



# Aggression and Prosocial Behavior in 7- and 17-Year-Olds' Sibling and Friend Interactions



Kaitlin N. Rohena, Alison M. Bradley, Jessamyn G. Perlus, Michael A. Perrone, Cara M. Clayback, and Ganie B. DeHart  
State University of New York at Geneseo

## Abstract

As part of a longitudinal study, we conducted an exploratory analysis of relational, physical, and verbal aggression at ages 7 and 17 and their connections to prosocial behaviors at the same ages. Results indicate that aggression and prosocial behavior are related in complex ways across relationships and over time, with both gender and partner playing a role in rates of aggression and prosocial behavior and in the connections among them.

## Introduction

Various forms of aggression have been extensively studied in middle childhood and adolescence, mostly by means of self-report and parent and teacher questionnaires. However, observational research on aggression during those years has been limited--typically examining peer aggression in school settings and focusing on physical aggression. We know surprisingly little about individuals' use of aggression with different partners or about their relative use of different forms of aggression, which limits our knowledge of the normative development of aggression during middle childhood and adolescence. In addition, it is not clear to what extent gender differences typically observed in aggressive behavior toward peers are also to be found in sibling interactions; in previous observational research involving preschoolers, our research group has not found the usual gender differences in aggression toward siblings.

Past studies have examined aggression and prosocial behavior separately in both sibling and friend relationships. There has been relatively little examination of how these two forms of behavior are connected, especially over time.

As part of an ongoing longitudinal study of children's sibling and friend relationships, we conducted an exploratory analysis of connections between aggression and prosocial behavior in sibling and friend dyads over time. We were specifically interested in the following issues:

- The roles of partner, age, and gender in rates of prosocial behavior and relational, verbal, and physical aggression in middle childhood and adolescence, and
- Interrelationships among the three types of aggression and prosocial behavior across partners and time.

## Method

### Participants

- A community sample from western New York consisting of 45 7-year-olds (21 females, 24 males), plus one sibling and one same-sex, same-age friend for each target child.
- Approximately half of the siblings were two years older than the target children and half were two years younger.
- Seventeen of these target children (8 females, 9 males), with their siblings and friends, have been revisited so far at age 17.



## Method cont'd

### Procedure

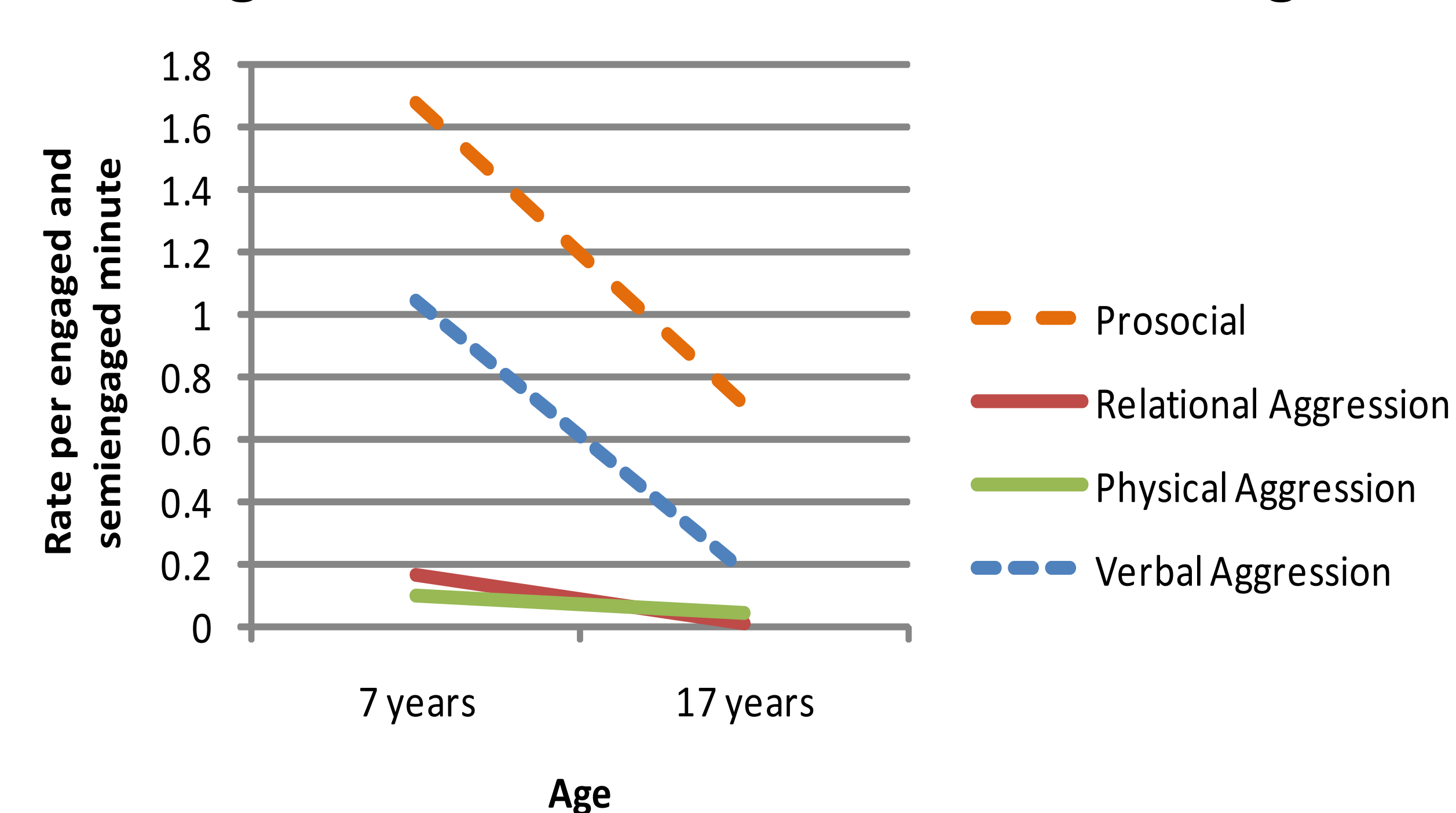
- At age 7 the target children were videotaped at home in separate semi-structured free play sessions with the sibling and the friend.
- At age 17 the target adolescents were videotaped at home in separate baking/cooking sessions with the sibling and the friend.
- The videotapes were transcribed, and transcripts were coded for the presence of aggression and prosocial behavior.
- Aggression was defined as any behavior with a clear intent to hurt or bother the partner, and prosocial behavior was defined as any voluntary behavior intended to benefit another party.
- 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).
- Social engagement was coded at 10-second intervals, and rates of aggression and prosocial behavior were adjusted to account for variation in session length and the extent to which members of dyads were engaged (mutually attending to each other) or semi-engaged (only one partner attending to the other).

### Analyses

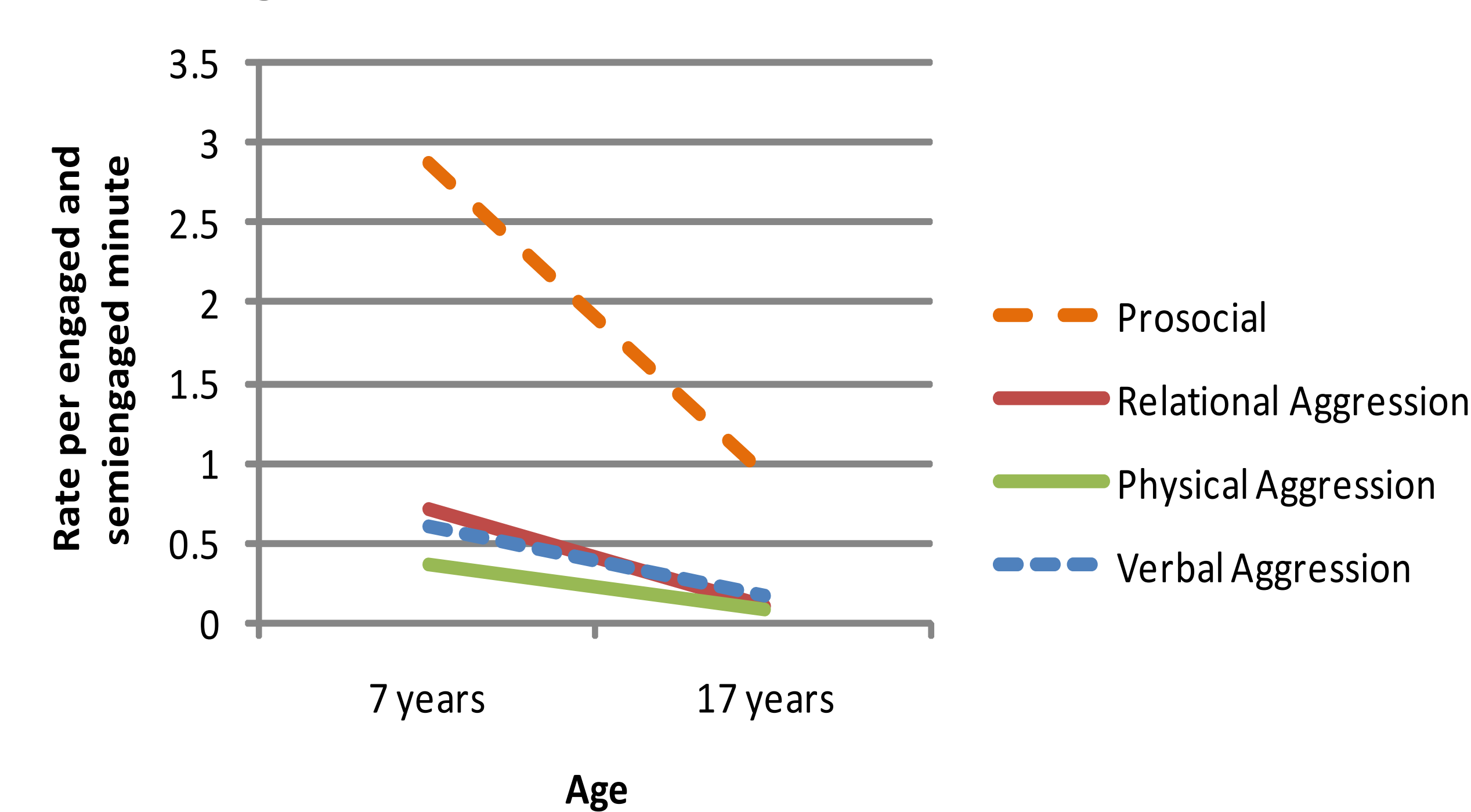
Two sets of data analyses were performed: Correlational analyses were used to examine relationships among the target children's use of various forms of aggression and prosocial behavior at age 7. To investigate the possibility that these relationships may be gender-specific, these analyses were performed separately for boys and girls.

Preliminary longitudinal analyses were used to examine changes in aggression and prosocial behavior and the connections between them over time. The longitudinal analyses are limited by the small sample size, but coding is ongoing and more participants will be available for future analyses. Because of the limited data available to us now, boys' and girls' data were analyzed together.

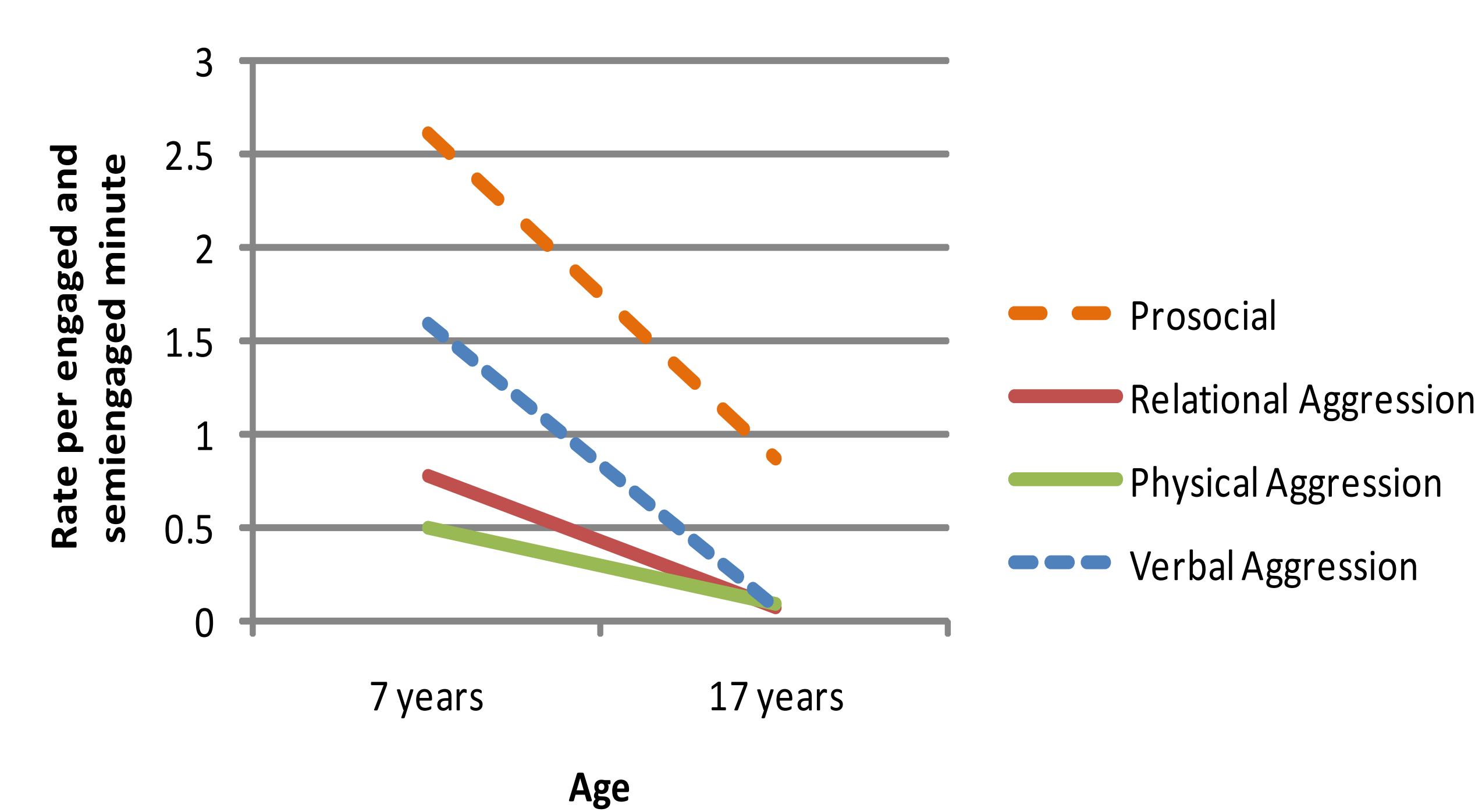
### Figure 1. Girls' Behavior toward Sibling



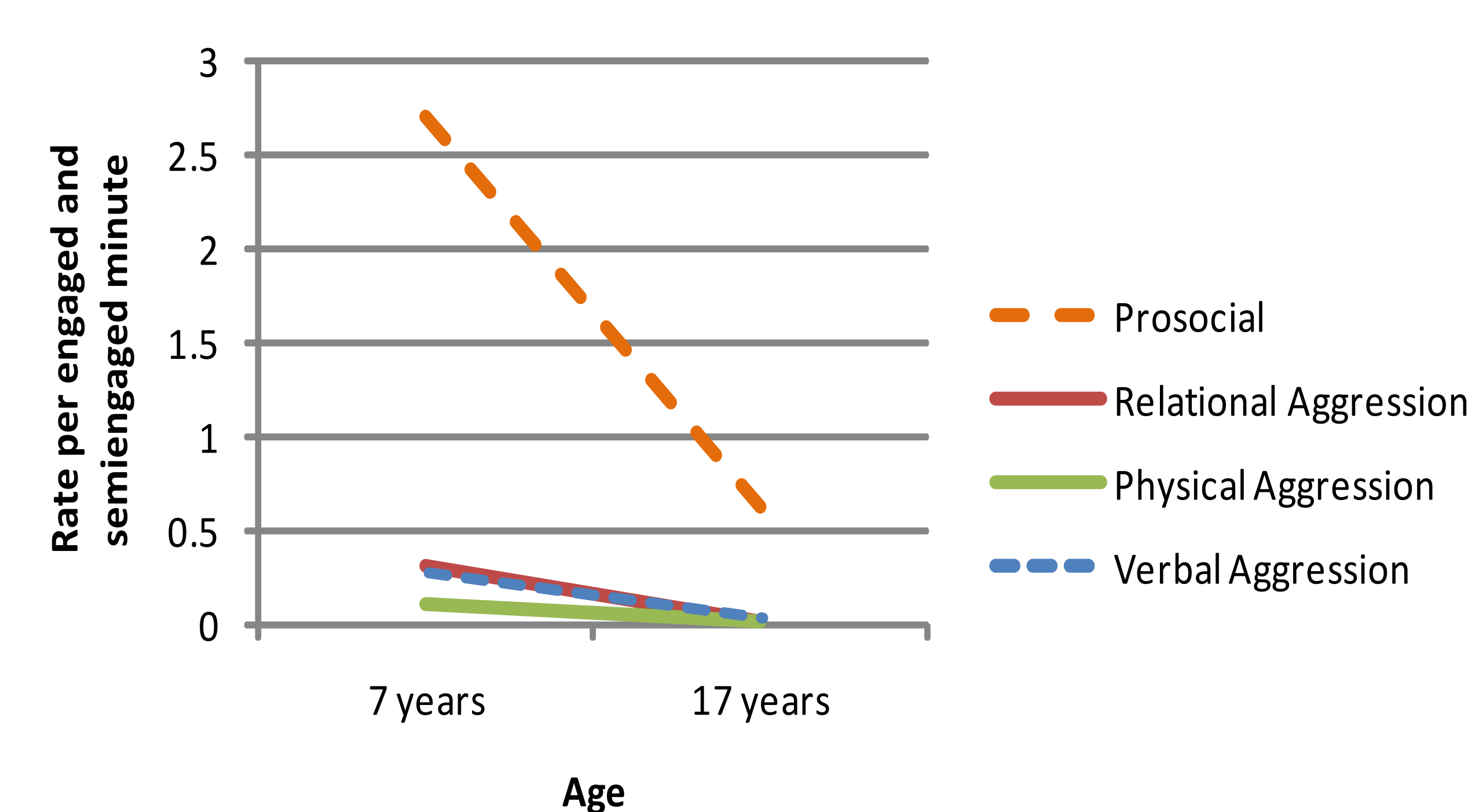
### Figure 2. Girls' Behavior toward Friend



### Figure 3. Boys' Behavior toward Sibling



### Figure 4. Boys' Behavior toward Friend



## Results

### Aggression and prosocial behavior at age 7

For girls, prosocial behavior and the various forms of aggression were connected in the following ways:

- The only significant within-relationship correlation was a positive correlation between rates of verbal and physical aggression toward friends ( $r = 0.46, p < 0.04$ ).
- Peer verbal aggression was positively correlated with sibling relational and physical aggression ( $r = 0.40, p = 0.07; r = 0.48, p = 0.03$ , respectively). Peer relational aggression and sibling verbal aggression were also positively correlated ( $r = 0.65, p = 0.001$ ).
- Relational aggression toward friends and verbal aggression toward siblings were both positively correlated with prosocial behavior toward friends ( $r = 0.43, p < 0.05; r = 0.60, p < 0.01$ , respectively).

For boys, prosocial behavior and the various forms of aggression were connected in the following ways:

- Significant within-relationship correlations were: rates of verbal and relational aggression toward friends, verbal and physical aggression toward siblings, and verbal and physical aggression toward friends. ( $r = 0.36, p = 0.08; r = 0.49, p = 0.02; r = 0.53, p < 0.01$ , respectively).
- Across relationships, rates of friend verbal aggression were positively correlated with sibling verbal aggression and sibling prosocial behavior. ( $r = 0.43, p = 0.04; r = 0.44, p = 0.03$ , respectively).

### Preliminary longitudinal analyses

As shown in Figures 1-4, aggression and prosocial behavior changed in the following ways over time:

- Relational, physical, and verbal aggression all decreased from age 7 to age 17 ( $p = .08, p < .05, p < .01$ , respectively). For verbal aggression, there was also a time x partner interaction; at age 7, siblings had a higher rate of verbal aggression than friends did, but the difference had disappeared by age 17 ( $p < .05$ ).
- The overall rate of prosocial behavior also decreased from age 7 to age 17 ( $p < .01$ ).

The following connections over time among the various forms of aggression and prosocial behavior emerged in our preliminary correlational analyses:

- Sibling verbal aggression at age 7 was negatively correlated with sibling physical aggression at age 17 ( $r = -0.44, p = 0.08$ ).
- Peer verbal aggression at age 7 was positively correlated with both sibling and friend prosocial behavior at age 17 ( $r = 0.47, p = 0.06; r = 0.54, p = 0.03$ , respectively).
- Peer physical aggression at age 7 was positively correlated with sibling verbal aggression at age 17 ( $r = 0.78, p < 0.001$ ).

## Discussion

These findings suggest the importance of social context when analyzing aggression and prosocial behavior in children and adolescents; both gender and partner played a role in rates of aggression and prosocial behavior and in the connections among them. Not surprisingly, rates of physical, verbal, and relational aggression were related both within and across relationships, contemporaneously and over time. However, the exact nature of the relationships differed for boys and girls.

Connections among the various forms of aggression and prosocial behavior were complex, perhaps due to relationship- and gender-specific meanings of the various forms of prosocial behavior and aggression. In any case, aggression and prosocial behavior are clearly not opposite ends of the same dimension. Instead, they seem to be connected in subtle ways, perhaps through joint dependence on social cognitive skills that make possible sophisticated forms of both prosocial behavior and verbal/relational aggression.