friend anymore when s/he is angry?" ($\alpha = .70$).

Analytic procedures

To test our hypotheses, we used Mean and Covariance Structures (MACS; Little & Slegers, 2005) modeling techniques. MACS analyses are used for multiple-group comparisons and include mean-level information as well as the covariance structures information of SEM. Like the more familiar SEM (Jöreskog & Sörbom, 2001), MACS models correct for unreliability and allow the testing measurement equivalence across groups. The latter quality allows unbiased comparisons across measures characterized by different levels of reliability (Little, Lindenberger, & Nesselrode, 1999). For unidimensional constructs with more than three items (e.g., closeness), we parceled (a method of aggregation) the items using a random procedure (for details see Little, Cunningham, Shahar, & Widaman, 2002).

We evaluated model fit using standard fit indices, such as the Incremental Fit Index (IFI) and the Comparative Fit Index (CFI), for which values of about .90 and greater are generally deemed acceptable, particularly in the context of multiple-group MACS analyses (cf. Hu & Bentler, 1999; see Little, Card, Slegers, & Ledford, in press). We also used the Root Mean Square Error of Approximation (RMSEA), for which

values of less than .08 are deemed acceptable (see e.g., Little, Card, et al., in press; Marsh, Hau, & Wen, 2004). For strict nested-model comparisons only, we used the maximum likelihood χ^2 statistic. Because the χ^2 is extremely sensitive with large sample sizes, we used a conservative criterion of $\alpha = .01$ for all nested-model comparisons.

To test for similarities and differences in the constructs across genders and types, we specified a series of single construct, 10-group MACS models (five resource control groups by two genders). Across the 10 groups in each model, we specified strong metric invariance (Meredith, 1993) to ensure comparability of the constructs across groups and gender (see also Little, Card, et al., in press). To identify the constructs and reproduce parameter values for the constructs that are non-arbitrary, we used effects constraints such that the average loading for a given construct is equal to one and the sum of the intercepts is equal to zero (see Little, Slegers, & Card, 2006).

To model the mean structures across the 10 groups in each of the models, we equated a chosen set of estimated means and evaluated the constraint(s) as a nested-model comparison (Jöreskog & Sörbom, 2001) with a chi-squared difference test. We conducted omnibus tests of; (a) no mean differences across all 10 groups; (b) self- vs. friend-ratings within each group; (c) gender differences within resource-control types; and (d) resource-control type differences within gender. For example, we placed cross-group equality constraints on a given set of latent mean estimates and evaluated the difference in fit between this constrained model and the unconstrained model. If the difference did not lead to a significant drop in fit, then the statistical evidence indicates that the parameters in each group are statistically indistinguishable. When a constraint led to a significant drop in fit ($p < .05$), it was not enforced. With this approach, the final set of structured means should not differ more than $p = .10$ from the unstructured means (see Little, Card, et al., in press; Little & Lopez, 1997 for details).

In the end, tabled means that do not significantly differ from each other are represented by the same value. Values that differ in the table are in fact significantly different from one another at $p < .01$. Self-report and best-friend reports did not differ significantly and therefore are merged in the final representation.

Results

Relationships among peer regard constructs, aggression, and resource control

Correlations among the peer regard variables, aggression, and peer nominated resource control by gender are presented in Table 2. Because of the large sample sizes (407 boys, 522 girls), correlations are significant $p < .001$ at $r = .08$. For this reason, we will hold our discussion to correlations over a magnitude of $r = .30$. Perceived popularity was positively related to liking in both boys and girls ($r_s = .39$ and $.45$ respectively), as well as to friendship aspirations ($r_s = .46$ and $.43$) and peer nominated resource control in both genders ($r_s = .65$ and $.65$), and yet was unrelated to disliking, overt and relational aggression in both boys and girls. Peer liking was correlated with friendship aspirations in both genders, but the moderate magnitude of these correlations suggests that these constructs are distinguishable ($r_s = .39$ and $.50$). Friendship aspiration was related to peer-nominated resource control in boys only ($r = .31$).

Table 2
Correlations among the peer regard and aggression constructs by gender

	1	2	3	4	5	6	7
1 Perceived popularity	–	.45	–.14	.43	.65	.16	.13
2 Peer liking	.39	–	–.27	.50	.20	–.04	–.09
3 Peer disliking	–.06	–.21	–	–.28	.04	.03	.11
4 Friendship aspirations	.46	.39	–.21	–	.22	–.06	.00
5 Resource control	.65	.17	.19	.31	–	.32	.27
6 Overt aggression	.08	–.08	.16	.02	.22	–	.66
7 Relational aggression	.06	–.06	.19	.02	.18	.68	–

Note. Boys are below the diagonal and girls are above the diagonal. Because of the large sample size, correlations are significant ($p < .001$) at $r = .08$. Correlations with acceptable effect sizes are italic.

Finally, peer nominated overt and relational aggression were correlated in both boys and girls ($r_s = .67$ and $.66$). Additional analyses by grade demonstrated that these patterns did not change demonstrably across grade, as seen in Table 3.

Unreciprocated best-friend nominations and reciprocal best friends

A MANOVA with number of reciprocal friends and number of times nominated as a best friend as dependent variables revealed a multivariate effect of resource control subtype and

gender ($F(8,2966) = 2.281, p < .05$). There was a significant effect of gender, with girls ($M = 2.07$) having more reciprocal best friends than boys ($M = 1.93$: $F(1,1484) = 12.92, p < .001$). The number of reciprocal best friends did not differ across subtypes. The number of times nominated as a best friend (including unreciprocated), however, differed significantly across the subtypes ($F(4,1484) = 20.78, p < .0001$). Scheffe's contrasts indicated that prosocial controllers ($M = 3.49, s = 1.6$) received significantly more best-friend nominations (ignoring reciprocation) than the next highest group, the bistrategic controllers ($M = 3.19$: $F(1,1484) = 6.18, p < .01$),

Table 3
Correlations among the peer regard and aggression constructs by grade

1 Perceived popularity	1	2	3	4	5	6
Grade 7						
2 Peer liking	.44	–				
3 Peer disliking	.04	–.18	–			
4 Friendship aspirations	.41	.61	–.29			
5 Resource control	.73	.19	.22	.18	–	
6 Overt aggression	.04	–.05	.24	–.08	.19	–
7 Relational aggression	.11	–.09	.24	–.09	.23	.64
Grade 8						
2 Peer liking	.48	–				
3 Peer disliking	–.11	–.33	–			
4 Friendship aspirations	.40	.36	–.20			
5 Resource control	.70	.24	.07	.31	–	
6 Overt aggression	.19	–.09	.11	.03	.33	–
7 Relational aggression	.17	–.04	.14	.10	.26	.58
Grade 9						
2 Peer liking	.41	–				
3 Peer disliking	–.11	–.27	–			
4 Friendship aspirations	.51	.45	–.20			
5 Resource control	.68	.11	.04	.22	–	
6 Overt aggression	.18	–.06	–.05	–.04	.35	–
7 Relational aggression	.14	–.09	–.05	.09	.27	.64
Grade 10						
2 Peer liking	.38	–				
3 Peer disliking		–.22	–.16	–		
4 Friendship aspirations	.45	.39	–.31			
5 Resource control	.46	.19	.13	.28	–	
6 Overt aggression	.00	–.08	.12	–.07	.18	–
7 Relational aggression	–.01	–.09	.22	–.02	.12	.48

who, in turn, received significantly more best-friend nominations than the next highest group, the typical controllers ($M = 2.92, s = 1.41; F(1,1484) = 6.67, p < .01$). Coercive controllers ($M = 2.55, s = 1.2$) did not differ from non-controllers ($M = 2.61, s = 1.1; F(1,1484) = .20, p > .10$).

Resource control type by friend type

Table 4 displays the tallies of subtype classification of the targets by the subtype classification of the targets' reciprocated friends. As can be seen, there are 876 girl-girl reciprocal friendships, 42 of which are bistrategic-bistrategic pairs, 30 of which are prosocial-prosocial pairs, etc. Elements on the diagonal are of higher frequency than would be expected by chance suggesting some level of homophily (i.e., bistrategic girls are more likely to have bistrategic friends than expected by chance). There are fewer bistrategic-typical controller friendships and fewer prosocial-coercive and prosocial-typical friendships than expected by chance alone ($\chi^2_{(16)} = 174.48, p < .001$).

A similar pattern emerged for boys. Of the 618 reciprocal best friendships among the boys, 42 are bistrategics with other bistrategics, 40 are prosocial controllers with other prosocial controllers, etc. Like girls, boys demonstrated some degree of homophily in their higher than expected diagonal elements with one exception (coercive-coercive dyads). Additionally, there were fewer prosocial-coercive relationships than would be expected by chance ($\chi^2_{(16)} = 72.36, p < .001$).

Relationship quality

Table 5 shows the results of the final MACS models. Means that do not significantly differ are portrayed as *the same value*. Those means that are not represented as the same value differed significantly ($ps < .01$). The fit of these final

constrained models do not differ from the model in which the means were freely estimated. Moreover, the overall tests of: (a) any differences in the means across all 10 groups; (b) any gender differences within resource control group; and (c) any differences across the resource control groups within each gender group were all significant (all $ps < .01$). The overall tests of self- vs. friend-report differences were all non-significant at the .05 level.

Positive features of friendships. Inspection of the values in Table 5 will reveal: (a) gender differences across the constructs; and (b) differences across resource control groups. Girls' friendships overall, for example, were characterized by higher levels of closeness, fun, and companionship, and lower levels of conflict than were boys' friendships.

For both boys and girls, bistrategic and prosocial controllers enjoy the highest levels of closeness within their best-friend relationships relative to the other groups of that gender (boys: $M_s = 2.98$; girls: $M_s = 3.42$). For boys, the remaining groups did not differ ($M_s = 2.82$). For girls, non-controllers and their friends report the lowest levels of closeness relative to other girls ($M = 3.18$).

Of the boys, bistrategic controllers and their friends report the highest levels of fun in their relationships ($M = 2.72$) while the remaining four groups did not differ from each other ($M_s = 2.58$). For the girls, bistrategic and prosocial controllers and their friends report the highest levels of fun with their friendships ($M_s = 2.93$), while non-controlling girls and their friends report the lowest ($M = 2.50$). Bistrategic boys and their friends report the highest levels of companionship relative to all remaining groups of boys ($M = 1.60$ vs. $M_s = 1.43$), whereas prosocial and coercive girls report the highest levels of companionship relative to other girls ($M_s = 1.67$), with non-controlling girls and their friends reporting the lowest of the girls ($M = 1.43$).

Table 4
Subtype classifications of children and their friend, by gender

Targets' resource control subtypes	Friends' resource control subtypes					Total
	BC	PC	CC	TC	NC	
Girls (<i>n</i> reciprocal relationships = 876)						
Bistrategic controllers	42 ⁺	30	16	20 ⁻	13	121
Prosocial controllers		70 ⁺	14 ⁻	52 ⁻	23	189
Coercive controllers			30 ⁺	45	20	125
Typical controllers				174 ⁺	30	321
Non-controllers					34 ⁺	120
						$\chi^2 = 174.48, 16 \text{ df}, p < .001$
Boys (<i>n</i> reciprocal relationships = 618)						
Bistrategic controllers	42 ⁺	17	31	36	10	136
Prosocial controllers		40 ⁺	10 ⁻	35	14	116
Coercive controllers			26	26	19	112
Typical controllers				70 ⁺	14	181
Non-controllers					16 ⁺	73
						$\chi^2 = 72.36, 16 \text{ df}, p < .001$

Note. BC denotes bistrategic controllers; PC denotes prosocial controllers; CC denotes coercive controllers; TC denotes typical controllers; and NC denotes non-controllers. Cells with a + superscript were significantly higher than expected by chance and cells with a - superscript were significantly lower than expected by chance ($p < .05$).

Table 5
Relationship qualities by resource control group and gender

	Boys					Girls					$\chi^2_{(df), p}$
	BC	PC	CC	TC	NC	BC	PC	CC	TC	NC	
<i>Friendship features</i>											
Closeness	2.98	2.98	2.82	2.82	2.82	3.42	3.42	3.33	3.33	3.18	$\chi^2_{(15)} = 16.87, p = .33$
Fun	2.72	2.58	2.58	2.58	2.58	2.93	2.93	2.72	2.72	2.50	$\chi^2_{(16)} = 13.77, p = .62$
Companionship	1.60	1.43	1.43	1.43	1.43	1.60	1.67	1.67	1.60	1.43	$\chi^2_{(17)} = 16.13, p = .51$
Conflict	1.99	1.84	1.99	1.84	1.84	1.84	1.68	1.84	1.68	1.68	$\chi^2_{(17)} = 17.17, p = .44$
<i>Behavior toward rater</i>											
Coercive control	1.91	1.91	1.91	1.82	1.82	1.91	1.91	1.91	1.82	1.82	$\chi^2_{(18)} = 13.52, p = .76$
Prosocial control	1.95	1.95	1.95	1.84	1.84	1.95	1.90	1.84	1.84	1.70	$\chi^2_{(17)} = 10.40, p = .89$
Overt aggression	1.73	1.54	1.73	1.54	1.54	1.54	1.39	1.39	1.34	1.34	$\chi^2_{(16)} = 14.17, p = .59$
Relational aggression	1.43	1.27	1.43	1.27	1.27	1.27	1.16	1.16	1.16	1.16	$\chi^2_{(17)} = 18.32, p = .37$

Note. BC denotes bistrategic controllers; PC denotes prosocial controllers; CC denotes coercive controllers; TC denotes typical controllers; and NC denotes non-controllers.

Conflict. Despite the closeness, fun, and companionship within the friendships of bistrategic controllers, the relationships of the bistrategic boys are among the most conflictual as are those of the male coercive controllers ($M_s = 1.99$). A similar pattern emerged for the girls; both bistrategic and coercive controllers and their friends report the highest level of conflict relative to the girls ($M_s = 1.84$).

Influence and aggression within friendships

Coercive and prosocial strategies. As can be seen in Table 5, for both male and female bistrategic, prosocial, and coercive controllers, all report relatively high levels of coercive strategies within the relationship ($M_s = 1.91$ vs. $M_s = 1.82$ for typical and non-controllers). A similar pattern emerged for the boys on prosocial strategies. Within the girls, however, bistrategic controllers reported experiencing the highest levels of prosocial strategies within their relationships, followed by the prosocial controllers. The lowest levels of prosocial strategies occurred within the relationships of female non-controllers.

Overt and relational aggression. In the boys, both bistrategic and coercive controllers reported experiencing the highest level of overt aggression within the relationship ($M = 1.73$ vs. 1.54). Although bistrategic girls are similarly experiencing high levels of overt aggression within their relationships ($M = 1.54$), girls' levels overall are lower than boys' levels. In fact, the highest level of overt aggression experienced by the girls equals the lowest level experienced by the boys. A similar pattern emerges on relational aggression; bistrategic and coercive boys are experiencing the highest levels ($M = 1.43$), while the bistrategic girls are experiencing the highest levels relative to girls ($M = .27$), but at a level equal to the lowest level reported by the boys.

Discussion

We opened with the question "What is the allure of the mean friend?", clearly taking literary license in referring to aggressive youths as "mean". Our questions, of course, are more

serious and more specific; namely, why do peers (here, adolescents) seem to be drawn to the powerful but highly aggressive bistrategic controllers?

Resource control theory suggests that it is not the aggression per se that either attracts or repels peers, but rather effectiveness at goal attainment. By adopting this theoretical perspective, we are not arguing that aggression is "good" or "desirable". Instead, our intention is to highlight that aggression appears to be profitably utilized by some youths in ways that allows them to achieve their goals effectively, and at the same time win (or, fail to lose) them the esteem of their peers. Accordingly, we hypothesized that peer-nominated resource control would be related positively to positive peer regard variables, that aggression and positive peer regard would not be negatively correlated, and that these patterns would replicate for older children. Our hypotheses were largely substantiated.

First, resource control was most consistently related to perceived popularity across all grades. This finding fits well the social centrality hypothesis of resource control theory that states other group members should grant status to socially dominant (effectively competitive) peers. This expectation finds its roots in the early primatological literature which has repeatedly suggested that social dominance is first and foremost about resource control (social and material), and the resulting hierarchy is fundamental to other aspects of social organization such as grooming patterns, heterosexual attention (Pellegrini & Long, 2003), affiliation, gaze, and submissiveness (Scott, 1956; Yerkes, 1925). Thus, it is important to distinguish resource control and social prominence conceptually in order to explore empirically their relationships and developmental courses. Both concepts have independent histories, and accordingly are typically found in different literatures. Our body of work, the present study included, is an attempt to bridge these literatures.

Despite the strong relations among resource control and perceived popularity, and the modest correlations among the aggression variables and resource control, overt and relational aggression were strongly related neither to perceived popularity, liking, nor disliking in this German sample (Tables 2 and 3). Additionally, perceived popularity and liking were positively

correlated for all age groups with no notable reduction over time. Thus, we did not replicate the “censure to reinforcement” model (Cillessen & Mayeux, 2004), nor did we find a strong aggression-status (perceived popularity) link. There are many possible reasons why we failed to replicate these patterns. Perhaps, for example, German youths do not ascribe the same meaning to “popularity” as American youths. Additionally, we did not measure social preference per se, but rather its component parts, liking and disliking (nor did we compute perceived popularity as a difference score). Furthermore, our data were cross-sectional rather than longitudinal. In any case, our person-centered approach was designed to help illuminate the correlational nexus.

Gender and resource control subtype

The boys and girls of this study (i.e., participants who have at least one reciprocal friend; cf. Hawley et al., 2005) are largely equally distributed among the resource control subtypes (Table 1). This pattern of girls holding high status positions has been replicated in several studies across multiple age groups (see, for example, Hawley, 2002; Hawley, 2003b; Hawley & Little, 1999; Hawley et al., 2002) and thus is not a novel contribution of the present study.

Reciprocal friendship and friendship nominations

The girls in our study had more reciprocal friendships than boys, which replicates what has been found by others (e.g., Furman, 1996; Parker & Asher, 1993). More important to the present thesis, however, was the differential reception of the resource control types, especially as the social dominance typology relates to aggression. In terms of the number of reciprocal friendship nominations, the resource control subtypes did not differ. This finding may have resulted from our limiting the number of best friends that a child could nominate and describe to three (Furman, 1996). This limitation, though practical from an assessment standpoint, may have restricted variability on this metric. In contrast, the resource control subtypes differed in the number of *unreciprocated* nominations they received (a metric that by the nature of the data collection protocol is much less constrained). Prosocial controllers as a group received the highest number of nominations for best-friend status (see also Gest et al., 2001). Bistrategic controllers, ranked second on this dimension, receiving significantly more nominations than typically controlling children, a group usefully considered average. Coercive controllers and non-controllers had significantly fewer nominations than the other groups, and as such, tied for last. Thus, it would be incorrect to conclude that all aggressive children are at risk for experiencing deficits in their friendship circle; bistrategics, in contrast to coercive controllers, apparently have plenty of candidates for friends to choose from.

Who are their friends?

In the present study, we derived our resource control subtypes via peer nomination (cf. Hawley, 2003b). Our cross-tabulation analysis showed that there was some tendency for members of a given resource control subtype to be reciprocal best friends with others of the same type (see Table 3). This finding is consistent with work that shows youths are attracted to those who are similar on some dimensions (e.g., homophily; Gest

et al., 2001) as well as work that suggests some youth cliques are higher status than others and are accordingly exclusive (Adler & Adler, 1996; Eder, 1985; Cillessen & Mayeux, 2004). We view these results with some caution, however, because of the peer nomination procedure. Peers may see individuals who hang out together in the same light. In other words, peer reputation may be driving this finding.

Relationship quality

Aggression is typically assumed to inhibit healthy relationship processes from variable centered approaches. However, bistrategic controllers enjoy many positive features in their friendships. For both boys and girls, bistrategic friendships are among the closest, the most fun, and in boys, of highest companionship levels. On these dimensions then, friendship quality of bistrategics is on par with those of prosocial controllers. Yet, friendships with bistrategics are evidently not without their wrinkles; in terms of conflict, they are comparable to the relationships of coercive controllers. Furthermore, it appears that the friends of bistrategic, prosocial, and coercive controllers feel that they are coercively controlled by their friends as can be seen in the relatively high (though low in an absolute sense) within-relationship coercive strategies ratings (though it should be noted, low in an absolute sense).

In asking “To whom are coercive children aggressive?”, we find at least part of the answer lies within the child’s own best-friendship circle. In boys, for both bistrategic and coercive controlling friendships, we see the highest levels of overt and relational aggression reported within friendships (see Table 4). For girls, the highest levels of relational and overt aggression within the relationship appear to occur in the friendships of bistrategic girls. As can be seen in Table 5, children report higher levels of overt aggression within their relationships than relational aggression. This pattern was unexpected. It could be that our overt aggression items describing one’s best friend may capture “argumentativeness” rather than verbal or physical assault (cf. Hawley, 2006a), and, if this is the case, the uncovered patterns become less surprising.

If bistrategic controllers can be considered “mean” because of their high aggression levels both overall (in terms of self-report and peer nomination; Hawley, 2003b) and to their best friends (both overt and relational), then we must conclude that mean friends of a certain ilk hold more than a little allure in the peer group.

Though the present study focused on dyad-level processes, the pattern of interpersonal attraction by type is consistent with ecological approaches focusing on social networks and embeddedness (e.g., Cairns, Xie, & Leung, 1998; Farmer & Farmer, 1996; Gest et al., 2001). These approaches have shown, for example, that network centrality can be maintained by way of leadership skills (Farmer & Rodkin, 1996; Gest et al., 2001) such as those displayed by prosocial controllers, as well as aggression (Bagwell et al., 2000; Farmer, Estell, Bishop, O’Neal, & Cairns, 2003; Xie, Cairns, & Cairns, 1999). We can thus surmise that positive leadership skills backed with aggression is a potent recipe for power (see also Hawley, 2006b; Machiavelli, 1513/1966).

Although the “skills” of bistrategic controllers may seem exaggerated or even illusory, the present data support the unorthodox contention that their skills, and therefore their appeal, are very real (see also Hawley, 2002, 2003b). Not only do bistrategic controllers enjoy friendships, they enjoy

friendships that are among the highest on intimacy and companionship and are among the most fun. Yet, they are not conflict free. In these senses, perhaps bistrategics are rather like sociometric controversials. Though less is known about controversial children than other sociometric classifications, they are known to engage in relatively high rates of positive interactions (Newcomb, Bukowski, & Pattee, 1993) and to be perceived as leaders (Bagwell et al., 2000), but are additionally perceived as aggressive and arrogant (Hatzichristou & Hopf, 1996).

Are relationships that are high on positive features and high on negative features in the end “high quality”? Gottman (1994) has argued that high and low functioning couples are less different in terms of conflict frequency than they are in how the conflict is resolved (see also De Waal, 2000). In the words of one college student explaining why she maintained a close relationship with another bistrategic woman, “no matter how often she left me waiting, she always apologized in ways that somehow made it difficult to stay mad” (see also Laursen, Hartup, & Koplas, 1996).

The present study, of course, did not address in any detail the nature of friendship conflict nor how it was resolved. The issue could simply be a matter of relationship economics (e.g., Laursen et al., 1996): The joys of affiliating with a bistrategic controller may outweigh the costs of doing so. Indeed, a former friend of Jackie Cohen claims that her “meanness” was a large part of her allure; it was related to the “certain quality” that Jackie demanded of her friends. There was excitement in never knowing when one’s turn came for being “on the outs” (Glass, 2003).

Conclusions

“It’s kind of like the Laws of Nature; someone will always be on top . . . Once people get the idea that they have that power, they’re going to use it. And they know they get to be mean to people and still be loved by everyone.” Former Popular Bully, Age 15 (Glass, 2003)

In the end, we return to our evolutionary meta-theoretical roots. Group life brings with it joys of safety, aid, and resource abundance, both social and material. Yet unavoidably, it brings within-group competition as well, a point clearly recognized by Darwin himself. Resource control theory posits that very high status individuals will be aggressive yet esteemed. By exploring social dominance relations across the lifespan, we attempt to illuminate perhaps one of the less attractive social forces, and additionally weigh in on the *peer regard–aggression paradox*.

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