

Observational Study of Children's Aggression toward Siblings and Friends: Form and Function Revisited

Alison M. Bradley, Michael A. Perrone, Jessamyn G. Perlus, Kathleen E. Covney, Moriah K. Clements, Paul R. Strusienski, Cara M. Clayback, Marysabel Gomez, Anna C. McDonough and Dr. Ganie B. Dehart

ABSTRACT

The proactive/reactive aggression dichotomy is often used to categorize functions of aggression, but it may not cover all naturally occurring subtypes of aggression. We examined the function and social context of verbal, physical, and relational aggression in children's interactions with siblings and friends in early and middle childhood. We found complex relationships among form, function, and social context of aggressive behavior by children from a nonclinical sample, demonstrating that the proactive-reactive dichotomy is not exhaustive when categorizing aggression in observational research.

INTRODUCTION

The categories of proactive and reactive are often used to classify functions of aggression, particularly in questionnaire research. Proactive aggression is characterized as planned and goal-directed, whereas reactive aggression is characterized as aggression committed in anger as retaliation for a perceived negative experience (Murray-Close & Ostrov, 2009). These categories have been extremely useful in studying negative outcomes of childhood and adolescent aggression because they differentially predict short- and long-term problems.

However, because the proactive/reactive dichotomy incorporates social context (presence or absence of a perceived negative experience) as well as function (hostile or instrumental motivation), it does not cover all naturally occurring subtypes of aggression. For example, goal-directed, instrumental aggression can occur in response to a perceived negative experience, and angry, hostile aggression can occur without any obvious triggering event. The use of questionnaires allows researchers to focus on aggression subtypes of particular interest, but in observational research a broader range of subtypes may present themselves, creating challenges for coding the functions of aggression.

As part of an ongoing longitudinal study, we examined the function and social context of verbal, physical, and relational aggression in children's semi-structured play sessions with siblings and friends in early and middle childhood. Our coding scheme categorizes aggression both by function (hostile vs. instrumental) and by social context (unprovoked, response to partner's aggressive behavior, or response to partner's nonaggressive behavior). When function and social context are examine together, six categories emerge. One of these (instrumental/unprovoked) corresponds to the usual definition of proactive aggression; another (hostile/response to aggressive behavior) equates to reactive aggression. The remaining categories (instrumental/response to aggressive behavior, instrumental/response to nonaggressive behavior, hostile/unprovoked, and hostile/response to nonaggressive behavior) will be referred to throughout the rest of this poster as "other" aggression.

Our present study examines the extent to which the categories of proactive and reactive aggression account for all instances of naturally occurring aggression observed during children's sibling and friend interactions. Although the proactive and reactive categories seem particularly salient for predicting negative behavioral outcomes, it would also be useful to know how other categories of aggression are related to both normative development and individual differences in behavior and adjustment.

METHOD

Participants

- A community sample from western New York consisting of 46 white, middle-class children (21 females, 25 males), plus one sibling and one same-sex, same-age friend for each target child.
- Twenty-six of the sibling pairs were same-sex, and 20 were mixed-sex.
- Approximately half of the siblings were two years older than the target children and half were two years younger.

Procedure

- At ages 4 and 7 the target children were videotaped at home in separate semi-structured free-play sessions with the sibling and the friend.
- The videotapes were transcribed, and transcripts were coded for episodes of aggression.
- Aggression was defined as any behavior with a clear intent to hurt or bother the partner.
- Episodes of aggression were classified as relational (damaging or threatening to damage a relationship), physical (physical acts or physical threats of force), or verbal (non-relational aggressive utterances).
- Each episode of aggression was further categorized by function (hostile vs. instrumental) and social context (unprovoked, response to partner's aggressive behavior, or response to partner's nonaggressive behavior).

Analyse

- To examine the overall relative incidence of proactive, reactive, and "other" aggression, separate chi-square analyses were conducted for target child verbal aggression (VA), physical aggression (PA), and relational aggression (RA) across sibling and friend sessions at Time 1 and Time 2.
- To examine the incidence of proactive, reactive, and "other" aggression at the individual level, separate 2(time) x 2(target child gender) repeated-measures MANOVAs for target child VA, PA, and RA were conducted, with rate per socially engaged minute of proactive, reactive, and "other" aggression as dependent variables in each case.

RESULTS

Overall Incidence of Proactive, Reactive, and "Other" Aggression

Figures 1-3 show the overall distribution of the proactive, reactive, and "other" categories for verbal, physical, and relational aggression, collapsed across time and partner:

- The "other" category accounted for the majority of all three types of aggressive episodes.
- The incidence of proactive aggression varied considerably across the three types of aggression, accounting for nearly a uarter of physical aggression episodes but 5% or less of verbal and relational aggression episodes.
- The incidence of reactive aggression was consistently low across the three types of aggression.

Relative Incidence of Proactive, Reactive, and "Other" Aggression

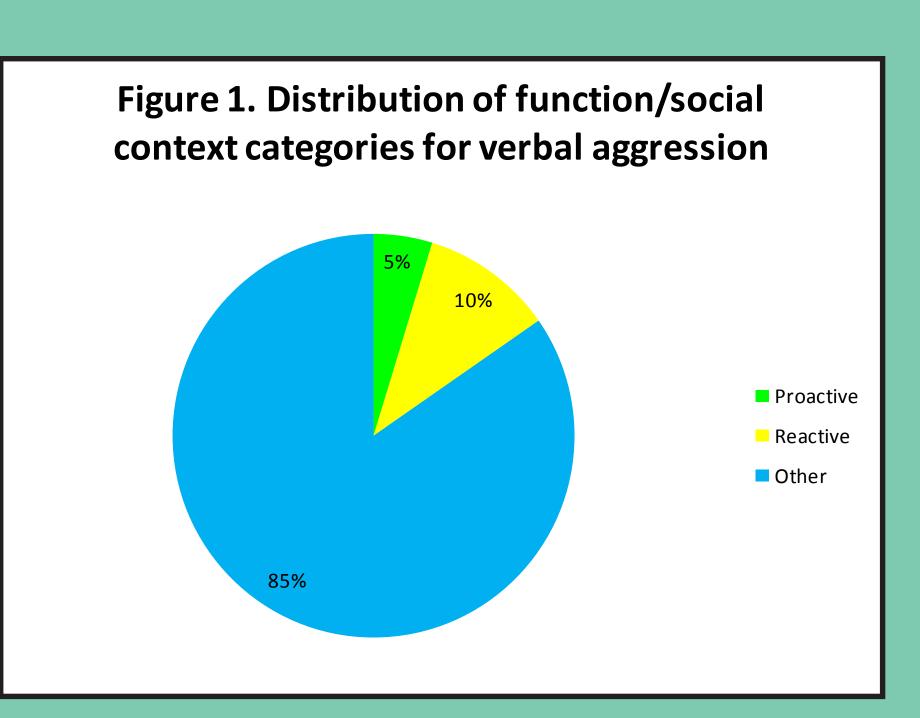
Tables 1-3 show the frequency of target child proactive, reactive, and "other" categories of verbal, physical, and relational aggression at Time 1 and Time 2 during sibling and friend interactions:

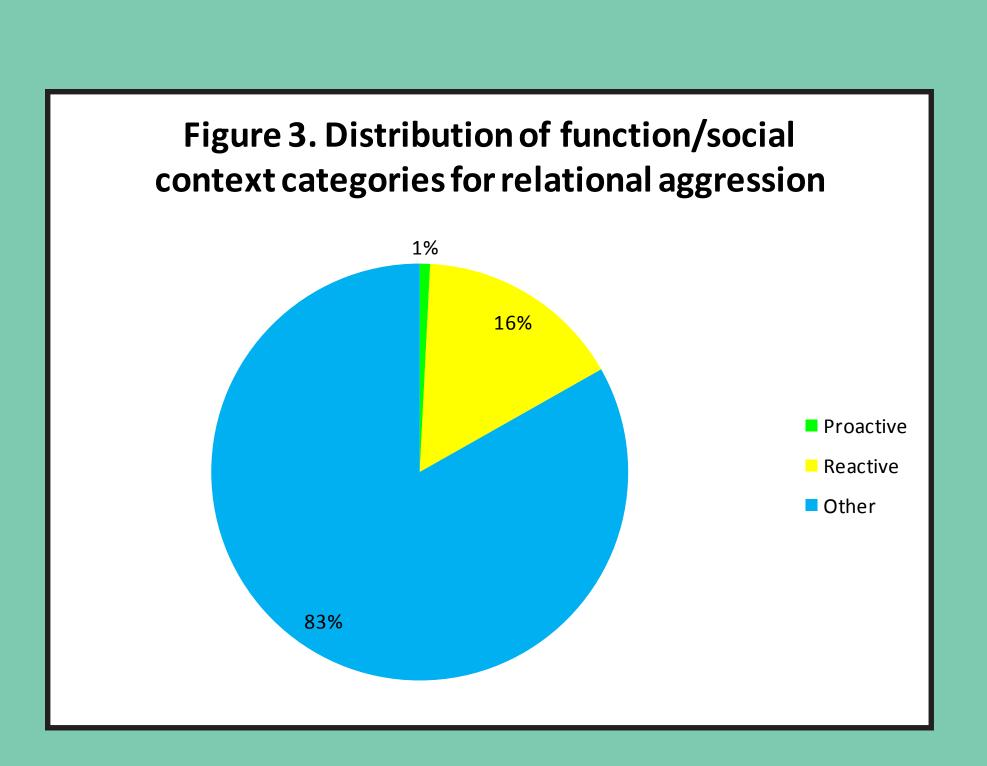
- All chi-square analyses for verbally and physically aggressive behaviors were significant, reflecting the uneven distribution of the various function/social context categories of aggression.
- None of the chi-square analyses for relationally aggressive behaviors was significant, reflecting the predominance of hostile forms of relational aggression and consistency between hostile and instrumental aggression in the distribution of social context categories.

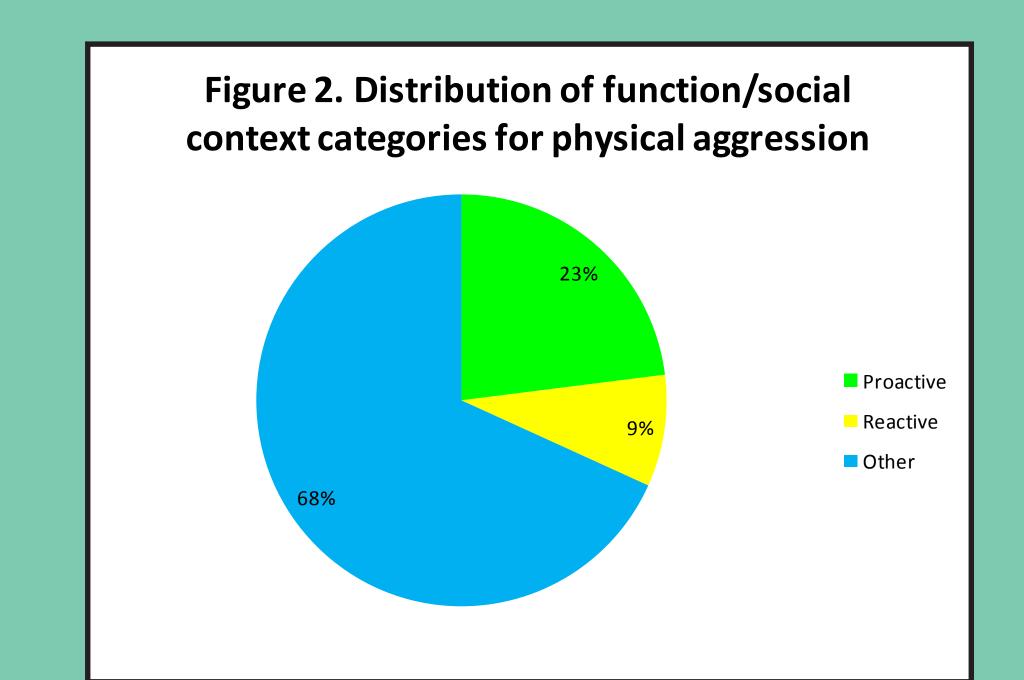
Incidence of Proactive, Reactive, and "Other" Aggression at the Individual Level

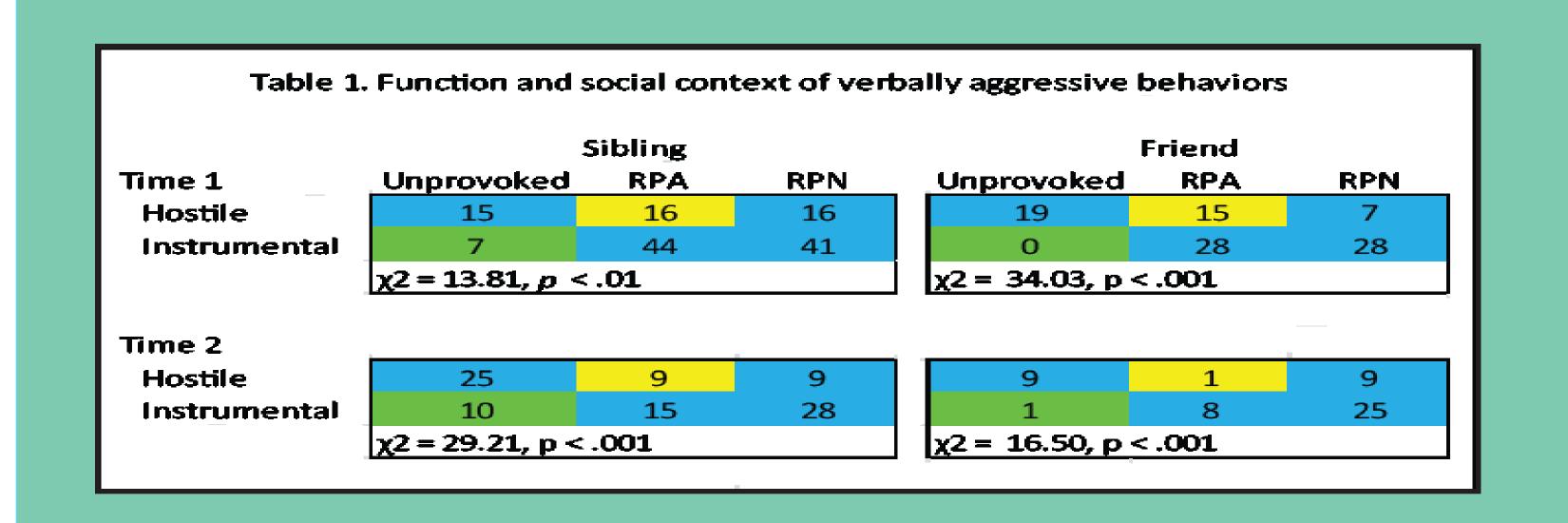
Consistent with the overall incidence of the three categories of aggression, the MANOVAs revealed some significant differences among sessions in children's rates of proactive and "other" aggression, but none in their rates of reactive aggression:

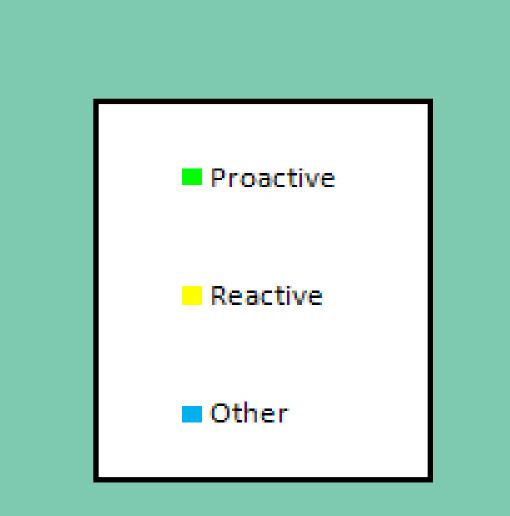
- For verbal aggression, there was a multivariate partner effect (p < .01), with univariate effects for proactive (p = .05) and 'other' aggression (p < .01); target children produced higher rates of both categories of aggression during interactions with siblings than during interactions with friends.
- For physical aggression, there was a multivariate partner effect (p < .01), with univariate effects for proactive (p = .05) and "other" aggression (p < .05); once again, target children produced higher rates of both categories of aggression during interactions with siblings than during interactions with friends.
- For relational aggression, there were no significant effects.

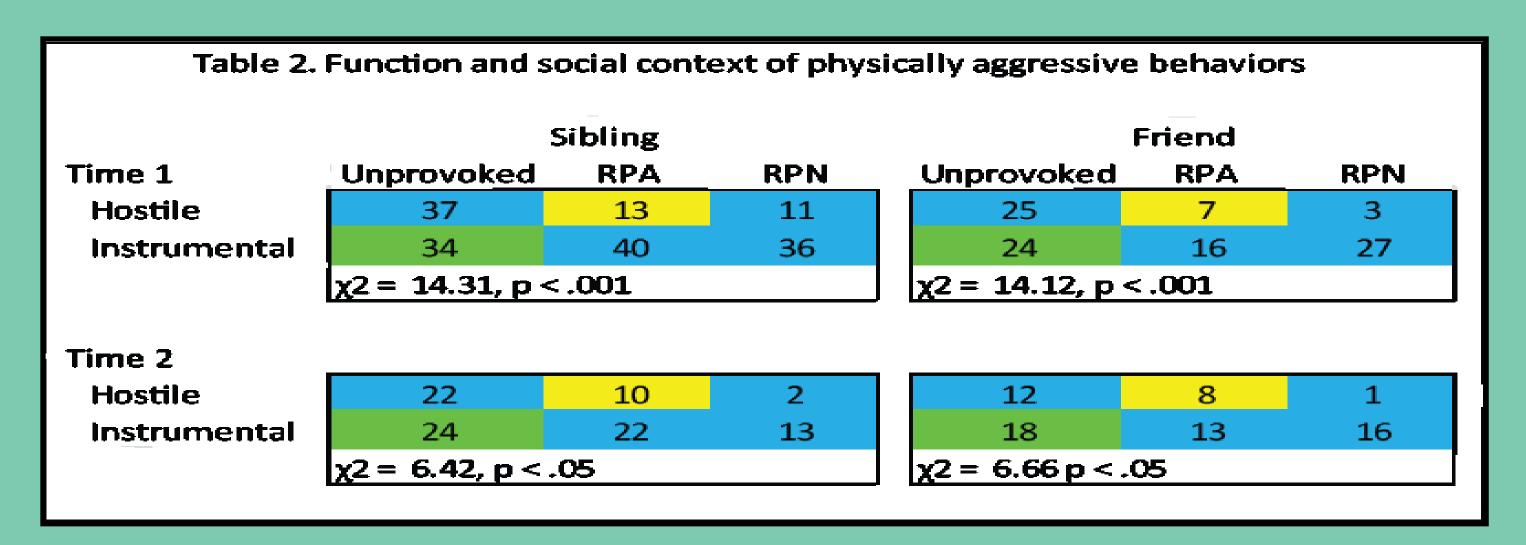


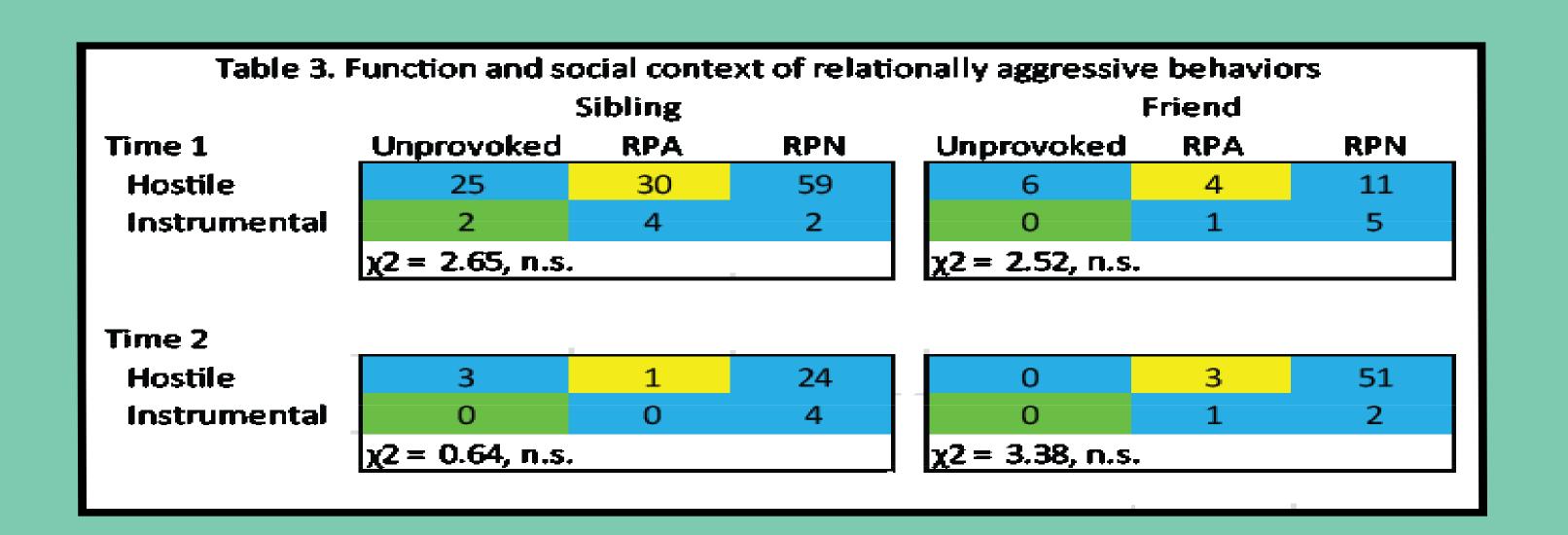












DISCUSSION

Our results demonstrate complex relationships among form, function, and social context of aggressive behavior by children from a nonclinical sample and suggest that the proactive-reactive dichotomy is not exhaustive when categorizing aggression in observational research. When function and social context are coded separately, categories other than proactive and reactive aggression account for a significant proportion of total observed aggression, particularly for verbal and physical aggression.

At least two caveats are in order when interpreting our results:

- Most of the children in our sample produced relatively low rates of aggression. It is possible that our results are specific to children whose behavior would not be considered highly aggressive. The traditional proactive and reactive aggression categories may account for a higher percentage of behavior by children producing higher overall rates of aggression.
- Our coding scheme captures many low-intensity aggressive behaviors that probably would not be taken into account in teacher, parent, peer, or self-reports of aggression. It is possible that high-intensity aggressive behaviors are more likely to fall into the proactive/reactive dichotomy.

Given that many instances of naturally occurring aggression appear not to fit the standard definitions of proactive and reactive aggression, clear differentiation of function and social context seems particularly important in observational coding of aggression. Based on past research, proactive and reactive aggression are clearly salient for predicting negative outcomes for children, but we do not yet know the significance of the various types of aggression that fall into the "other" category. Further research will be necessary to determine whether and how other function/social context categories beyond proactive and reactive aggression are related to both normative development and individual differences in behavior and adjustment.

