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Popularity, social preference, and social behaviors: the moderation of social status goals

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Keywords

Popularity
Social preference
Social status goals
Aggression
Prosocial

Abstract

This study investigated the associations between attained status and adolescents' social behaviors, as well as the moderating effects of social status goals, culture, and gender. Participants were 1,267 adolescents (M_{age} = 13.36; 49% girls overall) from China (n = 667) and the United Sates (n = 600). Social status goals, relational and overt aggression, and prosocial behaviors were self-reported, whereas popularity and social preference were peer reported. The findings suggest that the relationships between popularity and relational aggression and overt aggression were stronger when adolescents endorsed high popularity goals, whereas this relationship was weaker when these adolescents endorsed high social preference goals. For prosocial behaviors, these associations were stronger when adolescents endorsed high social preference goals, but lower when they endorsed high popularity goals. The patterns for social preference were stronger for Chinese adolescents, while the relationships for popularity were stronger for American adolescents. No moderation effects were found for gender. These findings indicate the need to consider the cultural context when examining adolescents' social status and the associated social behaviors.

Popularidad, preferencia social y comportamientos sociales: el papel moderador de las metas de estatus social

Palabras clave

Popularidad
Preferencia social
Objetivos de estatus social
Agresión
Prosocial

Resumen

Este estudio investigó las asociaciones entre el estatus social alcanzado y los comportamientos sociales de los adolescentes, así como los efectos moderadores de las metas de estatus, la cultura y el género. Un total de 1,267 adolescentes (M_{edad} = 13.36; 49% de chicas) procedentes de China (n = 667) y Estados Unidos (n = 600) participaron en el estudio. Las metas de estatus social, ambas formas de agresión y los comportamientos prosociales fueron recogidos mediante autoinformes, mientras que la popularidad y el estatus social a través de las nominaciones de los iguales. Los resultados sugieren que las relaciones entre popularidad y ambas formas de agresión eran más fuertes cuando los adolescentes reportaron metas de búsqueda de popularidad, mientras que fueron más débil cuando reportaron metas de búsqueda de preferencia social. En el caso de los comportamientos prosociales, estas asociaciones eran más fuertes cuando reportaron metas de búsqueda de preferencia social, pero más bajas cuando reportaron metas de búsqueda de popularidad. Los patrones de preferencia social fueron más fuertes para los adolescentes chinos, mientras que las relaciones de popularidad lo eran para los estadounidenses. No se encontraron efectos de moderación para el género. Estos resultados indican la necesidad de tener en cuenta el contexto socio-cultural al examinar el estatus y los comportamientos sociales asociados durante la adolescencia.

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Adolescents' peer relationships are incredibly important to their development, and impact their behaviors in positive (e.g., encouragement to apply for college) and negative (e.g., peer pressure) ways (Hymel et al., 1990). During adolescence, many adolescents are incredibly interested in whether their peers like them. Such concerns might lead them to desire peer acceptance and to increase their social standing among their peers (Chen et al., 2018). Peer status refers to the social position of an adolescent within their peer group. Peer status can involve high levels of status (i.e., high popularity, social preference), average levels, and low levels (i.e., peer rejection). Researchers have found that peer status or the desire for status can influence adolescents' behaviors (LaFontana & Cillessen, 2002; Prinstein & Cillessen, 2003). Popularity is often associated with relational aggression, while social preference is typically related to prosocial behaviors (Rodkin et al., 2000; Rubin et al., 1998).

With the increasing concern about their social standing within the peer group, many adolescents desire to attain specific peer statuses. This desire is referred to as social status goals (i.e., popularity goals and social preference goals; Li & Wright, 2013). Regardless of peer status, many adolescents might hold social status goals to either gain a higher status and/or boost their current social status. Holding higher social status goals, specifically popularity goals, might increase the positive relationship between popularity and relational aggression (LaFontana & Cillessen, 2002); similar patterns might be found for social preference goals, social preference, and prosocial behaviors (Rubin et al., 1998). Therefore, the present study aimed to examine the moderating effect of popularity goals and social preference goals in the associations between attained status (i.e., popularity, social preference) and adolescents' social behaviors (i.e., relational aggression, overt aggression, prosocial behaviors).

Peer status and behaviors

Researchers have found that low peer status is often related to adjustment consequences, including depression, anxiety, and antisocial behaviors (Kraatz-Keily et al., 2000; Ollendick et al., 1992; Rubin et al., 2006). Adolescents may desire popularity or social preference, two separate types of high peer status. As a reputational label, popularity does not always refer to an adolescent's perceived likeability by peers, whereas social preference indicates likeableness and not necessarily adolescents' reputation (Cillessen & Mayeux, 2004; Lafontana & Cillessen, 1999). Popularity is often liked to relational aggression and adjustment problems, such as depression (Rose et al., 2004). Social preference is unrelated to adjustment difficulties and aggressive behaviors.

Popularity and social preference are differentiated in terms of the type of aggression in which the adolescent engages (Xie et al., 2002). Popularity is linked to relational aggression perpetration while social preference is unrelated to relational, social, and overt aggression perpetration (Cillessen & Mayeux, 2004; LaFontana & Cillessen, 2002; Parkhurst & Hopmeyer, 1998; Prinstein & Cillessen, 2003; Rodkin et al., 2000; Rubin et al., 1998; Xie et al., 2002). Defined as a type of aggression implemented to damage relationships, relational aggression causes harm to not only one's relationships but also an adolescent's peer status (Crick & Grotpeter, 1995). Examples of relational aggression include rumor spreading, ostracism, and relationship manipulation. Researchers often conceptualize social aggression as being analogous to relational aggression (Xie et al., 2002). Social aggression involves attacking another peers' reputation. Overt aggression is another form of aggression linked to popularity, and it involves causing physical harm (e.g., kicking/punching), verbal harm (e.g., threats), and property destruction (Crick & Grotpeter, 1995).

Some studies have examined the longitudinal behavioral correlates of popularity and social preference. Cillessen and Mayeux (2004) found a strong connection between overt aggression and popularity during 5th grade, but by 9th grade this relationship disappears. Social preference is consistently negatively related to overt aggression and relational aggression across the four years of the study. Consistent positive relationships were found between relational aggression and popularity over four years, with the strongest associations occurring from middle childhood into adolescence.

Additionally, prosocial behaviors (e.g., behaviors concerned with the welfare of others) are often engaged in by socially preferred and popular adolescents (Cillessen & Mayeux, 2004). Examples of prosocial behaviors include offering help to one's peers and cheering peers up (Crick, 1996). Some popular adolescents are considered bi-strategic, utilizing both prosocial and aggressive behaviors to achieve peer status (Closson, 2009). Socially preferred adolescents typically use only prosocial behavior to maintain status (Cillessen & Mayeux, 2004; LaFontana & Cillessen, 2002). We know very little about how adolescents cognitively process peer status; more specifically, there has been little research attention given to whether adolescents' social status goals to attain a desired peer status might influence the relationship between attained peer status (i.e., popularity, social preference) and social behaviors (i.e., relational aggression, overt aggression, prosocial behaviors).

Social status goals

As mental representations of specific desired or expected outcomes, goals involve behaviors directed toward achieving these outcomes (Aarts, 2012). Many adolescents have goals related to various domains in life, including social goals (Covington, 2000; Dweck & Leggett, 1988; Ojanen et al., 2005). Social goals involve behaviors, evaluations, and emotions (Fishbach & Ferguson, 2007). Peer acceptance is desired by many adolescents because gives them a sense of belonging, with some adolescents desiring social preference and popularity (Rubin et al., 2006). Desires for social preference and popularity might be guided by adolescents' goals for attaining a desired peer status (Levy et al., 2004; Sijtsema et al., 2009). Social status goals are defined as adolescents' pursuit to attain a desired peer status, either social preference and/or popularity goals (Li & Wright, 2013).

Social goals for popularity are generally characterized by visibility and prestige (Kiefer & Ryan, 2008; Ryan et al., 1997). Furthermore, adolescents with popularity goals often perpetrate aggressive behaviors, whereas adolescents with social preference goals do not usually engage in aggressive behaviors (Li & Wright, 2013). Popularity and social preference goals were moderately correlated with each other and attained status. Considering such a finding, it is reasonable to treat popularity goals and social preference goals as separate goals, each related differentially to attained status. Furthermore, adolescents with high social status goals have similar behavioral patterns as those behaviors associated with attained status. Thus, the relationship between popularity and aggressive behaviors might be stronger when adolescents endorse high levels of popularity goals; similar patterns might be found between social preference goals and prosocial behaviors when adolescents endorse high levels of social preference.

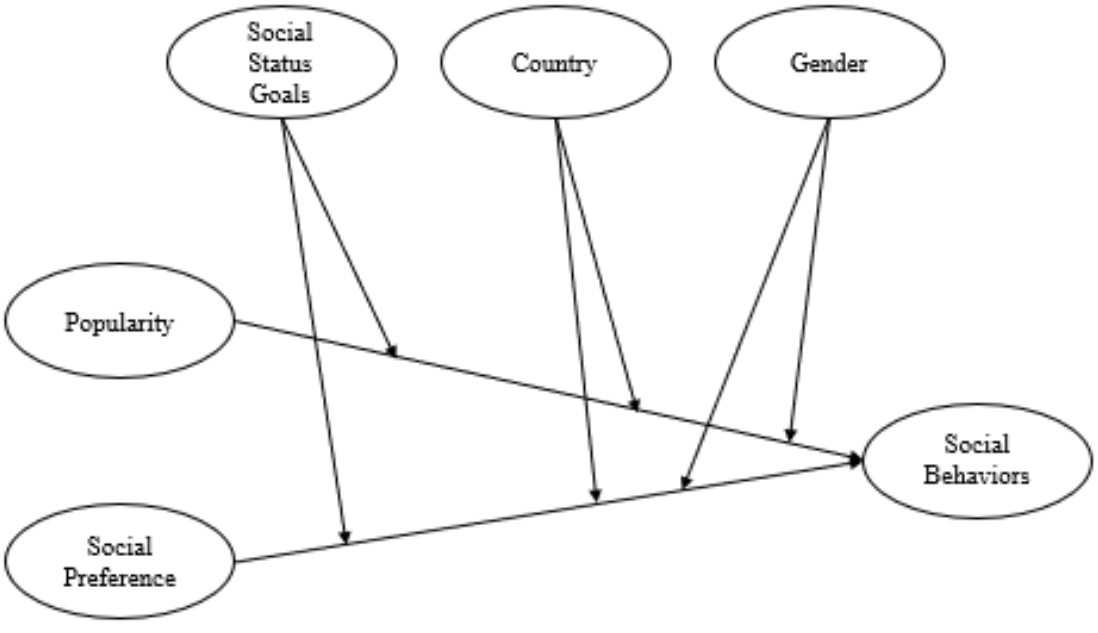
Country of origin and gender differences

Hofstede developed a framework for understanding the differences in cultures across countries (Hofstede et al., 2010). He conceptualized six categories to define culture, including Power Distance versus Closeness, Uncertainty Avoidance versus Acceptance, Individualism versus Collectivism, Masculinity versus Femininity, Long-Term versus Short-Term Orientation, and Indulgence versus Restraint. For the present research, we utilize the collectivism and individualism category because culture helps to inform how we interact with others and understand ourselves in relation to others. People from collectivistic cultures (e.g., China) endorse attitudes and behaviors that promote an interdependent self-construal (Zhang et al., 2005). On the other hand, people from individualistic cultures (e.g., United States) promote attitudes and behaviors that bolster an independent self-construal. Overall, endorsing collectivism is typically not related to bullying involvement, while endorsing individualism was (Menzer & Torney-Purta, 2012; Nesdale & Naito, 2005). Collectivistic cultures, like China, might endorse social status goals associated with relational hierarchies, while individualistic cultures, like the United States, might support social status goals that promote one's own self-interest (Zhang et al., 2005). It is unknown how country of origin might influence relationships among attained status, social status goals, and social behaviors.

Whether gender might moderate the associations among attained status, social status goals, and social behaviors is unknown, as there have been few studies conducted on this topic. Girls might hold more popularity goals and social preference goals than boys because girls typically have more relational goals (Rose & Rudolph, 2006); such differential endorsement of social status goals might alter the associations among gender, attained status, and social behaviors. Furthermore, adolescents' cultures often construct gender differently, and country of origin might further influence these associations. In traditional Confucian culture in China, unequal gender stratification and distribution of power and resources are evident, especially with women being subordinate to men throughout their lives (Zhou et al., 2012). In the United States, people typically support tra-

Figure 1

Hypothetical model of the moderating effect of social status goals (i.e., popularity goals, social preference goals), country (China and the United States), and gender in the associations between attained status (i.e., popularity, social preference) and social behaviors (i.e., relational aggression, overt aggression, prosocial behaviors)



ditional gender roles without being sexist or discriminatory and suggests "egalitarian essentialism", supporting a blend of feminist equality and traditional motherhood roles (Cotter et al., 2011). Given these views of gender in both countries, it might be likely that girls and boys in these countries have different focuses in terms of their social relationships and behaviors associated with their roles in society.

The present study

The aim of this study present research was to investigate the relationships between attained status (i.e., popularity, social preference) and adolescents' social behaviors (i.e., relational aggression, overt aggression prosocial behavior). The moderating effects of social status goals, country of origin, and gender in these relationships was also examined (see Figure 1 for a hypothetical model). To guide this study, the following research questions were developed: 1) what relationship, if any, is there among popularity, social preference, popularity goals, social preference goals, relational aggression, overt aggression, and prosocial behaviors?; and 2) what moderating effect, if any, does gender and country of origin have in the associations among popularity, social preference, popularity goals, social preference goals, relational aggression, overt aggression, and prosocial behaviors?

Method

Participants

Participants were 1,267 adolescents from 6th through 8th grades (M_{age} = 13.36; ages range from 12 to 15; 49% girls overall) from China (n = 667) and the United Sates (n = 600). Chinese adolescents were from public schools in Beijing; adolescents from the United States were from public schools located in the suburbs of a large Midwestern city. No other demographic data were collected.

Procedures

This research was granted ethical approval by the first author's university. Schools were randomly selected from a list of schools in proximity to the researchers' universities. A recruitment email was made to school principals, describing the study and how to participate. Classroom announcements were made once a school principal agreed to allow their school to participate, and parental permission slips were distributed. Adolescents brought parental permission slips back to their school. Data were collected in the fall of 2019. Adolescents provided their assent, and all agreed to participate. They completed demographic information and peer nominations of popularity and social preference, as well as questionnaires on social status goals, relational aggression, overt aggression, and prosocial behaviors. Questionnaires were originally available in American English and then translated into Mandarin Chinese, and later back-translated.

Measures

Social preference and popularity. Adolescents received an alphabetized roster of all students in their grade at their school. All names were given a unique identification code. They wrote the identification code of the peer they believed fit the description, nominated as many peers as they wanted, and nominated peers of the any gender. Identification code sheets were turned in with the other questionnaires. For social preference, they nominated peers whom they "like most" and "like least" to assess social preference (Coie et al., 1982); for popularity, they nominated peers who are "popular" and "unpopular" (Mayeux & Cillessen, 2008). Social preference was calculated from standardizing nominations for "like least" and "like most" items and then subtracting the "like least" item from the "like most" item. Popularity was calculated the same way, by subtracting standardized the "unpopular" item from the standardized "popularity" item. These scores were then re-standardized by grade and school to form the social preference score for each adolescent.

Social status goals. Five items were used to measure social preference goals (e.g., "I want to be well-liked by my peers") and six items were used for popularity goals (e.g., "I want to be popular among my peers") and five items included to assess (Li & Wright, 2013; Wright et al., 2014). All items were rated according to how often adolescents thought the item described their desires and were scored on a scale of 1 (*Never*) to 5 (*All the time*). Items were averaged to form scores on popularity goals and social preference goals. Cronbach's alphas were .90 for social preference goals and .86 for popularity goals.

Relational aggression, overt aggression, prosocial behavior. This questionnaire assessed how often adolescents engaged in relational aggression, overt aggression, and prosocial behaviors (Crick & Grotpeter, 1995). Five items were used to assess relational aggression (e.g., "How often do you gossip about a peer to get others not to like them?"), three items for overt aggression (e.g., "How often do you start hit peers?"), and four items for prosocial behaviors (e.g., "How often do you cheer peers up when they are sad?"). All items were rated on a scale of 1 (*Never*) to 5 (*All the time*) and averaged separately to form three scores on each social behavior. Cronbach's alphas were .83 for relational aggression, .81 for overt aggression, and .80 for prosocial behaviors.

Analytic Plan

Multi-group confirmatory factor analysis was used to assess measurement invariance using *Mplus* 8.8. The measures were equivalent and responses to the measures were similar for Chinese (χ^2 = 206.05, df = 107, CFI = .99, TLI = .99, $RMSEA$ = .04, $SRMR$ = .05) and American (χ^2 = 200.67, df = 114, CFI = .99, TLI = .99, $RMSEA$ = .04, $SRMR$ = .04) adolescents, $\Delta\chi^2$ = 71.89, df = 29, $p < .001$ for examining constraints on loadings and intercepts. Thus, loadings and intercepts were the same across the groups, supporting scalar invariance. Additional details about models are not provided but can be requested from the first author.

Research questions were examined using multigroup structural equation modeling with groups as the two countries (Chinese, United States) using *Mplus* 8.8. Robust Maximum Likelihood estimator and the Full Information Maximum Likelihood approaches were used to address missing data. Approximately 0.8% of the data were missing, with 176 incomplete cases, approximately 90 cases among the Chinese sample and 86 cases in the United States sample. Little's (1988) missing completely at random test revealed that the data were not systematically missing, $\chi^2 = 36.96$, $df = 76$, $p =$ n.s. Paths were included from popularity and social preference to popularity goals, social preference goals, relational aggression, overt aggression, and prosocial behaviors. In addition, paths from popularity goals and social preferences goals to relational aggression, overt aggression, and prosocial behaviors were added to the model. Two-way interactions were included between popularity and popularity goals, popularity and social preference goals, social preference and social preference goals, social preference and popularity goals, popularity goals and gender, and social preference goals and gender. Three-way interactions were included among popularity, popularity goals, and gender, popularity, social preference goals, and gender, social preference, social preference goals, and gender, and social preference, popularity goals, and gender. Simple slopes analyses were performed to test significant interactions.

Results

Correlations between all variables were conducted (see Table 1). All correlations were in the expected direction.

The multigroup model demonstrated adequate fit, $\chi^2 = 573.92$, $df = 593$, $CFI = .99$, $TLI = .99$, $RMSEA = .04$, $SRMR = .05$ (see Table 2). The following description of findings address research question one. For all adolescents, popularity and popularity goals were linked to relational aggression and prosocial behaviors; popularity and popularity goals were correlated with overt aggression for American adolescents only. Negative relationships were found among social preference, social preference goals, relational aggression, and overt aggression, but positively associated with prosocial behaviors for all adolescents. A positive relationship was found between popularity goals and prosocial behaviors for Chinese adolescents only. Gender was unrelated to relational aggression, overt aggression, and prosocial behaviors among Chinese and American adolescents.

Research question two addresses interactions between and among various variables. Two-way interactions with gender and three-way interactions with gender were not significant. The only significant interactions were between popularity and popularity goals for relational aggression and overt aggression, as well as social preference and social preference goals for all social behaviors among Chinese and American adolescents. Our findings suggest that the relationships between popularity and relational aggression and overt aggression were stronger when adolescents endorsed high popularity goals, whereas this relationship was weaker when these adolescents endorsed high social preference goals. Similar patterns were found for prosocial behaviors, such that these associations were stronger when adolescents endorsed high social preference goals, but lower when they endorsed high popularity goals. There were cultural differences in these associations such that the patterns for social preference were stronger for Chinese adolescents, while the relationships for popularity were stronger for American adolescents.

Discussion

Having peer acceptance and popularity are important social processes in adolescents' lives and many of them actively seek higher peer status (Bukowski, 2011). Despite a substantial body of research (e.g., Cillessen & Mayeux, 2004) finding consistent behavioral characteristics associated with attained popularity and social preference, little attention has been given to the social cognitive processes involved in the pursuit of social status goals, particularly popularity goals and social preference goals. Understanding adolescents' social cognitive processes for peer status has powerful implications for adolescents' social behaviors. During adolescence, attained popularity and social preference become increasingly distinct, making it incredibly important to investigate popularity goals and social preference goals as separate social status goals (Cillessen & Marks, 2011; Li & Wright, 2013; Wright et al., 2014). The focus of the present research was to address these important topics by examin-

Table 1

Aspects or criteria important for defining and measuring NEBB

	1	2	3	4	5	6	7
1. Popularity	---						
2. Social Preference	.50***	---					
3. Popularity Goal	.32***	-.03	---				
4. Social Preference Goal	.08	.24*	.41***	---			
5. Relational Aggression	.30***	-.23*	.27**	-.23*	---		
6. Overt Aggression	.11	-.21*	.16	-.21*	.50***	---	
7. Prosocial Behaviors	.25**	.33***	.20*	.36***	-.36***	-.30***	---

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 2

Structural Regression Model

Country	Predictors	Relational Aggression		Overt Aggression		Prosocial Behaviors	
		β	*SE*	*β*	*SE*	*β*	*SE*
China	Pop	.30***	.09	.16	.07	.29***	.08
	SP	-.30**	.08	-.26*	.07	.33***	.10
	Pop Goal	.23*	.05	.15	.04	.20*	.03
	SP Goal	-.25*	.04	-.23*	.06	.30***	.10
	Gender	.13	.03	.10	.03	.06	.02
	Pop x Pop Goal	.10*	.02	.08*	.03	.03	.01
	Pop x SP Goal	.02	.01	.03	.01	.05	.02
	SP x Pop Goal	.04	.02	.03	.02	.04	.01
	SP x SP Goal	-.15*	.03	-.14*	.03	.11*	.03
	Pop x Gender	.03	.01	.02	.01	-.03	.01
	SP x Gender	-.01	.01	-.02	.01	-.04	.01
	Pop x Pop Goal x Gender	.01	.01	.02	.01	-.05	.01
	Pop x SP Goal x Gender	-.02	.01	-.03	.01	-.03	.01
	SP x Pop Goal x Gender	-.02	.01	-.04	.01	-.03	.01
	SP x SP Goal x Gender	-.03	.01	-.03	.01	-.02	.01
United States	Pop	.36***	.10	.22*	.06	.20*	.07
	SP	-.26***	.10	-.20**	.07	.25*	.08
	Pop Goal	.28**	.08	.20*	.06	.16	.03
	SP Goal	-.23*	.07	-.19*	.06	.25*	.09
	Gender	.10	.05	.06	.02	.06	.02
	Pop x Pop Goal	.14*	.06	.11*	.05	.01	.01
	Pop x SP Goal	.03	.01	.02	.01	.06	.03
	SP x Pop Goal	.03	.01	.03	.01	.02	.01
	SP x SP Goal	-.09*	.03	-.08*	.03	.07*	.03
	Pop x Gender	.02	.01	.01	.01	.01	.01
	SP x Gender	-.01	.01	-.01	.01	-.01	.01
	Pop x Pop Goal x Gender	.02	.01	.02	.01	.03	.01
	Pop x SP Goal x Gender	-.03	.01	-.03	.01	-.04	.01
	SP x Pop Goal x Gender	-.03	.01	-.04	.01	-.02	.01
	SP x SP Goal x Gender	-.04	.01	-.03	.01	-.03	.01

Note. *β* = beta; *SE* = standar error; *Pop* = popularity; *SP* = social preference.
*$p < .05$. **$p < .01$. ***$p < .001$.

ing the moderating effects of popularity goals and social preference goals in the associations between attained status (i.e., popularity, social preference) and adolescents' social behaviors, including relational aggression, overt aggression, and prosocial behaviors. Another aim of the present study was to examine the role of country of origin and gender in these associations. This study provides a better understanding of adolescents' social cognitive processes in the pursuit of peer status and the corresponding behavioral characteristics.

We expected that attained statuses and social status goals would be associated with specific social behaviors, and this expectation was supported by our findings. More specifically, we found that popularity and popularity goals were associated with relational aggression for all adolescents, as well as overt aggression for American adolescents only. These findings are consistent with the literature linking popularity and popularity goals to aggression (Li & Wright, 2013; Wright et al., 2014). Therefore, adolescents with attained popularity and who have popularity goals, regardless of country of origin, might engage in relational aggression as a mechanism for gaining higher social standing in their peer group. Competition in the peer group to maintain popularity and/or increase one's popularity (i.e., popularity goals) might increase their risk of engaging in relational aggression, as they might see the legitimacy of using relational aggression for maintaining or increasing their peer status. For popular American adolescents and those who have popularity goals, they also engaged in overt aggression. Although overt aggression diminishes during adolescence, there is evidence that popular adolescents and those who hold popularity goals continue to engage in overt aggression (Li & Wright, 2013; Prinstein & Cillessen, 2003; Rodkin et al., 2000; Rubin et al., 1998; Wright et al., 2014).

Popularity was related to prosocial behaviors for Chinese and American adolescents, but popularity goals were associated with prosocial behaviors for Chinese adolescents only. Finding differences in the endorsement of prosocial behaviors are a bit puzzling at first, but it might be explained by individualism and collectivism, and complex dynamics involving prosocial behaviors. Given the relational focus of Chinese culture (Zhang et al., 2005), it might be likely that prosocial behaviors are utilized by popular adolescents and those with high popularity goals to maintain or increase their social standing. Research on the complex peer group dynamics in American culture have shown that there are two groups of popular adolescents, those who are popular-prosocial and others who are popular-antisocial (De Bruyn & Cillessen, 2006; Rodkin et al., 2000). Popular-antisocial adolescents are often unlikely to engage in prosocial behaviors, but they could still hold endorse higher popularity goals. Adolescents concerned with the social status implications of their behaviors might cooperate more with peers of similar popularity levels (Levy et al., 2004). Such a proposal might indicate that adolescents who want to enhance their popularity (via popularity goals) may be selectively prosocial to certain peers. Engaging in both relational aggression and prosocial behaviors indicates that popular adolescents are bi-strategic in their behavioral patterns for maintaining their social standing (Hawley, 2003); however, our findings could suggest that American adolescents with popularity goals might not necessarily be bi-strategic when it comes to certain types of peers (e.g., those with lower popularity levels).

Like popularity and popularity goals, social preference and social preference goals were correlated with prosocial behaviors, but not relational aggression and overt aggression, as found in the literature (Cillessen & Mayeux, 2004; Rubin et al., 1998). Ultimately, socially preferred adolescents and those with high social preference goals more than likely utilize prosocial behaviors to maintain and/or gain higher social standing in the peer group. They might utilize cooperation and help-giving behaviors to boost their peer status.

A main contribution of the present study was examining how attained status interacted with social status goals to alter adolescents' social behaviors. Overall, we found similar patterns in the moderating effect of social status goals in the associations between attained status and social behaviors for both Chinese and American adolescents. High popularity goals increased the positive relationship between popularity and relational aggression and overt aggression. Such a finding suggest that relational aggression and overt aggression are important behavioral strategies implemented by popular adolescents, especially when they also have high popularity goals. The implication of this finding is important as it suggests that popular adolescents can also hold popularity goals for the pursuit of maintaining and promoting further popularity, and that when they do, they also are behaviorally aggressive. Competition in the peer group might make it necessary or perceived as necessary to engage in aggressive behaviors to promote one's status. We did not find similar patterns for prosocial behaviors among popular adolescents with high popularity goals for American adolescents. Given that the literature (e.g., Hawley, 2003) suggesting that popular adolescents are bi-strategic, implementing both relational aggression and prosocial behaviors, they might be likely to desire more popularity, which could diminish adolescents' use of prosocial behaviors. Thus, when adolescents hold popularity goals, they might not utilize prosocial behaviors to further promote their peer status. More research attention should be given to this complex dynamic in the peer group.

At higher levels of social preference goals, the negative relationships between social preference and relational aggression and overt aggression were more negative for all adolescents, indicating that endorsing social preference goals diminishes the likelihood of implementing aggressive behavioral strategies. Thus, for these adolescents, aggression is not conductive to the pursuit of being socially accepted or preferred in the peer group (Cillessen & Mayeux, 2004; Rubin et al., 1998). However, high social preference strengthened the positive association between social preference and prosocial behaviors. These findings highlight how vital the implementation of prosocial behaviors is for maintaining and promoting one's status among socially preferred adolescents.

Although we did not directly compare Chinese and American adolescents, we did find some magnitude differences in the associations found in this study. We found these differ-

ences for social preference and Chinese adolescents, and for popularity and American adolescents. The behavioral patterns associated with social preference might promote interdependence-based self-construals (collectivism) among Chinese adolescents, while popularity might promote more self-interest and independent self-construals (individualism) found in American adolescents (Zhang et al., 2005).

Main effects of gender or interactions of the study's variables with gender were not found. Girls might endorse social status goals and engage in behaviors that promote social status goals because they often have more relational goals than boys (Rose & Rudolph, 2006). There is no evidence of gender differences in popularity goals (Jarvinen & Nichols, 1996; Li & Wright, 2013), but the literature has revealed that girls have more social preference goals than boys (Li & Wright, 2013). We did not find any differences in the endorsement of goals or the use of behavioral strategies to maintain status. More research is needed to better disentangle the lack of gender differences found in this study, especially because some research has found that girls endorse more relationship maintenance goals than boys (Rose & Asher, 1999). It might be that relationship maintenance goals are related to direct, personal relationships and do not encompass goals that might be implemented to promote adolescents' social standing.

Limitations and future directions

Individualism and collectivism were not assessed directly in this study. Future research should measure adolescents' endorsement of individualism and collectivism to examine intracultural variations; such a focus might provide more knowledge to the field on variations in the associations among attained status, social status goals, and adolescents' social behaviors. Furthermore, individualism and collectivism might also provide additional moderators in the associations examined in this study. Another focus of future research might be to measure parents' individualism and collectivism and compare those values to their children's endorsement of individualism and collectivism. Groups of adolescents could be created based on the discrepancy between their values and their parents' values, and then researchers could examine group differences in attained status, social status goals, and social behaviors.

Another aim of future research might be to delineate aggressive behaviors based on proactive and reactive designations. Considering such motivations could help clarify the associations examined in this study based on whether aggressive behaviors were carried out for revenge or to achieve a goal, such as social status goals. Our assessment of social behaviors did not consider the motivations underlying the behaviors.

This study's design was cross-sectional. Follow-up research is needed to examine the longitudinal associations among attained status, social status goals, and adolescents' social behaviors. This research might also help with understanding the temporal ordering of the relationships examined in this study. It also might be important for follow-up research to include multiple informants of aggressive and prosocial behaviors. Such a focus might be important as Li and Wright (2013) found differential associations of aggression and prosocial behaviors to attained status and social status goals, depending on the informant of the behaviors. Furthermore, peer-nominations or peer-ratings of aggression might reduce self-report biases associated with engaging in undesirable behaviors.

Conclusions

Findings from the present study indicated that adolescents who endorsed popularity goals or social preference goals have similar behavioral patterns as those with attained status (popularity, social preference), and that the association between attained status and behavior was greater when adolescents endorsed certain social status goals. Main effects and interactions among the variables were similar for all adolescents. The results of this study contribute to our understanding of the social cognitive processes related to peer status and how attained status influences behavior. Given the social cognitive processes of peer status, it might be important for schools to promote social status goals related to social preference, as this type of goal is linked to positive school interactions.

Conflict of interest

The authors have no conflicts of interest to declare.

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