Title of Entry: Status competition and peer relations in childhood

Synonyms: Social hierarchy, Prestige, Dominance, Power, Popularity, Reputation.

Definitions: Status competition is the contest or rivalry between two or more individuals over the pursuit of influence, deference, attention, and associated resources. Peer relationships are associations between two or more individuals that may vary in closeness and duration, and which reflect and sometimes lead to the creation of friendships, partnerships, allegiances, and group membership.

Introduction

Whilst the underlying fabric and structures of human groups are diverse, two processes seem ubiquitous to social life: individuals desire affiliation with others and together these individuals form social hierarchies. From the formal social organization of adolescent naval cadets (de Klepper et al., 2016) to the relationships within some of the most egalitarian societies that lack formal structures of power (reviewed in von Rueden, 2014), individuals assort hierarchically, with people occupying different strata within a group based on their standing in multiple culturally-valued domains (Henrich & Gil-White, 2001). The reason for the universality of both processes is that their presence provides a solution to the competition over relatively scarce social, sexual, and material resources that characterizes most group-living species. These processes not only reduce costly conflict, aggression, and warfare, but may also generate and sustain cooperation within a group (Henrich, Chudek & Boyd, 2015; Berger et al., 1980). Although these relationships are present and important during adulthood, an understanding of the social world, and the positions that individuals occupy within that

world, develop during childhood as early as in the first few months after birth.

Both the desire for peer relationship and status competition are present throughout the developmental periods of human life, although they take different forms and serve diverse purposes during each developmental stage. However, the means by which individuals both attain social status and successfully manage peer relationships seem to fall into two routes across a range of developmental periods: dominance and prestige (Cheng, Tracy & Henrich, 2010; Sijtsema Veenstra, Lindenberg & Salmivalli, 2009; Hawley, 2002). The vast and growing body of research supporting the dual model of social hierarchy during childhood suggests that prestige and dominance have distinct outcomes for different dimensions of status, and that their efficacy is governed by the period of development and the group's social norms. The current entry surmises (1) the different types of status and peer relations in childhood, and further outlines (2) the pathways to attaining status and managing peer relationships during childhood.

Main Text

Children have an innate disposition towards social hierarchy. Evidence suggests that beginning in the earliest years of life, even during preverbal periods, infants are remarkably skilled in recognizing and inferring relative social rank. For example, they make transitive rank inferences (e.g., if A > B and B > C, then A > C; Gazes, Hammton, & Lourenco, 2015; Mascaro & Csibra, 2014)., and show an expectation for these relationships to be stable over time (Mascaro & Csibra, 2012). Moreover, infants as young as ten months old use physical size to predict the results of conflicts of interest, specifically revealing a expectation for larger agents to win dominance contests (Thomsen, Frankenhuis, Ingold-Smith & Carey,

2011). Given these exceptional abilities in forming rank-related mental representations, it is perhaps not surprising that pre-schoolers display an understanding of the complex hierarchical dynamics of their group (Hawley & Little, 1999).

Although the valued resources that individuals compete over are often different to those during adulthood, status is of paramount importance during development, especially in adolescence (Adler & Adler, 1998; Cillessen & Rose, 2005). High status children wield considerable power and influence and have access to valued social and material resources within their group (Hawley, 1999; Keltner, Gruenfeld & Anderson, 2003). Moreover, an individual's relative standing within their hierarchy impacts success as adults, both socially and reproductively, (Masten & Coatsworth, 1999; Bagwell, Newcomb & Bukowski, 1998; Hawley, 2015; McDougall & Vallaincourt, 2014; von Rueden, Gurven, & Kaplan, 2010). Status competitions are thus widespread across societies and social settings and highly prevalent across the lifespan.

(1) Social Status

Although there is agreement on the importance of the individual rewards and group benefits of social status during childhood, there has been a divergence in theoretical conceptions ofwhat it means to be high in status. The current section outlines two measures of status commonly used in Developmental Psychology: (a) popularity, or social prominence, and (b) social preference, also termed sociometric popularity (Coie, Dodge & Coppotelli, 1982; Parkhurst & Hopmeyer, 1998: see Cillessen & Marks, 2011 for a review). These two measures of status overlap strongly during early childhood (Cillessen & Rose, 2005), but their association gradually decreases over time and they become distinct (Rose, Swenson & Waller, 2004). The third measure of status discussed, (c) social rank, explicitly captures an

individual's perceived social influence and agency. These distinct but overlapping conceptions of status are important, as they describe distinct dimensions of status during childhood, which have different antecedents and may produce divergent outcomes for both groups and individuals (reviewed in Mayeux, Houser & Dyches, 2011).

(a) Popularity

As a child, negotiating one's way through the hierarchies of the classroom, playground, and household can be difficult. Ethnographic evidence and accounts from classroom settings indicate that developmental hierarchies—especially those during adolescence (Rose & Rudolph, 2006)—are competitive, with individuals struggling against one another to attain and defend their popularity and position within a group (Merten, 1997; Lindenberg, 1996). Popularity, a limited zero-sum social outcome that cannot be shared, reflects an individual's reputation and signposts that individual's impact, prominence, social influence and power within a group (Cohen & Prinstein, 2006; reviewed in Asher & McDonald, 2009).

Popularity during child development is complex and is often governed by a combination of physical attributes, such as attractiveness and athletic ability (Dijkstra, Lindenberg, Verhilst, Ormel & Veenstra, 2009; Hawley, Johnson, Mize & McNamara, 2007) and relational behaviours (e.g. assertiveness or kindness: Rodkin, Farmer, Pearl & van Aker, 2000; Hawley, Little & Card, 2007). In addition to these, the social structure of a group and social network processes have bearing on popularity during development. Evidence suggests that individuals assort and affiliate with those similar to themselves (sometimes called homophily; Farmer et al, 2002; Cairns & Cairns, 1999), and this preference is also seen among children, who form friendships and playgroups at higher rates with other children who share similar demographic traits (McPherson, Smith-Lovin, & Cook, 2001); however, this observed similarity based on popularity is governed by two processes over time: selection and influence. Selection refers

to individuals preferentially choosing to associate with those similar to themselves on a given dimension (e.g., same-sex friendships), whereas influence denotes a subsequent gradual shift towards similarity between proximate individuals (some of whom may have been initially brought together through selection processes such as homophily; reviewed in Steglich, Snijders & Pearson, 2010). Both selection and influence operate with regard to popularity during development (Dijkstra, Cillessen & Borch, 2012). Less popular individuals attempt to gain status by association with popular conspecifics (via influence processes: Cialdini & Richardson, 1980) and popular individuals often try to maintain their status by preferentially selecting those similar in popularity as they risk their popularity decreasing via influence processes of being associated with those less popular (Haynie, 2001).

Why do children and adolescents place such high emphasis on popularity? After all, popularity is not easily obtainable and being popular can be seen as a double-edged sword as it is also associated with a number of harmful outcomes, such as increased health risk-taking behavior and potentially poor academic outcomes (Cillessen & van den Berg, 2012; Mayeaux, Sandstrom & Cillessen, 2008; Badaly, Schwartz & Hopmeyer Gorman, 2012). However, popular children attain a vast array of benefits. Highly popular children have greater access to a group's valued social, material and informational resources (Reviewed in Hawley, 1999, 2007). Popular children are believed to dictate the desirability of behavioral patterns within a classroom and are sought after as friends (Ellis & Zarbatany, 2007; Lease, Kennedy & Axelrod, 2002). In contrast, being unpopular has a considerable, deleterious impact on children due to its relationship with victimization, which is associated with mental health disorders (Arseneault et al., 2006), poor academic functioning (Schwartz, Gorman, Nakamoto & Toblin, 2005) reduced physical quality of life (Bogart et al., 2014), and in extreme cases even suicide (Bearman & Moody, 2004). It seems that those perceived as

being popular have more power among their peers, but not necessarily well liked, and this form of status does indeed provide substantial benefits.

(b) Social preference

In contrast to perceived popularity, status based on social preference—for example, as assessed using nominations of likability (Cillessen & Marks, 2011)—has a weaker association with power and influence in children. Social preference represents a form of status that is founded on personal sentiment (Bukowski, 2011). It seems that it may be less complex, and less risky, to be socially preferred than to be popular, with the strongest antecedent of social preference being prosociality (Rodkin et al., 2000). Social preference seems to be rooted in relational intimacy, with prosocial and socially preferred individuals having closer friendships and a greater number of friendship nominations to those not socially preferred (Gifford-Smith & Brownell, 2003; Gest, Graham-Bermann & Hartrup, 2001). These socially accepted individuals seem to be likeable and driven by communal goals, wishing to forge close relationships with their peers (Ojanen, Grönroos & Salmivalli, 2005; Caravita & Cillessen, 2011)

There are abounding benefits, and relatively few negative consequences, of childhood status derived from social preference. Socially preferred children do not come across as much adversity as those who aren't socially preferred, and social preference is not associated with risk-taking behavior (Buhs & Ladd, 2001). Rather, being socially preferred is associated with cooperation among children, with likeable children holding the development of interpersonal skills as highly important (Rubin, Bukowski & Parker, 2007). Moreover, high social preference is associated with a high sense of group belongingness and social support (Ladd, Kochenderfer & Coleman, 1997), and has long-term benefits for a child's mental health and academic functioning (see Rubin et al., 2015).

a. Social Rank

Akin to the concepts of popularity and social preference, a third conceptualization of status that has been studied within adult populations, termed social rank, has been captured using peer-ratings (see Cheng, Tracy & Henrich, 2010; Cheng et al., 2013). This measure captures an individual's perceived social influence within a group and their perceived agency (Wiggins, Trapnell & Phillips, 1988). Both social influence and agency reflect an individual's power, control and status (Bakan, 1966), which are central dimensions of an individual's social rank. To date, this measure has not commonly been used to measure status during childhood (the exception being an adapted version by Redhead, 2015) and, thus, little is known about how this form of status relates to important developmental outcomes, such as academic functioning, friendship and health. Given the similarity of the construct to the dimension of popularity, such as increased social influence and power, and its distinction with likability (Cheng et al., 2013), similar developmental outcomes are expected.

Additional research is needed to further understand how it operates during childhood.

(2) The routes to social status

Social asymmetries are multidimensional and relative status arises from two distinct systems of rank allocation: prestige and dominance (reviewed in Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). Although there are many factors that impact a child's ability to relate with others, such as family dynamics and parental influences (Rubin, Bukowski & Bowker, 2015; Kapetanovic, Bohlin, Skoog & Gerdner, 2017), the current focus is on the contributions of personality, behavioural disposition and individual differences. A large body of research focusses on the unique relationships that specific determinants of social status, such as aggression and prosociality, have with popularity and social preference during

childhood. However, the current chapter emphasizes that these dimensions comprise two psychological profiles, prestige and dominance, that broadly predict an individual's status. It is important to note that the effects of prestige and dominance on social status and peer relationships discussed may be moderated by a group's norms, with dimensions relating to the two routes to status potentially having fluctuating efficacy based on the peer ecology (Hartup & Abecassis, 2002; Laninga-Wijnen et al., 2017).

TABLE 1 ABOUT HERE.

(a) Dominance advertise

Dominance is a rank acquisition system that is centred on the use of intimidation and coercion. Individuals strategically advertise their ability and propensity to inflict harm (either physical, material or psychological), which urges others to yield to their will (Barkow, 1975). Dominance is often associated with physical strength and size, as these are physiological cues to an individual's ability to triumph during agonistic conflicts or inflict harm (Archer, 1988). As shown in Table 1, a dominance psychological profile is characterised by aggression, disagreeableness, narcissism and manipulative tendencies, all of which aid in an individual's ability to propagate fear and coerce their peers (see Cheng, Tracy & Henrich, 2010). It is common for individuals high in dominance to have egocentric goals, aiming to increase their power and reach their social and material goals with little consideration about others (also referred to as 'agentic goals': Salmivalli et al., 2005; Vaillancourt & Hymel, 2006; Faris and Ennett, 2012).

Whilst aggression is an essential facet of dominance, children employ dual forms of aggression and these have divergent implications for their relative status with peers (reviewed

in Coie, Dodge & Kupersmidt, 1990). The first form of aggression, reactive aggression, is a response to anger, provocation and frustration, which has negative effects on status and is often associated with behavioral difficulties (Crick & Dodge, 1996; Card & Little, 2006). Conversely, proactive aggression is a behavior that is a deliberate route for individuals to attain agentic goals (Little et al., 2003) and often has a positive effect on status during childhood (Pellegrini et al., 1999). The most pronounced form of proactive aggression during childhood is bullying, defined as repeated aggressive acts towards a peer, often lesser in size, status, or with fewer alliances (Olweus, 1978). Bullying pervades cultures and species (Volk, Camilleri, Dane & Marini, 2012) and can persist into adulthood (Volk, 2016). Those with more direct status-striving goals are most likely to be bullies and bullying does indeed increase an individual's popularity (Sijtsema et al., 2009), even though bullies are as socially rejected by others in their group as their victims are (Pakaslahti & Keltikanglas-Jarvinen, 1998). It seems that, if a child were to perform aggressive acts with socio-political aptitude, just as the reminders of power often seen in dominance hierarchies among non-human primates (See Boehm, 1999), they accrue status, social influence and positive attention (reviewed in Hawley, Stump & Ratliff, 2010).

The relationship that dominance has with status during childhood indicates those high in dominance are met with several benefits and costs. Aggressive adolescent males are perceived as highly attractive by the opposite sex (Pellegrini, 2001; Bukowski, Sippola & Newcomb, 2000) and are high in status (Reijntjes et al., 2013). Among a group of children and young adults in Romanian state care, both males and females perceived as high in dominance were also perceived as high in social rank, were nominated more as friends and had disproportionate control over the group's resources (Redhead, 2015), of which has also been found in western classroom settings (Hawley, 2003). However, the friendships that

these individuals have tend to be low quality (Hawley et al., 2007). Children behaving aggressively receive greater visual attention from their peers, which is considered an indicator of social rank (Abramovitch, 1976; Chance, 1967; La Freniere & Charlesworth, 1983), and are occasionally perceived as possessing leadership skills (Poulin & Boivin, 2000; Wassdorp et al., 2013). Dominance-related behaviours seem most utilized and effective during periods of transition (for example between primary and middle or junior high school) and decreases across school years once hierarchies begin to stabilise (Pellegrini, 2002; Faris & Felmlee, 2011; Kokko et al., 2006). Overall, current evidence suggests that dominance makes for popular, but disliked, children.

a. Prestige

Social learning is essential to human culture and individuals selectively learn from others based on a number of cues (Boyd & Richerson, 1985; Laland, 2004), of which are present during childhood (reviewed in Wood, Kendal & Flynn, 2013). Experiments assessing the microevolution of cultural traditions among children have repeatedly shown that the majority of children selectively learn from others, becoming followers to and imitating knowledgeable others, whilst a minority may still produce innovations that create meaningful group differences (Whiten & Flynn, 2010; Hopper, Flynn, Wood & Whiten, 2010). Children may preferentially learn from peers similar to themselves on given attributes (Frazier et al., 2011), peers high in status (Allen, Porter & McFarland, 2006; Nagle et al., 2003), and to older individuals (Jawal & Neely, 2006). However, cues to a peer's competence and reliability also effectively govern children's learning (Zmyj, Buttelmann, Carpenter & Daum, 2010; Brody & Stoneman, 1985; Koenig & Harris, 2005). This discriminate social learning, biased towards deferring to and imitating those perceived as competent and knowledgeable, is

termed prestige-biased social learning (Henrich & Gil-White, 2001) and individuals possessing a prestigious psychological profile, or cuing prestige, are preferentially attended to by children (Chudek, Heller, Birch & Henrich, 2012; McGuigan, 2013).

Prestige is a system of rank acquisition where individuals possessing skills in a culturally-valued domain are provided freely conferred deference from peers through respect and admiration. Prestigious individuals not only have to cue an ability, but also a willingness to provide informational knowledge and help. Therefore, prestige is not solely dependent on competence, but also a moral, prosocial reputation (see Bai, 2017; note that the current entry presents morality and prosociality as traits that partially confer prestige). As shown in Table 1, individuals high in a prestige psychological profile are perceived as being agreeable, conscientious, agentic and high in genuine self-esteem (See Cheng, Tracy & Henrich, 2010). Moreover, individuals high in prestige are characterized by behavioral tendencies that are antithetic to dominance and are perceived as highly cooperative, socially skilled, and capable advice-givers (Cheng, Tracy, & Henrich, 2010). The social goals of individuals high in prestige are further distinct from those of dominants, with individuals possessing dimensions of prestige reporting an intrinsic motivation to pursue friendships with others (Hawley et al., 2002).

Given the association to social learning, and previous research consistently presenting a positive relationship of prosociality with status, prestige makes likable, socially accepted and, to some extent, popular children. The popularity of an individual perceived high in prestige is potentially not as strong as with aggression (Ellis, Dumas, Mahdy & Wolfe, 2012). However, these individuals are accepted by their peers (Newcolme, Bukowski & Patee, 1993) and perform well academically (Wentzel, 2012). Among a group of children and young adults in

Romanian state care, individuals perceived by their peers as being highly prestigious were high in social rank, more central in networks of cooperation (i.e. toy and resource sharing), and received high numbers of friendship nominations (Redhead, 2015). Those perceived as high in prestige-related facets are often advice-givers (Hawley, 2002) and enjoy the resource-related benefits of long-term friendships (Charlesworth, 1996). Furthermore, research suggests that individuals high in prestige-related facets have greater social support, receiving greater numbers of reciprocated friendships (Aboud & Mendelson, 1996), of which are high in intimacy and low in conflict (Hawley, Little & Card, 2007). These prestige-related behaviors exhibit an increase between childhood and adolescence (Eisenberg et al., 2009) and are somewhat stable strategies throughout adolescence (Eisenberg et al., 2005). As with adults, evidence suggests that the behaviours associated with prestige increase a childhood group's ability to cooperatively and collaboratively learn (Reviewed in Wentzel & Watkins, 2011). Overall, prestige provides distinct hierarchical benefits to dominance for both groups and individuals during childhood, bolstering a child's social acceptance but not necessarily their popularity.

Although research directly assessing the effects of prestige and dominance on social status has illustrated that the two profiles are either uncorrelated (Cheng, Tracy & Henrich, 2010; Cheng et al., 2013) or negatively related (Redhead, 2015), work within developmental psychology indicates that there may be bi-strategic approaches (i.e., the deployment of both prestige and dominance simultaneously) to status acquisition. A number of studies have suggested that these bi-strategists may have found the optimal route to 'getting ahead and getting along' (Hawley, 1999; Hawley et al., 2002). These bistrategists are characterized by a specific form of social competence. They understand social rules and have having a similar profile to prestige. However, they also utilize aggressive, forceful acts and view relationships

as avenues to resource acquisition (Hawley et al., 2009). Through it's positive association with both popularity and social acceptance, bistrategists enjoy intimate relationships (Hawley, Little & Card, 2007), have high scores on indicators of health (Massey, Byrd-Craven & Swearingen, 2014) and maintain high status reputations (Cilliessen & Rose, 2005).

FIGURE 1 ABOUT HERE.

Conclusion

There are two routes to attaining social status and managing peer relationship during childhood: prestige and dominance. As shown in Figure 1, prestige-related behaviours and traits are strongly associated with social acceptance, whilst evidence indicates that those related to dominance are associated with a child's perceived popularity. These different associations with status allot distinct benefits and costs related to prestige and dominance during childhood. Whilst there is an expansive body of research assessing the impact of certain dimensions of prestige and dominance during childhood, there is limited empirical evidence directly testing the dual model of social hierarchy in a developmental context, of which provides a fruitful platform for future research.

References

Figures & Tables

Table 1. Correlations of peer-rated dominance and prestige with theoretically related self- and peer-rated traits, attribute and competencies, adapted from Cheng, Tracy and Henrich, 2010.

Tracy and Henrich, 2010.	Peer-rated dominance	Peer-rated prestige
Self-rated traits and attributes		1 0
G : 16 .	02	2.4*
Genuine self-esteem	03	.24*
Narcissistic self-aggrandizement	.22*	.17
Social acceptance	.08	.29**
Aggression	.35**	.03
Extraversion	.29**	.12
Agreeableness	39**	.15
Conscientiousness	-13	.23*
Neuroticism	-02	15
Openness	.13	.10
Agency	.46**	.39**
Communion	12	.05
GPA	15	.19 [†]
Peer-rated abilities		
Advice-giving	.12	.56**
Intellectual	06	.37**
Athletic	.29**	.57**
Social skills	.19 [†]	.71**
Altruism	36**	.36**
Cooperativeness	54**	.33**
Helpfulness	38**	.39**
Ethicality	41**	.26**
Morality	32**	.31**
Leadership	.40**	.73**

N=91

[†]*p*<.10, **p*<.05, ***p*<.01.

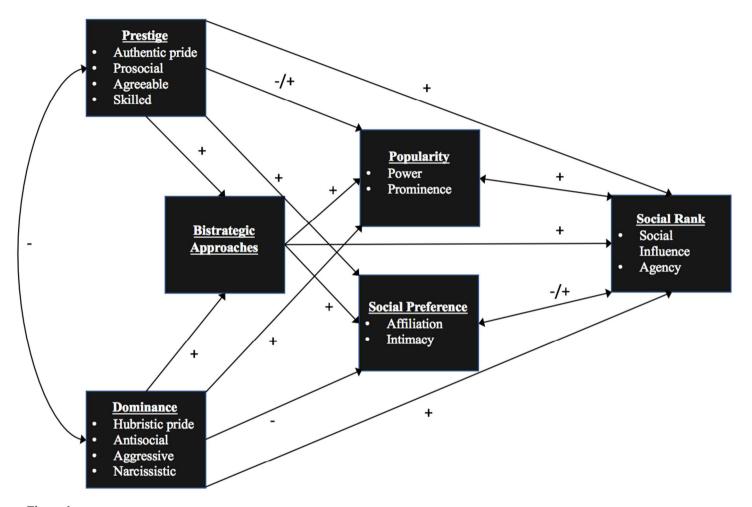


Figure 1.

Relationships between prestige, dominance and dimensions of social status during childhood. Arrows indicate the theoretical directionality of the effect and plus/minus symbols illustrate whether the effect is positive or negative.