

Strategies of Play and Winning the Game: A Reply to Brian Vaughn

Patricia H. Hawley
Yale University

A functional approach to social dominance (i.e., resource control) advances important and unique developmental questions not suggested by structuralist approaches. The functional approach to social dominance emphasizes that behavior can be motivated by self-interest, and yet recognizes the relative advantage gained by individuals who pursue their own goals while balancing them (or *appearing* to balance them) with the goals of others (a question of social competence). The strategies (competent or incompetent) a child employs to control resources can affect developmental outcomes, as can the win-loss experiences of the child.

My colleagues and I are delighted by Vaughn's enthusiasm for our journey into the dusky domain of social dominance (Hawley & Little, 1999). His commentary (Vaughn, 1999) accurately summarizes the issues raised in the preceding decades and the doors that subsequently closed. We agree that the social relations approach additionally invites developmentalists to study their small preschool groups with renewed gusto and to pose heretofore avoided but nonetheless intriguing questions concerning an important context for development—the peer world.

Vaughn rightly mentions, however, that this study has novel twists that can raise concern. Because our approach introduces novelty, many accepted views may appear to be challenged, and in some cases perhaps even undermined. Vaughn has taken on the critical task of examining the theoretical basis of our underlying model (e.g., Hawley, 1999b) and our current test of some of its tenets (Hawley & Little, 1999). In so doing, he has identified three important areas of ambiguity. Specifically, he notes our straying from traditional approaches to defining social dominance,

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Correspondence may be sent to Patricia H. Hawley, Department of Psychology, Yale University, P.O. Box 208205, New Haven, CT 06520. Electronic mail may be sent to Patricia.Hawley@Yale.edu.

the apparent overlap of social dominance with social competence, and the cues on which observers rely to assess social dominance. These apparent ambiguities are natural outcomes of our first study in which a larger theoretical model is examined. Therefore, in order to address Vaughn's cogent points, I will briefly describe some further theoretical background that was the basis of our experimental approach.

Structure and Function

By focusing on aggression, one adopts a structural definition of social dominance. Vaughn summarized excellently the questions and approaches used by "structuralists," and the less-than-enthusiastic response by developmentalists and psychologists at the time. In addition to the issues discussed by Vaughn, we believe this structural approach is problematic for several theoretically meaningful reasons. First, it compels theorists to seek idiosyncratic evolutionary mechanisms for social hierarchies that, to the observer, look very different (e.g., rhesus monkeys, Asian elephants, and adult humans). The behavior of some species is simply more overtly aggressive than that of other species. We believe, however, that a unified theory of social dominance is not only possible, but also highly desirable. Second, one must argue for selective pressures maintaining within-group aggression. To our way of thinking, unless these contests are ultimately about gaining or maintaining rights to something or someone (i.e., resources), then their adaptive value is questionable.

In contrast, we have adopted a functional approach to social dominance. That is, we focus on the consequences of competition first, and the form of the behavior (which may vary) second. This approach has been avoided by some structuralists because it is generally held that many activities can produce similar consequences (e.g., Bernstein, 1981); resources can be acquired by force, stealth, or ingratiation. These various strategies are in fact the stuff of our analyses and theoretical framework (see Hawley, 1999b). For us, dominance is only meaningful in an evolutionary sense insofar as access is gained to something or someone important for survival, development, or reproduction.¹ To us, dominance is about relative competitive ability. Therein lies the selective mechanism.

¹ Our understanding of the literature (cf. Vaughn, 1999) is that the correlation between agonistic hierarchies and access to resources is actually quite sizable, often exceeding .70 (e.g., Bernstein, 1969; Gouzoules, Gouzoules, & Fedigen, 1982; Smith, 1993; Warren & Maroney, 1958). Nonetheless, there has been reluctance to adopt a functional definition because the relationship is not isomorphic (I. S. Bernstein, personal communication, 21 October 1998). In our opinion, correlations of this magnitude support our belief that the outcomes of agonistic contests determine the allocation of resources.

The structuralist approach has enjoyed little admiration from contemporary developmental psychologists. As described by Vaughn, the pursuit of measurement invariance by structuralists stimulated a tiresome chase of an endlessly changing entity. In contrast, however, when social dominance is defined by resource acquisition and control, it has very strong evolutionary roots with more general applicability than a definition based entirely on agonistic behavior. In addition, this functional approach achieves something the structuralist approach failed to realize: It gives rise to intriguing developmental questions and testable predictions concerning children's social worlds.

The Ontogenesis of Social Dominance

This shift from traditional approaches highlights individual differences in the adoption of various strategies, developmental change, and peer relationships. Specifically, how do children pursue their material goals in a social group and balance them with social goals? How do these strategies change over the life span? What are the social (and self-) consequences of using one strategy over another? These are questions we are avidly pursuing in our program of research.

Are differential strategies (including prosocial behavior) outside of the domain of social dominance, as suggested by Vaughn? We believe they are not. On the contrary, individuals develop variegated strategies as *means* to acquire and control resources. Bargaining and compromise, appeals to friendship obligations, and cooperation are effective strategies used by socially dominant individuals to get what they want while achieving an equally important goal—maintaining positive social (resource-yielding) bonds in the group. In terms of children's social dominance in the peer group, children occupying the top positions in the hierarchy may control resources by coercion or by capitalizing on the social group in acceptable ways, or both.

Central to the model, the appearance of socially oriented strategies is an age-dependant process that follows the heuristic of developmental differentiation (see Hawley, 1999b for details). Resource control strategies in toddlerhood, for example, are characterized by coercion. Gradually in the preschool years, more prosocial strategies emerge (e.g., sharing, cooperating, and helping others). According to this model, and as would be expected from differentiating concepts in general, coercive and prosocial strategies in this age group should be highly correlated, related to social competence, and, like social dominance in many primate groups, associated with social centrality. Initial reports suggest that the strategies meet many of these expectations (Hawley, 1999a).

In primary school, the strategies become more differentiated. Prosocial strategies of resource control come to be associated with social centrality and social competence (e.g., positive peer regard), whereas coercive strategies do not. In an evolutionary (ultimate) sense, applying either strategy is more adaptive than applying no strategy because both serve to access resources. In a psychological (proximate) sense, prosocial strategies are better because they not only win access to resources, but also win approval from the social group (Hawley, Pasupathi, & Little, 1999). In contrast, coercive strategies invite peer censure and retaliation. The psychological implications of these patterns are considerable. Important from a theoretical standpoint, socially dominant individuals of human societies are now socially central, as are their primate counterparts, when prosocial strategies are considered. Cast in this light, social dominance is continuous across species and can be summarized in hierarchical patterns (i.e., dominance hierarchies).

Is Social Dominance Social Competence?

Does social competence predict contest outcomes, as Vaughn suggested? We believe it does, in addition to other personal characteristics (e.g., persistence, belligerence). In an evolutionary sense, it may be best to get what you want while being an accepted group member because social acceptance will maximize the probability that future attempts also will be successful. This undoubtedly requires a certain degree of social competence, or at least maintaining the appearance that the goals of others are not constrained. We believe that such effective adaptation is reflected in prosocial strategies of control, which are characterized by behavior that appears to be other-oriented (and on the surface may well be), but effectively serves the self. Prosocial strategies of control should be (and appear to be; Hawley, 1999a) correlated with ratings of social competence upon their emergence in the preschool years. Coercive strategies, however, also appear to be associated with ratings of social competence in this age group (see also Vollenweider, Vaughn, Azria, Bost, & Krzysik, 1998). From the developmental model discussed earlier, this is not a paradox to be reconciled. This relationship is an explicit expectation (Hawley, 1999b).

Why are young coercive children considered socially competent? Vaughn suggests this is in part due to their elevated social activity. We agree. This observation converges with the ethological work on social dominance in young children as well as our own. But we venture a step further and speak to what we believe are the origins of behavior. We believe that this pattern reflects our natural (primate) tendency to posi-

tively judge individuals who control resources successfully in age-appropriate ways (an aspect of social centrality). From a developmental perspective, however, the correlation between coercive behavior and social competence should reduce over time until it eventually reverses. Bullies, for example, appear to meet our criteria for social dominance, yet they are not considered socially competent. For these reasons, we do not believe that social dominance can be subsumed under social competence.²

Like Vaughn, we too wonder about individuals who “know” when it is appropriate to use coercive strategies and when it is appropriate to use prosocial strategies. We have speculated elsewhere that the flexibility and social savvy of these individuals may make them optimally adapted (Hawley et al., 1999). “Optimally adapted” in the ultimate sense, however, does not mean “optimally adjusted” in the proximal sense. Children who say they use both strategies report enjoying the benefits of being prosocial (they are happy and connected to peers) as well as suffering the consequences of being coercive (they are also unhappy and lonely). This “bistrategic” approach to control implies that at least sometimes the goals of others are unduly constrained (by use of coercion). Because we are at the beginning of our explorations, we do not yet know whether these children are nonetheless considered socially competent by others.

How Is Dominance Judged?

What do observers attend to when assessing dominance ranks? In our study, we asked the caretakers to report who prevails in disputes and who controls peers, with no reference to how this is done. We did not measure the degree to which directed agonism and submission were involved for two reasons. First, our participants were toddlers who characteristically adopt coercive strategies (Russon & Waite, 1991). We therefore assume agonistic exchanges were common. Second, the focus of this study did not involve strategies per se (cf. Hawley et al., 1999), but rather whether social dominance as relative competitive ability affects social behavior outside of competition. Our approach was functional, rather than structural, and our measurement simply reflects this theoretical stance.

² In contrast to other developmental approaches, the functional approach to social dominance raises questions about how prosocial and coercive children are similar, in addition to how they are different (Hawley et al., 1999). Consider, for example, moral reasoning. From a resource-control perspective, both coercive and prosocial strategies are expected to be similarly related to the tendency to excuse a transgression concerning resource possession, but be differentially related to the emotional response to having committed such a transgression (e.g., Hawley, Malti, & Keller, 1998).

In studies involving older children, however, at ages where differentiation is evident, we asked caretakers to rate the children on strategy-related behaviors after they had derived their hierarchies. They scored some of their dominant children as high on "makes threats," "is aggressive," and "bullies" and other dominant children as high on "leads," "makes suggestions," "is helpful." Nondominant children scored low on these descriptors. Social dominance, depending on the age of the children under study, need not be strongly associated with aggression. Caretakers appear to implicitly agree.

What cues do caretakers attend to when judging social dominance? Age (a proxy for development) is a strong predictor of a toddler's ability to prevail in disputes and is thus a likely candidate, as Vaughn pointed out. But mental age primarily accounted for this relationship, which presumably is less conspicuous than chronological age. Other factors appear to be involved as well. One of the alpha children of our study was neither the oldest nor the largest of his group. For all appearances, his ability to prevail appeared to be largely due to his motivation to do so. The model presented in "On Winning Some and Losing Some" (Hawley & Little, 1999) reflects these multiple paths of influence. A testable prediction engendered by the theoretical model on which this study is based is that age as a predictor of social dominance will become less important over the course of development. Size should also be largely irrelevant (cf. the traditional agonistic approach). A study we conducted with kindergartners suggests that in fact motivational factors (e.g., extraversion) carry nearly as much weight as age (e.g., Hawley, 1999a). We agree with Vaughn that these are all very important issues and we are continuing to study them.

(Not) The Final Word

Is social dominance a useful construct that speaks to the organization of groups as well as to individuals' adaptive behavior and psychological adjustment? We believe it is, so long as the approach is functional rather than structural. The functional approach gives rise to unique yet testable predictions concerning peer relationships, personality, and well-being. In the long run, we believe that it is not solely how you play the game, but also whether you win or lose.

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