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Adolescent Controversial Status Brokers: A Double-Edged Sword

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Using a 3-wave longitudinal, multidimensional approach, this study investigated the influence of social network position and social status on the psychosocial outcomes of 440 youth (45.1% girls; M_{age} = 16.1 years; 90.9% Caucasian) over 26 months, focusing on the controversial status classification (i.e., youth who are highly liked and disliked by their peers). Brokerage (i.e., the degree to which a person has relationships with peers who do not have a direct relationship with each other) was examined in conjunction with sociometric status to explain potential heterogeneity of outcomes for controversial status youth. Adolescents completed peer nominations and self-reports of adjustment. Results demonstrated that brokerage was related to poorer psychosocial outcomes for controversial compared to average status youth. Brokerage appears to add predictive value to youths' adjustment beyond traditional sociometric classifications, especially for controversial status youth.

Keywords: peer relations, social networks, sociometric status

Forming relationships with peers is an important developmental task in adolescence that has critical effects on psychosocial adjustment. Whether in school settings or elsewhere, youth who are socially accepted experience fewer negative outcomes than those who are socially rejected (Kupersmidt & DeRosier, 2004). Nonetheless, the relation between peer relationships and adjustment is complex. For example, research has shown that accepted youth can report adverse outcomes, particularly if they are involved with peers who engage in maladaptive behaviors such as alcohol abuse or aggression (Ettekal & Ladd, 2015; Giletta, Scholte, Engels, Ciairano, & Prinstein, 2012).

Examining peer relationships has long been dominated by methods to identify youths' sociometric status, or the extent to which one is liked or disliked by a peer group (Jiang & Cillessen, 2005). In these studies, individual sociometric status is determined through a count of dyadic ratings (i.e., friends rating each other), without considering the relational structure in which the dyad is embedded. In contrast, a newer line of research has focused on how peer relationships are influenced by global network structures (see McFarland, Moody, Diehl, Smith, & Thomas, 2014 for a recent review). Studies examining adolescent social networks have shown that network position predicts important aspects of individual adjustment, such

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as identity formation and maintenance (Mcfarland & Pals, 2005), substance abuse (Kobus & Henry, 2010), classroom performance (Wilson, Karimpour, & Rodkin, 2011), and suicide ideation (Bearman & Moody, 2004). Nevertheless, little research has considered how these relationships may themselves be influenced by membership in a particular sociometric status group.

We contend that focusing on network placement and sociometric status provides school-based practitioners a more nuanced understanding of adolescent peer relationships as they unfold over time to influence psychological and social adjustment (Gilman, Schonfeld, & Carboni, 2009). Thus, this longitudinal study represents one of the first to focus on specific types of youth identified by position in the global network structure (brokers) and by sociometric methods to classify group status as commonly accepted in the developmental literature. Although an array of status groups are included, we were particularly interested in youth who are liked by some and disliked by others (i.e., controversial youth).

The Concept of Brokerage

Within any social network, brokers are individuals who have direct relationships with peers who themselves do not have a direct relationship with each other (Granovetter, 1973). To illustrate, given relationship A ↔ B ↔ C, person B is a broker. Brokerage may arise for many reasons, such as an individual who has friends in nonoverlapping subgroups or an individual whose friends actively dislike each other. In any event, because persons A and C do not have a direct relationship with each other, they are each likely to have information that the other does not have, and they can only receive information through person B. There are advantages to being a broker. For example, brokers can leverage their position to access novel and diverse information and by controlling how (or if) it is communicated from one part of the network to the other. They are also in a position to "play" friends off one another for personal gain (Burt, 1992, 2005). Even if brokers do not actively leverage their position, they are more likely to be perceived as "leaders" (Burt, 2005).

Despite these perceived social advantages, the position may also confer psychological disadvantages. For example, brokers may exhibit higher levels of anxiety or worry (e.g., Kalish & Robins, 2006). Among adolescent girls, brokers (vs. nonbrokers) reported higher levels of suicide ideation and social stress (Bearman & Moody, 2004) and lower life satisfaction (Carboni & Gilman, 2012). Given these findings, various authors have speculated that serving as a broker may place stress on some adolescents by forcing them to juggle multiple identities and roles (Carboni & Gilman, 2012; Mcfarland & Pals, 2005).

The Role of Brokerage and Social Status

However, with the exception of gender, no other study has examined potential group differences with respect to brokerage. Social status is a plausible focus given that different status groups report different outcomes. For example, using the classification approach pioneered by Coie, Dodge, and Coppotelli (1982), youth identified as "popular" consistently report higher levels of psychological and behavioral adjustment than youth who are identified as "rejected" or "neglected" by peers (Wentzel, 2003). Outcomes are less clear for the infrequently studied "controversial youth," perhaps because they are similar to popular (e.g., high sociability) and rejected youth (higher levels of aggression; Cillessen & Mayeux, 2004; Woodhouse, Dykas, & Cassidy, 2012). For example, whereas some studies have found that controversial status youth report positive social outcomes, such as low levels of loneliness (Woodhouse et al., 2012), others have found them to be equally or even more at risk than rejected youth for certain adverse outcomes (e.g., Aloise-Young & Kaeppner, 2005).

There are several reasons why the brokerage position may affect controversial youth differently compared with other status groups. Social awareness is a hallmark of adolescent development (Steinberg, 2014), and the realization that one is accepted by some and rejected by others may lead youth to question their self-identity and self-worth, generating distress. Brokerage is already likely to be a stressful experience for some given that the individual must understand and navigate through different group norms and expectations. In addition, considering that controversial status youth are perceived by

peers as being aggressive (e.g., Newcomb, Bukowski, & Pattee, 1993) and socially irresponsible (Wentzel, 2003), it may be that controversial status brokers manage the broker position less adaptively than their peers in other sociometric groups; therefore, they experience poorer outcomes. For example, they may be more likely to use their relationships as a source of power, rather than social support, and they may experience stress as a result of ongoing efforts to maintain their social power.

Current Study

The current study examined longitudinal associations between brokerage and adjustment for controversial status youth in comparison to their popular, average, and rejected status peers. (Neglected youth are defined as those having few social relationships and were therefore excluded from analyses). Data were collected in three waves over 26 months. Given previous findings relating brokerage to social stress (Carboni & Gilman, 2012) and psychological distress (Kalish & Robins, 2006), we were interested in how brokerage relates to youths' self-reported social and psychological adjustment, especially for controversial status youth.

We predicted that for controversial status youth, brokerage would predict positive social but negative psychological adjustment outcomes because the toll of managing different social groups would result in lowered psychological functioning (Bearman & Moody, 2004; Carboni & Gilman, 2012). In comparison to controversial status youth, brokerage was not expected to relate to poor adjustment for youth belonging to other sociometric classifications. For example, brokers who were popular likely possess the necessary social skills to manage the multiple roles associated with brokerage (Mcfarland & Pals, 2005; Newcomb et al., 1993). Conversely, rejected youth (e.g., those who are shunned due to high levels of disruptive behaviors) tend to find others with similar tendencies (Hoff, DuPaul, & Handwerk, 2003). Thus, if these youth do serve as brokers, then they likely link between groups with similar behavioral profiles and norms.

Method

Participants and Procedure

Over the three data collection periods, 616 students from one high school (grades 9–12) in the greater Cincinnati, Ohio region completed the survey, with 440 (71.4%) having complete data for a minimum of two consecutive time points allowing them to be included in longitudinal analyses. At Time 1 (T1), 315 students completed the survey, with 245 of those students also completing the survey at Time 2 (T2; 77.8%). At T2, 479 students completed the survey, with 406 also completing the survey at Time 3 (T3; 84.6%). The difference in enrollments between T1 and T2 was due to the influx of new students into the school system. Of the participants included in analyses, 213 (48.4%) provided data at all three time points. The remaining 227 students (51.6%) provided data at two time points, with 59 (26.0%) providing data at T1 and T2 and 168 (74.0%) providing data at T2 and T3.

Demographic characteristics were assessed at T1 and T2. There were 245 participants at T1 (55.9% girls; M_{age} = 15.2 years, SD = 0.47, R = 14.0–15.0) with a primarily Caucasian ethnic composition (90.6% Caucasian, 6.9% African American, 2.5% other). Fifty-nine participants (24.1%) reported receiving free or reduced lunches. There were 406 participants at T2 (45.1% girls; M_{age} = 16.1 years, SD = 0.40, R = 15.0–18.0; 90.9% Caucasian, 7.1% African American, 2.0% other), with 88 participants reporting receiving free or reduced lunches (21.7%). Participants included in longitudinal analyses did not differ from the students who were not included in analyses in gender composition ($\chi^2(1) = 0.06$, $p = .86$) or lunch status ($\chi^2(1) = 2.77$, $p = .10$). There were differences in age, such that participants included in analyses were younger than those excluded at T1 ($t(363) = 3.75$, $p < .001$) and T2 ($t(511) = 5.23$, $p < .001$). In terms of ethnicity, there was a greater proportion of students identifying as Caucasian in the sample used for analyses compared with the participants excluded from analyses ($\chi^2(2) = 23.13$, $p < .001$).

Passive consent procedures were used such that parents received the consent letter and a letter of support from the school. Parents could choose to have their child opt out of the survey

up to 24 hr before data collection. Students without parental consent ($n = 6$) participated in a noneducational activity. After providing assent, students completed surveys on school computers that took approximately 1 hr. Sessions were monitored by a teacher, researcher, or administrator to address questions or disruptive behavior. T1 data collection occurred during the spring of the students' freshman year, T2 during the fall of their junior year (19 months from T1), and T3 during the following spring (26 months from T1; 7 months from T2).

Measures

Sociometric status. Participants completed peer nominations that included all student names presented in alphabetical order within the same grade level, excluding the names of students without parental consent. Participants could choose 3–10 students who they considered to be "close friends" or "at least somewhat close to." This range was chosen given research that four to five friends constitutes the average number of friends endorsed by adolescents (Steglich, Snijders, & West, 2006). These nominations served as Liking scores. In a separate set of nominations, students were asked to choose up to seven names of students they "definitely do not get along with." These nominations served as Disliking scores.

In their seminal paper, Coie and colleagues (1982) originally classified children into five social statuses, including popular, controversial, average, rejected, and neglected, on the basis of standardized scores of liking and disliking used to generate social preference scores (liking minus disliking) and social impact scores (liking plus disliking). Subsequent studies have demonstrated the importance of considering Social Preference and Social Impact when classifying youths' peer statuses because both dimensions provide insights into youth adjustment (e.g., Wentzel, 2003; Woodhouse et al., 2012). Liking and Disliking scores from T1 and T2 were converted into *z*-scores to compute sociometric status groups (Coie et al., 1982). Specifically, Social Preference was computed by subtracting the Disliking from the Liking ratings whereas Social Impact was computed by adding the two ratings. Controversial status included students with Social Impact scores greater than 1, Liking scores greater than 0, and Disliking scores greater than 0. Average status included students with Social Preference scores between 0.5 and −0.5 and Social Impact scores less than 1. Popular status included students with Social Preference scores greater than 1, Liking scores greater than 0, and Disliking scores less than 0. Rejected status included students with Social Preference scores less than −1, Liking scores less than 0, and Disliking scores greater than 0.

At T1 ($n = 245$), 25 students were classified as controversial, 148 as average, 49 as popular, and 16 as rejected. At T2 ($n = 479$) there were 53 students classified as controversial, 241 as average, 89 as popular, and 55 as rejected. The stability of sociometric status classifications was examined between T1 and T2. For the controversial status, 52.0% of youths' statuses remained stable across time points, 68.9% for average, 40.8% for popular, and 50.0% for rejected. Similar stabilities were reported in high school students' sociometric statuses across a 12-month period (Cillessen, Bukowski, & Haselager, 2000; Franzoi, Davis, & Vasquez-Suson, 1994).

Brokerage. Brokerage captures the extent to which a student, referred to as *ego,* has a positive relationship with individuals who do not have positive relationships with each other. To calculate this variable, matrices were created based on all positive nominations. At each time point, a positive relationship matrix was created in which cell Xij was coded as 1 if student i reported being at least "somewhat close" to student j. At T1, a 245 × 245 matrix was created; at T2, a 479 × 479 matrix was created. The brokerage variable was measured as ego-betweenness centrality, as calculated by UCINET 6.311 for Windows (Borgatti, Everett, & Freeman, 2002).

Ego-betweenness centrality is equal to the sum of the proportion of times an ego lies on the shortest path between each pair of ego's friends (Freeman, 1979). Ego's friends are defined as the set of students who either nominated the ego or were nominated by the ego; a "path" is created by the flow of relationships that connect individuals. In relationship A → B → C, if two friends are unconnected to each other (i.e., not A → C), then the contribution of that pair to student B's ego-betweenness is 1. For each pair of B's friends in which B does not serve as the only connection between two friends (i.e., A → B → C and A → C), the contribution of that pair

to B's ego-betweenness is 0. In those cases the contribution is 1/*k*, where *k* is the number of the ego's friends that connect with each other. Ego-betweenness centrality was normalized by a function of the number of ego's friends. All students were required to nominate at least three other students; therefore, all students had at least three friends.

Social and psychological outcomes. Students reported on their social and psychological adjustment using the Behavioral Assessment for Children-2 (BASC-2; Reynolds & Kamphaus, 2004). The current study used the Social Stress, Interpersonal Relations, Depression, and Self-Esteem scales. Each scale contained questions answered "True" or "False" or on a 4-point scale (1 = *never*, 4 = *almost always*). The BASC-2 has been demonstrated to show convergent validity and strong internal and test–retest reliabilities with adolescent samples (Reynolds & Kamphaus, 2004). Internal consistencies are reported using the ω coefficient with 95% confidence intervals (CIs as recommended; Dunn, Baguley, & Brunsden, 2014).

Social outcomes. The Social Stress and Interpersonal Relations scales measured students' perceptions of their social functioning, with higher scores reflecting poorer social functioning. The Social Stress Scale (10 items) measures perceptions of tension within personal relationships and feelings of exclusion (e.g., "I feel out of place around people."). Internal reliability for the current study ranged from excellent to good (T1 = .90, 95% CI [.88, .92]; T2 = .88, 95% CI [.86, .90]; T3 = .90, 95% CI [.72, .82]). The seven-item Interpersonal Relations Scale assesses students' perceptions of having good relationships with friends and peers (e.g., "I am liked by others."). There was good internal reliability (T1 = .79, 95% CI [.72, .84]; T2 = .79, 95% CI [.72, .82]; T3 = .78, 95% CI [.73, .82]).

Psychological outcomes. Students reported on their psychological functioning using the Depression and Self-Esteem scales. The 12-item Depression Scale (e.g., "I feel sad.") had good internal reliability (T1 = .88, 95% CI [.85, .88]; T2 = .86, 95% CI [.83, .88]; T3 = .89, 95% CI [.86, .90]). Higher scores on this scale represent greater depressive symptoms. The eight-item Self-Esteem Scale (e.g., "I feel good about myself.") showed good internal reliability (T1 = .87, 95% CI [.85, .90]; T2 = .88, 95% CI [.84, .90]; T3 = .89, 95% CI [.87, .91]). For this scale, higher scores reflect more positive self-esteem.

Analytic Approach

Longitudinal analyses were used to examine effects of brokerage and social status on participants' social and psychological outcomes, including (a) main effects of brokerage, (b) main effects of social status, and (c) interaction effects between brokerage and social status. Dependent variables were lagged within participants to test effects over time. Social status was represented using three dummy-coded variables that compared the controversial, popular, and rejected classifications to the average classification (e.g., Newcomb et al., 1993; Wentzel, 2003). The lagged brokerage variable was standardized and interaction terms were computed between brokerage and the social status dummy codes.

To test main effects and interactions of brokerage and social status, we used a generalized estimating equation (GEE). This approach accounts for nonindependence by correcting for correlated dependent variables within subjects (Liang & Zeger, 1986; Twisk, 2003). Using a GEE offers advantages in the analysis of longitudinal data that accommodated certain characteristics of the current dataset: (a) three time points, (b) unequal lengths of time between time points, and (c) different sample sizes at each time point (Twisk, 2003; Vens & Ziegler, 2012).

Results

Preliminary Analyses

To correct for observed skew, the outcome variables were transformed using a square-root transformation (see Tabachnick & Fidell, 2013; values ranged from −1.26 to 2.89). Correlational analyses examined the stability of the outcome variables from T1 to T2 and T2 to T3. All outcome variables showed moderate to strong correlations over time (see Table 1). Brokerage demonstrated a weak positive but statistically significant correlation from T1 to T2, $r = .15$, $p = .01$. Demographic variables (gender, age, ethnicity, and socioeconomic status [SES])

Table 1
Stability of Outcome Variables From T1 to T2 and T2 to T3

Outcome variable	1	2	3	4	5	6	7	8
1. Social stress (lag)	—	.66	.73	.65	.64	.45	.46	.46
2. Interpersonal relations (lag)	.66	—	.53	.52	.51	.56	.31	.37
3. Depression (lag)	.70	.55	—	.67	.49	.33	.52	.45
4. Self-esteem (lag)	.63	.53	.64	—	.45	.38	.40	.63
5. Social stress	.76	.58	.63	.57	—	.67	.69	.67
6. Interpersonal relations	.58	.72	.49	.50	.68	—	.58	.56
7. Depression	.56	.45	.66	.56	.73	.61	—	.67
8. Self-esteem	.53	.48	.53	.77	.65	.62	.70	—

Note. Correlations for T1 (lag) outcomes and T2 outcomes are displayed in the upper diagonal ($n = 245$), and correlations for T2 (lag) outcomes and T3 outcomes are displayed in the bottom diagonal ($n = 406$). All correlations are significant at $p < .01$.

at T1 and T2 were then correlated with outcome variables at the subsequent time points (see Table 2). Demographic variables that were significantly or marginally associated with outcome variables at any time point were included as covariates in longitudinal analyses for the appropriate outcome.

Longitudinal Analyses

Four GEEs tested the longitudinal main effects and interactions of brokerage and sociometric status on social stress, problems with interpersonal relationships, depression, and self-esteem. Covariates included gender (1 = male, 0 = female), age (in years), and SES (1 = reduced lunch program, 0 = no reduced lunch program). Duration between time points and interactions between duration and the predictors were tested as parameters in each GEE. All interactions with duration that were nonsignificant were excluded from the final models. When significant, duration was included as a covariate. Influential outliers with studentized residuals greater than 3.29 were excluded from analyses ($n = 10$; Cohen, Cohen, West, & Aiken, 2003). Full results are displayed in Table 3. Only significant main effects and interactions are reported.

Social outcomes. Controversial status predicted lower social stress over time ($b = -0.24$, $p = .003$), although this finding is qualified by a significant interaction between controversial status and brokerage ($b = 0.23$, $p = .007$). Simple slope analyses determined that for con-

Table 2
Correlations Between Demographic Variables and Outcome Variables for T1 to T2 and T2 to T3

Measures	1	2	3	4	5	6	7	8	*M*	*SD*
1. Gender	—	$.27^{**}$	$-.01$	.09	$-.04$	$-.09$	$-.11^{+}$	$.22^{**}$	—	—
2. Age	$.17^{**}$	—	$-.14^{*}$	.06	.03	.03	$-.01$	.04	15.13	.47
3. Ethnicity	$-.03$	$-.03$	–	$-.28^{**}$	$-.07$	.01	$-.13^{*}$	.07	–	—
4. SES	$.11^{*}$	.06	$-.23^{**}$	—	$.17^{*}$	.07	$.22^{**}$	$-.11^{+}$	—	—
5. Social stress	$-.12^{*}$	$-.11^{*}$	$-.04$	.07	—	$.70^{**}$	$.72^{**}$	$-.68^{**}$	47.07	11.37
6. Interpersonal relations	$-.11^{*}$	$-.08^{+}$	$-.003$	.04	$.72^{**}$	—	$.55^{**}$	$-.58^{**}$	53.67	9.10
7. Depression	$-.12^{*}$	$-.06$	$-.02$	$.09^{+}$	$.73^{**}$	$.62^{**}$	—	$-.68^{**}$	47.40	9.09
8. Self-esteem	$.30^{**}$	$.15^{**}$	.004	$-.03$	$-.69^{**}$	$-.63^{**}$	$-.74^{**}$	—	50.03	11.01
M	—	16.05	—	—	48.40	53.70	48.82	49.34		
SD	—	.04	—	—	12.44	9.00	10.42	11.79		

Note. Correlations for T1 demographic variables and T2 outcome variables ($n = 245$) are presented the top diagonal with descriptive information in the vertical columns. Correlations for T2 demographic variables and T3 outcome variables ($n = 406$) are presented in the bottom diagonal with descriptive information in the horizontal rows. Means for BASC-2 variables are presented as *t*-scores.
$^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$.

Table 3
Standardized Betas and CIs for Longitudinal Analyses (GEEs)

	Social stress		Interpersonal relations		Depression		Self-esteem	
	b	95% CI	*b*	95% CI	*b*	95% CI	*b*	95% CI
Covariates								
Lagged dependent variable	.77***	[.72, .82]	.71***	[.64, .78]	.68***	[.61, .75]	.72***	[.66, .77]
Gender	−.09	[−0.19, .02]	−.11*	[−.22,−.01]	−.13*	[−.24,−.01]	.21*	[.10, .32]
Age	.03	[−.03, .09]	−.01	[−.19, .14]	—	—	−.03	[−.18, .10]
SES	.06	[−.06, .18]	—	—	.04	[−.10, .19]	.03	[−.08, .03]
Duration	—	—	−.08*	[−.15,−.003]	−.09**	[−.15,−.03]	—	—
Main effects								
Brokerage	−.04	[−.10, .03]	−.10**	[−.16,−.03]	−.10**	[−.17,−.03]	.06	[−.001, .12]
Controversial	−.24**	[−.39,−.08]	.01	[−.17, .19]	−.10	[−.29, .09]	.20*	[.03, .38]
Popular	.03	[−.11, .16]	−.05	[−.19, .09]	−.04	[−.19, .11]	.09	[−.05, .23]
Rejected	−.02	[−.19, .15]	.21*	[.004, .41]	.03	[−.18, .23]	.04	[−.14, .22]
Interactions								
Controversial × Broker	.23**	[.06, .40]	.27**	[.09, .46]	.26*	[.04, .47]	−.30***	[−.46,−.14]
Popular × Broker	.001	[−.14, .14]	−.03	[−.20, .14]	.14	[−.05, .32]	.02	[−.10, .14]
Rejected × Broker	−.02	[−.13, .10]	.04	[−.10, .19]	.04	[−.10, .19]	.02	[−.10, .14]

Note. All continuous variables were converted to *z*-scores for analyses.
* $p < .05$. ** $p < .01$. *** $p < .001$.

troversial status students, brokerage predicted greater social stress ($b = 0.32$, $p = .02$) but did not have an effect for average status students ($b = -0.06$, $p = .25$).

Rejected status predicted greater dissatisfaction with interpersonal relations ($b = 0.21$, $p = .04$) and brokerage predicted less dissatisfaction with interpersonal relationships ($b = -0.10$, $p = .003$). The interaction between controversial status and brokerage was significant ($b = 0.27$, $p = .004$), such that brokerage predicted less dissatisfaction with interpersonal relationships for average status students ($b = -0.13$, $p = .003$) and greater dissatisfaction with interpersonal relationships for controversial status students ($b = 0.23$, $p = .05$).

Psychological outcomes. There was a significant main effect of brokerage on depressive symptoms over time such that brokerage predicted lower depressive symptoms ($b = -0.10$, $p = .006$), qualified by a significant interaction between controversial status and brokerage ($b = 0.26$, $p = .02$). Simple slope analyses revealed that brokerage significantly predicted lower levels of depression for average status students over time ($b = -0.15$, $p = .006$) but did not predict depression for controversial status students ($b = 0.24$, $p = .13$).

Controversial status had a significant main effect predicting higher self-esteem across time ($b = 0.20$, $p = .02$) and brokerage also predicted higher self-esteem ($b = 0.06$, $p = .05$). The interaction between brokerage and controversial status was significant ($b = -0.30$, $p < .0005$); brokerage predicted lower self-esteem for controversial status students ($b = -0.36$, $p = .002$) and greater self-esteem for average status students ($b = 0.09$, $p = .05$).

In summary, controversial status and brokerage either had no effect or were positively associated with positive social and psychological outcomes. However, these effects were qualified by interactions such that, compared with their peers, controversial students who were high in brokerage had significantly higher levels of social stress, greater dissatisfaction with interpersonal relationships, and lower self-esteem. Unexpectedly, brokerage did not predict depression for controversial status students.

Discussion

This study contributes to the peer relations literature by introducing brokerage as a network position of interest to school psychology researchers. Brokerage predicted changes in adolescent social and psychological adjustment over time. Results further indicate that brokerage is a valuable construct to use in conjunction with traditional sociometric statuses because it

explains heterogeneity of outcomes within these classifications. These findings are particularly salient for controversial status youth who may experience the role of broker differently from other youth. For controversial status youth, having little brokerage responsibility may be more adaptive and less stressful than it is for their cohorts with high levels of brokerage.

This interpretation is based on our supported hypotheses that being a broker either did not affect or resulted in positive outcomes among average status youths as evidenced by lower depressive symptoms, higher self-esteem, and lower dissatisfaction with interpersonal relationships. Furthermore, and as expected, the effects of being a broker did not differ for popular compared with average status youth. Similar to brokers in professional networks (Burt, 2002), adolescent brokers appear to benefit from their social network position. For example, being a member of multiple social groups in high school is related to greater feelings of acceptance, belonging, and positive feelings of affiliation with the school compared with membership in one or fewer social groups (Faircloth & Hamm, 2011; Hamm & Faircloth, 2005).

Contrary to our initial thoughts, the results indicate that high levels of brokerage among controversial status youth led to more negative psychological functioning (i.e., lower self-esteem) and more negative social functioning (i.e., higher social stress and dissatisfaction with interpersonal relationships). One interpretation of our findings is that controversial youth who are high in brokerage occupy their position as a function of unique social dynamics. For example, perhaps high-brokerage controversial youth tend to form positive but relatively short-term relationships such that their friendships are in a constant state of churn, with some always in the stressful process of falling apart or even becoming negative relationships. In contrast, low-brokerage controversial youth may have more stable relationships; the higher and more durable levels of social understanding and support that tend to be found among embedded friends (Wölfer, Cortina, & Baumert, 2012) may buffer them against the negative consequences of negative relationships. If this is the case, then the brokerage position may indicate highly divergent paths to controversial status, each with its unique constellation of social interactions (cf., Carboni & Casciaro, 2016). Future research should explore the different behavioral characteristics and relational contexts of high- versus low-brokerage controversial status youth.

Although the current study had numerous strengths, including a longitudinal design and a multidimensional examination of social relationships, its limitations should be noted. First, the peer nomination measure of brokerage could be bolstered using additional measures. Social–cognitive maps that ask students to name the different groups of friends in their schools (e.g., Neal & Neal, 2013) could help elucidate whether a youth's high level of brokerage reflects multigroup membership. Next, due to an influx of students into the network, there were more participants to include in the second lag of longitudinal data. Although the analyses used in the current study allows for this characteristic (Twisk, 2003; Vens & Ziegler, 2012), the change in the size of the social network makes it difficult to examine changes in network positions and could make it difficult for students to have stable connections with their peer group. A stable social network size would be better suited to test whether those who do not adaptively manage the brokerage position (e.g., controversial status adolescents) decrease in brokerage over time (Burt, 2002). Given this limitation, it is important that these results are replicated in additional schools.

It is also important to note that the outcome measures were all assessed with self-report. Although research suggests that youth may be the best reporters of their internalizing difficulties (De Los Reyes et al., 2015), it may be that controversial status youth with higher levels of brokerage have negatively biased perceptions of their adjustment. These youth may be aware of the complexity of their peer relationships; that is, they are highly disliked among some of their peers and have a fractured pattern of relationships among the peers who do like them. This incongruity in their peers' responses could create anxiety or uncertainty about their social relationships that may have influenced their self-reported psychosocial functioning. As such, their reports of social functioning could be indicative of social anxiety rather than actual impaired social functioning. It could be valuable to incorporate peer- and/or teacher-report measures of social functioning because perceptions may vary.

Despite these limitations, our findings open several possible avenues for future research, including investigating why controversial status adolescents do not seem to benefit from the brokerage position. Identity conflict from managing multiple roles as a broker (Mcfarland & Pals, 2005) is one possibility that warrants investigation. Past research indicates no differences between controversial status and other status youth in identity development (Jackson & Bracken, 1998). Nonetheless, there may be heterogeneity in identity formation within the controversial status that is explained by brokerage. Incorporating measures related to identity development into future research could also inform understanding of brokerage's effects at different developmental stages as youth undergo changes in how they understand identity conflicts from early to late adolescence (Harter, Bresnick, Bouchey, & Whitesell, 1997).

It is also possible that controversial youth experience enhanced adjustment from low levels of brokerage because this type of friendship structure supports the development of positive social skills (Wölfer et al., 2012). Incorporating measures of emotional and social competence into future studies could help explain why low levels of brokerage appear to confer benefits for controversial status adolescents. For example, if a controversial status adolescent is positioned in between two friends who are in conflict with one another, social perspective-taking skills could help them to adaptively understand and facilitate conflicts, decreasing their social stress.

Finally, researchers have found that social acceptance (assessed by sociometric popularity) and perceived popularity are distinct, yet potentially overlapping constructs (Badaly, Schwartz, & Gorman, 2012; Lease, Musgrove, & Axelrod, 2002). Unlike sociometric popularity, perceived popularity has been linked to social dominance strategies aimed at maintaining high visibility in the peer group (Badaly et al., 2012) and may be most similar to the controversial sociometric group status. Specifically, youth who are not uniformly liked by peers are more likely to be "perceived popular" than youth who are sociometrically popular (i.e., who are uniformly liked; Badaly et al., 2012). It is possible that controversial youth with high levels of brokerage could also be categorized as being high in perceived popularity, accounting for why they are nominated by many peers who are not necessarily connected to one another. Given the links between perceived popularity and behavioral outcomes such as aggression (Lease et al., 2002), it could be valuable to examine this construct in tandem with brokerage. For example, it may be that these youth would use their brokerage position as a means to control and maintain dominance over different social group through the use of aggressive tactics.

Although research investigating adolescent social networks is just emerging, there are several implications that pertain to school psychology practice. Middle to older (i.e., high school) adolescence represents an important developmental period in which to hone relationship skills. Successfully navigating through a myriad of relationships—some of which may be stressful—predicts confidence and optimism that such skills can be then applied in the adult world (Hutteman, Nestler, Wagner, Egloff, & Back, 2015). Consistent with previous studies investigating network brokerage (e.g., Carboni & Gilman, 2012), the present findings indicate that maintaining connections with disparate groups may be stressful to some adolescents, particularly among those who are in the unenviable position of being liked by some but not by others. Our findings indicate that sociometric status is not the issue; that considering only sociometric status, controversial youth appear able to cope with this realization rather well and report lower stress than average youth. However, occupying a brokerage role appears to place stress on these youth that undermines these effects. Our findings are not meant to imply that controversial youth should not be brokers; as noted previously, there are several benefits that are afforded to brokers that are not found elsewhere in the network (Burt, 2005). Rather, controversial brokers can be counseled about possible social "minefields" as they strive to maintain connections with disparate groups. Brokers are also critical integration agents for schools seeking to increase overall cohesion among students and student groups. By virtue of their position in schools, school psychologists are key personnel to identify, counsel, and monitor such youth in this regard.

As a specific example, school psychologists may identify and lead a "brokerage" group in

which those identified as brokers meet to identify and discuss challenges inherent in their network role and to determine strategies that foster intergroup cohesiveness and thereby reduce stress. There are several methods being developed that rather easily identify sociometric groups, global social networks, and network positions (see Dijkstra, Cillessen, & Borch, 2013; Gilman, Carter-Sowell, DeWall, Adams, & Carboni, 2013, for recent illustrations). In sum, this study underlines the importance of using a multidimensional approach in school psychology practice to better describe and understand the effects of brokerage on adolescent social adjustment.

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