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Mara Brendgen, PhD, Brigitte Wanner, PhD, Frank Vitaro, PhD

ARTICLE

ABSTRACT

OBJECTIVES. Many adults mention past incidences of verbal abuse by the teacher as the most overwhelming negative experience in their lives. The present study examined (1) the course and stability of verbal abuse by the teacher from kindergarten through grade 4 and (2) the link between verbal abuse by the teacher and children's behavioral, emotional, and academic adjustment.

DESIGN. Participants were 399 children (177 girls) who were assessed yearly over a period of 7 years, starting in kindergarten. Verbal abuse by the teacher, as well as acceptance versus rejection by the peer group from kindergarten through grade 4, were assessed through peer nomination. Child adjustment from kindergarten through grade 4 (antisocial behavior, attention problems, anxiety) was evaluated by the teacher. Child adjustment in early adolescence (delinquent behavior, depressive feelings, academic performance) was assessed by teacher evaluations and self-reports.

RESULTS. The vast majority of children (~85%) have almost 0 risk of becoming a target of verbal abuse by the teacher over the course of elementary school. However, a small minority of children (15%) seems to be at relatively high risk of verbal abuse by the teacher in kindergarten, and this risk increases even further over the course of elementary school. Boys, as well as children with high levels of early antisocial behavior and attention problems in kindergarten, are at high risk of verbal abuse by the teacher during elementary school. In turn, verbal abuse by the teacher is significantly related to subsequent delinquent behavior and academic difficulties in early adolescence, although this effect depends on child characteristics.

CONCLUSIONS. Verbal abuse by the teacher seems to be a highly stable phenomenon for at-risk children. Children who are relatively well adjusted are at low risk of becoming the target of verbal abuse by the teacher. If they do, however, these children are the most vulnerable to subsequent developmental difficulties.
NEGATIVE SOCIAL EXPERIENCES in the school context, especially rejection and victimization by the peer group, have been found to put children at risk for a wide range of maladjustment and negative health outcomes, including delinquency, depression, and academic failure.1 Children’s negative social experiences in the school context, however, do not necessarily only entail rejection and victimization from the peer group. Especially in the primary school grades, the teacher-child relationship exerts a major influence on children’s social, behavioral, emotional, and academic adjustment.2 Children who have a very negative relationship with their teacher, especially those who experience frequent verbal abuse by the teacher, are, thus, not only likely to miss out on important learning opportunities with regard to academic content but may also be at risk for further behavioral, emotional, and social maladjustment. Indeed, when college students were asked to recall the 2 most negative experiences in their lives, incidences of verbal abuse by a teacher (eg, public humiliation in front of the class) were mentioned more often than any other type of negative experience.3 To date, however, very little is known about children’s verbal abuse by the teacher and its potential effect on child development. To address this issue, the present study examined verbal abuse by the teacher from kindergarten throughout the elementary school years and its predictors, as well as its effects on children’s social, emotional, behavioral, and academic adjustment.

VERBAL ABUSE BY THE TEACHER: WHAT IS IT AND IS IT A STABLE PHENOMENON?

Verbal abuse is considered part of the broader concept of psychological abuse or maltreatment against children.4–8 Although the specific definitions of verbal abuse sometimes vary from one author to another, behaviors that are generally subsumed within the context of verbal abuse refer to behaviors such as ridiculing and teasing, name calling, or yelling at the child.4–6,9 Similarly, in a survey among 151 mental health professionals and parents, behaviors that were rated as indicative of verbal abuse included: verbal putdowns, negative prediction, negative comparison, scapegoating, shaming, cursing and swearing, and threats.10 The present study focuses on these types of verbally abusive behavior.

Few studies have examined verbal abuse of children by their teacher, and most of these studies rest on anecdotal evidence.11,12 A few empirical studies have examined the prevalence of psychological abuse, including verbally abusive behaviors, by the teacher in non-Western societies.13,14 It is unclear, however, to what extent the findings are comparable to Western countries, which may differ in attitudes toward childrearing and student and teacher rights issues. In 1 of the only 2 empirical studies on this topic conducted in Western countries, Olweus15 examined the prevalence of students’ verbal abuse by the teacher in a sample of 2400 Norwegian students in grades 6 through 9. Verbal abuse (termed “bullying” in that study) was defined as the teacher repeatedly saying hurtful things to the student or as acting in a sarcastic, haughty manner. In addition, the abuse had to occur ≥2 times per month, and ≥4 students in the class had to agree that a child was treated in such manner. The study found that only a small minority of students seem to become victims of verbal abuse by the teacher. Specifically, when using the very strict 4-student-per-classroom agreement criterion, 1.67% of students were victims of verbal abuse by the teacher. When only 1 informant was considered, the rate of victimized students increased to 5.2%. Very different results were reported in a study by Casarjian, who examined the prevalence and the correlates of psychological abuse by the teacher in a sample of 700 North American students from low socioeconomic status backgrounds. In that study, teacher psychological abuse was operationalized as a teacher’s verbal attacks on the student’s character or ability (eg, name calling, yelling, or public ridicule) or as acts of neglect (eg, ignoring). Thirty-four percent of students reported ≥6 incidences of psychological abuse by the teacher, and 11% indicated >31 incidences of psychological abuse over the course of the school year. Moreover, approximately one quarter of participants reported specifically being the target of verbal abuse from a teacher. Notably, boys were significantly more likely than girls to have experienced any type of psychological abuse by the teacher.

Despite the difference in prevalence rates, both the Olweus15 and the Casarjian9 studies suggest that teacher-to-child verbal abuse exists in Western societies. However, the cross-sectional nature of these 2 studies limits the conclusions that can be drawn regarding the stability of this phenomenon. Is teacher-to-child verbal abuse a phenomenon that is tied to a few teachers who happen to pick on a few unlucky children or are certain children at a particularly high risk of being consistently targeted by their teachers throughout their school career? Studies examining the quality of the teacher-child relationship from early childhood through kindergarten show that conflictual relationships between a child and his or her teacher are consistent over time, even as teachers change from year 1 to the next.15 These findings suggest that problematic teacher-child relationships emerge rather early and that these problems perpetuate over time. Assuming that verbal abuse by the teacher indicates a particularly negative teacher-child relationship, it might, thus, be possible to identify a group of children who are particularly likely to be consistently picked on by their teachers throughout their school career. Examining this hypothesis was the first goal of the present article. The second goal was to examine the longitudinal associations of verbal abuse by the teacher with child adjustment.
ASSOCIATIONS BETWEEN VERBAL ABUSE BY THE TEACHER AND CHILD ADJUSTMENT

Teachers serve not only as educators but also as important socializing agents who fulfill basic socioemotional needs, such as belongingness and esteem needs. Repeated acts of verbal abuse by the teacher, thus, may derive their destructive potential of these acts through the fact that the fulfillment of the child’s basic socioemotional needs is denied, thereby undermining healthy development. However, given the rarity of empirical studies on verbal abuse by the teacher in general, it is not surprising that data regarding its effects on child adjustment are also lacking. Some support for a link between verbal abuse by the teacher and child adjustment problems can be found in the 2 aforementioned empirical studies by Olweus and Casarjian. Thus, a significant correlation was found between teacher-to-child verbal abuse and students’ own aggressive behavior toward the teacher in the Olweus study, and similar findings were reported for teacher-to-child psychological abuse (which mostly included verbally abusive behavior) in the Casarjian study. Moreover, teacher-to-child psychological abuse was related to school-related adjustment problems as measured by students’ school motivation and academic self-concept. Unfortunately, the cross-sectional nature of both studies does not provide any information on the directionality of the effect between verbal abuse by the teacher and child maladjustment.

Support for the notion of a bidirectional link between child maladjustment and verbal abuse by the teacher comes from findings that children who displayed elevated levels of problem behavior as 4-year-olds had more conflictual relationships with their teachers in kindergarten even after controlling for the quality of the teacher-child relationship in the preschool years. The reverse link was also true, however, as conflict in the teacher-child relationship during preschool was related to increases in child problem behavior in kindergarten. In another study with second- and third-grade children, the quality of the teacher-child relationship was also predictive of child aggression the following year, even when controlling for previous aggression levels. Apart from aggressive and antisocial behavior, attention problems in the child may also attract negative attention from the teacher, which, in turn, may further aggravate the child’s school-related problems. In support of the latter link, a negative teacher-child relationship in kindergarten has been shown to negatively predict children’s academic performance in grades 1–4 even after controlling for gender, verbal intelligence, and behavior problems in kindergarten. In contrast to overtly disruptive behaviors, such as aggressiveness and inattention, internalizing problems in the child may be more a result of verbal abuse rather than provoking it. Indeed, although internalizing problems have been linked to conflict in the teacher-child relationship in cross-sectional studies (eg, ref 19), longitudinal evidence suggests that early anxiety during preschool is unrelated to the quality of the teacher-child relationship in early adolescence.

Overall, the literature on the teacher-child relationships provides some, albeit indirect, support for a reciprocal link between verbal abuse by the teacher and various adjustment problems in the child. However, conflict in the teacher-child relationship does not necessarily entail verbal abuse of the child. As such, it still remains to be seen whether verbal abuse by the teacher shows similar links to child adjustment. Moreover, when investigating the correlates, especially the outcomes, of verbal abuse by the teacher, it may be important to also consider the potential moderating effect of child characteristics. Diathesis-stress theory suggests that behavioral or emotional maladjustment results from the interaction between stressful events, on the one hand, and individual vulnerability factors, on the other hand. Verbal abuse by the teacher may be viewed as a stressor, of which the negative effects on specific adjustment problems may be amplified by preexisting vulnerabilities to such problems. For example, children who are constantly picked on by the teacher may be especially prone to developing subsequent internalizing problems if they have already previously displayed high levels of anxiety. Potential moderating effects of child characteristics, thus, need to be examined to understand the effects of verbal abuse by the teacher on subsequent child adjustment problems. Another issue to consider is the potential overlap between verbal abuse by the teacher with negative experiences with the peer group. Thus, evidence suggests that conflicts in teacher-child interaction are related to children’s levels of peer rejection and that kindergarten children’s initial behavior problems are negatively related to the quality of both teacher-student interactions and peer rejection. Peer rejection, in turn, has been related to increases in children’s externalizing and internalizing problems, as well as academic difficulties. As a consequence, it is crucial to disentangle the overlap of verbal abuse by the teacher with peer rejection to understand its unique relation to child adjustment. Moreover, peer rejection might moderate the effects of verbal abuse by the teacher on child adjustment. Indirect evidence for this notion comes from findings that a problematic parent-child relationship is less strongly related to subsequent emotional maladjustment if youngsters experience high levels of peer support and that perceived social support from peers protects adolescence against the negative effects of stressful life events on depressed mood.

SUMMARY OF STUDY OBJECTIVES

In sum, the objectives of the present study were as follows: (1) to assess the course and stability of verbal abuse by the teacher from kindergarten through elementary school, and (2) to examine the bidirectional
links between verbal abuse by the teacher, on the one hand, and children’s behavioral, emotional, and academic adjustment, on the other. With respect to the first objective, based on the findings in the Olweus study, we expected to find a small group of children who are consistently picked on by their teachers (ie, a high-risk group) over the course of several years, whereas the vast majority of children should have minimal to no risk of being targeted by the teacher (ie, a no-risk group). With respect to the second goal, based on the previously discussed findings on the teacher-child relationship, we expected that the high-risk group would show more aggressive-disruptive behavior and school-related attention problems than the no-risk group already during kindergarten, although no difference in kindergarten levels of anxiety was expected. In addition, the high-risk group should show more externalizing and internalizing problems, as well as lower academic performance than the no-risk group by early adolescence. Important, these differences were expected even when controlling for family socioeconomic status and children’s behavioral, emotional, and attention-related characteristics, as well as their level of peer acceptance during childhood. In addition, we expected children’s behavioral, emotional, and attention-related problems, as well as their level of peer acceptance/rejection, to moderate the effect of verbal abuse by the teacher on subsequent maladjustment. 

In examining these issues, we also investigated potential sex-related differences. Previous studies have shown that boys not only show more behavior and school-related attention problems than girls but that they are also more likely to have conflictual relationships with their teachers. As such, boys may be more likely to be targets of verbal abuse by the teacher than girls. Apart from the main effect of gender, however, no specific predictions could be made in regard to potential moderating effects of gender on the bidirectional links between verbal abuse by the teacher and child adjustment, although the possibility of such moderating effects was examined in an exploratory fashion.

METHODS

Sample

Participants of the present study were 399 white children (N = 177, 44.4% girls) who were assessed yearly over a period of 7 years, starting in kindergarten (age: 6.01 ± 0.28 years at the time of data collection [mean ± SD]). The participants were part of a community sample from 5 schools in a small city in Quebec, Canada, who were first assessed in kindergarten. In each of the 5 schools, there were ~3 classrooms per grade. Classroom composition changed each year in the participating schools. In kindergarten, 95.3% of all the children in the targeted classrooms participated in the study. Those who did not participate did not receive parental permission or were absent from school on the day of data collection. Of the children originally assessed in kindergarten, 24.3% (n = 97) were lost from the study, because they moved away or were absent from school at the day of testing. The final sample for the analyses predicting to early adolescent outcomes (see below), thus, was composed of 302 children (141 girls). Those who were lost did not significantly differ from those who remained in the study on anxiety and antisociality scores assessed in kindergarten (see description of instruments below). However, those lost through attrition were less accepted by peers and had higher inattention scores than those who remained in the study. Children’s socioeconomic status was very similar to the provincial norm (ie, 40.40 ± 10.61 for mothers’ occupational prestige, and 44.06 ± 10.53 for fathers’ occupational prestige compared with 43.74 ± 12.88 and 43.63 ± 14.54, respectively, in a provincial representative sample of parents with children of the same age [mean ± SD]). Parental written permission was obtained each year for all of the participants. The research questions and instruments were submitted to, and approved by, the University of Montreal’s Ethics Committee and the school board administrators.

Measures

Verbal abuse by the teacher from kindergarten through grade 4 was assessed every year through peer nomination procedures. Because all children in a classroom can observe a teacher’s interactions with a given classmate, peers are likely to develop a group consensus about that classmate’s relationship with the teacher. As a result, peer nominations can offer more objective information about verbal abuse by the teacher than teacher or self-reports. At the same time, the use of peer reports maximizes reliability of measurement because of the large number of evaluators. Booklets of photographs (for kindergarten and grade 1) or names (grades 2 and higher) of all the children in a given class were handed out to the participants, and the children were then asked to circle the photographs (or names) of 3 children “who always get picked on by the teacher.” This formulation resembles the one used to assess verbal abuse by the peer group with this age group (eg, ref 32). Although the source of abuse differs, verbal abuse by the peer group conceptually resembles the phenomenon we wanted to assess in the present study. In line with the definition of verbal abuse provided by Schaefer, “picked-on” was defined as behaviors such as scolding, criticizing, or shouting at a student. The verbal abuse item was embedded in a series of additional items, including liked most and liked least nominations (see below), as well as other items (eg, friendship nominations) not pertinent to the present study. Although children were encouraged to nominate 3 classmates if possible,
they were allowed to choose fewer peers. Probably because of the relative rarity of verbal abuse by the teacher, the vast majority of children nominated 1 classmate with respect to the verbal abuse item.

Separately for each year of assessment, the total number of received nominations was calculated for each participant and \( z \) standardized within the classroom to create a total verbal abuse score. The peer nomination procedure, thus, rests on the assumption that, in classrooms where 1 or more children fit a given item descriptor particularly well, peers will choose these children in a relatively consistent manner, who, as a result, will receive high standardized scores. In contrast, in classrooms where no children fit a given item descriptor (eg, where no one is really picked on by the teacher), peer nominations will be rather random, and all of the children will receive similarly low standardized scores. To identify children who experienced notable verbal abuse by the teacher and distinguish them from classmates who are only rarely or occasionally a target of negative attention from the teacher in a given year, we followed criteria used to identify victims of abuse by peers (eg, refs 33 and 34). Specifically, children whose peer-nominated abuse score was in the upper 10th percentile of the distribution at a given assessment time were considered targets of verbal abuse by the teacher. Children whose peer-nominated abuse score was below the upper 10th percentile of the distribution at a given assessment time were not considered targets of verbal abuse by the teacher. On average, children in the upper 10th percentile of the distribution received 7.2 nominations, whereas children below the upper 10th percentile received on average 0.2 nominations. Our criterion for identifying victims of verbal abuse from the teacher can, thus, be considered adequate and sufficient insofar as the average number of nominations received by the children in the upper 10th percentile (ie, the “victims”) in our sample exceeds the criterion of 4 nominations used in the Olweus study.6

Acceptance versus rejection by the peer group from kindergarten through grade 4 was also assessed through peer nominations. Specifically, the children were asked to circle the photographs (or names) of \( \geq 3 \) children they most liked to play with (ie, positive nominations) and to circle the faces (or names) of up to 3 children they least liked to play with (ie, negative nominations). Separately for each year of assessment, a social preference score was then computed for each participant following the criteria outlined by Coie et al.31 Specifically, the total number of received positive nominations was calculated for each participant and \( z \) standardized within classroom to create a total liked-most score. The total number of received negative nominations was calculated for each participant and \( z \) standardized within classroom to create a total liked-least score (LL). The liked-least score was then subtracted from the liked-most score to create the social preference score, which was, again, \( z \) standardized within classroom. Test-retest reliability of social preference over a 1-year period ranged from .47 to .57, despite a yearly change in classroom composition.

Child Adjustment From Kindergarten Through Grade 4

Every year, teachers completed the Social Behavior Questionnaire for each participant.35 For the purposes of the present study, 3 types of problem behaviors were assessed: antisociality (11 items: eg, fights, destroys others’ properties, tells lies, and hits and kicks others), inattention (2 items: low concentration and easily distracted), and anxiety (5 items: eg, easily distressed, fearful, and cries easily). Ratings for each item ranged from 0 (“does not apply”) and 1 (“applies sometimes”) to 2 (“applies often”). For each child, individual item scores were added to compute scale scores. The good psychometric properties of the Social Behavior Questionnaire have been reported in previous research (eg, refs 36 and 37). In the present study, \( \alpha \) ranged from .90 to .93 for antisociality, from .83 to .90 for inattention, and from .72 to .76 for anxiety. Test-retest reliability over a 1-year period ranged from .54 to .62 for antisociality, from .46 to .60 for inattention, and from .24 to .40 for anxiety, despite the use of different teachers as raters from 1 year to the next.

Delinquent Behavior in Grades 5 and 6

Delinquent behavior was assessed in grades 5 and 6 by means of the Self-Reported Delinquent Behavior Questionnaire.38 Participants reported whether they had been involved in a variety of delinquent behaviors over the last 12-months. The 25 questions addressed fighting, theft, vandalism, and drug/alcohol use. The adolescents answered whether they had never (1), rarely (2), sometimes (3), or often (4) engaged in each act. LeBlanc39 reported satisfactory internal consistency, test-retest reliability, convergent, discriminant, and predictive validity for early adolescents of both genders. For the total delinquent behavior scale, which was created by summing the individual item scores, internal consistency was .89 in grade 5 and .84 in grade 6. Test-retest reliability was .68.

Depression in Grades 5 and 6

Participants’ feelings of depression were assessed in grades 5 and 6 using the Children’s Depression Inventory (CDI). The CDI is a self-rated 27-item scale assessing affective, cognitive, motivational, and somatic symptoms of depression. In the present study, the suicidal ideation item was eliminated because of concerns of the school board. Participants rated each item on a 3-point scale (from 0 to 2) with higher ratings indicating more severe symptoms. The CDI has relatively high internal consistency and stability and has been validated using normative and clinic-referred samples.40-42 Internal con-
sistency was .86 in grade 5 and .87 in grade 6. Test-retest reliability was .32.

Academic Performance in Grades 5 and 6
Information about participants’ academic performance was obtained from teachers in grades 5 and 6. Specifically, teachers rated participants’ performance with respect to reading, writing, and math, respectively, in comparison with their agemates on a 5-point scale ranging from 1 ("much below average"), 2 ("somewhat below average"), 3 ("average"), 4 ("somewhat above average"), to 5 ("much above average"). A total academic performance score was calculated for each participant by summing the 3 item scores. This procedure has shown good construct validity as indicated by the correlation with children’s grades ($r = 0.73$) for a comparable sample of early adolescents in Quebec. Internal consistency was .91 in grade 5 and .93 in grade 6. Test-retest reliability was .72.

Procedure
All of the instruments were administered in French. Following the procedure suggested by Vallerand,44 instruments that were administered in French but were originally written in English were first translated into French and then translated back into English. Bilingual judges verified the semantic similarity between the back-translated items and the original items in the questionnaire. Mothers filled out the questionnaires regarding family socioeconomic status at home. Peer nominations (as well as self-reported assessments in grades 5 and 6) were conducted in the classrooms between April and May at the end of each school year and took ~45 minutes per class. At the same time, teachers completed the behavior questionnaires for each participating child in their class. Trained research assistants administered and collected the questionnaires. The students were encouraged to keep their answers confidential and not to talk with classmates about their answers. The research assistants remained present while students filled out the questionnaires to answer any questions related to the study. Teachers were asked to leave the classroom during the assessment. Parental written permission was obtained each year for all of the participants.

RESULTS
Identification of Groups With Distinct Longitudinal Profiles of Verbal Abuse by the Teacher
In the first block of analyses ($n = 399$), we examined whether groups with distinct longitudinal trajectory profiles of verbal abuse by the teacher could be empirically identified. For this purpose, we used TRAJECTORIES (henceforth referred to as TRAJ), an SAS-based growth mixture modeling procedure (SAS Institute, Cary, NC) for longitudinal data (for a detailed description see refs 45 and 46). Growth mixture models empirically test whether different groups with distinct trajectories exist in the population and provide an empirical basis for determining the number of groups, as well as the shapes of the trajectories in the different groups. A LOGIT distribution was used as the basis of model estimation for the dichotomized verbal abuse variable. Although a 2-group model was expected, we also tested alternative models (ie, models varying from 1 to 3 groups) to examine whether a 2-group model indeed provided the best fit to the data. Initial model specification included cubic trajectories for all of the groups, which allowed for a possible temporal variability of verbal abuse occurrences. As in previous applications of the TRAJ procedure (eg, refs 47 and 48) the Bayesian information criterion (BIC) was used as a basis for selecting the optimal number of trajectory groups. The integrated classification likelihood (ICL)-BIC, an entropy-corrected and, thus, more conservative fit index,59 was also included for model evaluation. For both indexes, the value closest to 0 indicates the best fit.

The results from the TRAJ procedure revealed that a 2-group model showed the best fit to the data (BIC = 1105.31; ICL-BIC = 1214.15) compared with the 3-group model (BIC = 1131.34; ICL-BIC = 1368.55) and the 1-group model (BIC = 1218.05; ICL-BIC = 1218.05). On the next step, the trajectory parameters from the 2-group model were examined with respect to whether the modeling of a cubic trend was necessary to adequately fit the trajectory in each group. Using backward elimination of higher-order trends (ie, cubic trends were eliminated first, then quadratic trends, and finally linear trends), a simpler model was estimated whenever a specific higher-order growth coefficient did not reach statistical significance in a specific group. As such, not only the specific values but also the number of growth parameters could differ between groups in the final model. The results from the final parsimony model with the estimated and observed trajectories of verbal abuse by the teacher for each of the 2 groups, based on estimated and observed probabilities of verbal abuse, are depicted in Fig 1. This final parsimony 2-group model had a better fit to the data than the initial 2-group model (BIC = 1069.15. ICL-BIC = 1178.76 for the final model compared with BIC = 1218.05. ICL-BIC = 1218.05 for the initial 2-group model). Moreover, the results revealed excellent classification precision of the 2-group model, with a mean average posterior assignment probability of .96 (±.08) for the no-risk group and a mean average posterior assignment probability of .92 (±.11) for the high-risk group.

As can be seen in Fig 1, the first group showed a

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* Because the TRAJ procedure automatically includes cases with missing data, these analyses were based on all 399 children of the original sample. The vast majority of children, however, had complete data regarding their level of psychological maltreatment by the teacher, with a maximum of 3 missing data points in 4% of the sample.
0-order trend of verbal abuse by the teacher, which indicated that this group was basically at no risk of being targeted by the teacher (constant: 0.03; \(P < .001\); slope: 0.00, not significant). Thus, the probability of being a target of verbal abuse by the teacher for children in this group was \((1 - e^{-0.03}) \times 100\% = 3\%\) over the course of the 5 years of assessment from kindergarten through grade 4. This group (the no-risk group), comprised an estimated 84.7\% of the population and included 347 children (172 girls and 175 boys) from the study sample. In contrast, the second group (the high-risk group), showed already a relatively high probability of verbal abuse by the teacher in kindergarten, and this probability increased even more over the course of elementary school (constant: 0.39; \(P = .08\); slope: 0.89; \(P < .05\)). Thus, the probability of being a target of verbal abuse by the teacher for children in this group was \((1 - e^{0.39}) \times 100\% = 40\%\) in kindergarten and increased to \((1 - e^{0.39 + 0.89 \times 3}) \times 100\% = 60\%\) by grade 4. This group comprised an estimated 15.3\% of the population and included 52 children (5 girls and 47 boys) from the study sample. Independent sample t tests were conducted to compare the 2 trajectory groups in regard to their average level of verbal abuse by the teacher during childhood (ie, from kindergarten through grade 4). Because membership in the verbal abuse trajectory groups is not a certainty but is based on probability estimates, values were weighted by individuals’ posterior assignment probabilities into each of the 2 trajectory groups. On the first step of the logistic regression analysis we included gender, socioeconomic status, antisociality, anxiety, and inattention as predictors in the model. We also included social preference among peers as an additional predictor on the first step to test for the possibility of reputational bias effects. On the second step, we tested whether the predictive effects of the 4 main predictor variables were moderated by child gender. The four 2-way interaction terms were tested in a mutually exclusive sequence (ie, steps 2a through 2d) to keep the number of model predictors to a minimum. The 0-order correlations, means, and SDs of the variables used in the logistic-regression analysis predicting verbal abuse by the teacher are presented in Table 1. In Table 2 we present the overall model fit and \(\chi^2\) change associated with each step of the logistic regression, as well as the specific odds ratios associated with each predictor with respect to membership in the high-risk group. The results showed that girls were significantly less likely to experience repeated verbal abuse from the teacher than boys (odds ratio: 0.22; \(P < .01\)). In addition, high levels

Predictive Links of Kindergarten Characteristics to Verbal Abuse Trajectories

In the next set of analyses, we examined to what extent children’s behavioral, emotional, and attention-related problems in kindergarten would predict their likelihood of repeated verbal abuse by the teacher in subsequent years and whether child gender would moderate the observed predictive links. For this purpose, a hierarchical logistic-regression analysis was performed to predict membership in the high-risk group, using the no-risk group as reference category. Because of the probabilistic nature of membership in the trajectory groups, the logistic regression was weighted by individuals’ posterior assignment probabilities into each of the 2 trajectory groups. On the first step of the logistic regression we included gender, socioeconomic status, antisociality, anxiety, and inattention as predictors in the model. We also included social preference among peers as an additional predictor on the first step to test for the possibility of reputational bias effects. On the second step, we tested whether the predictive effects of the 4 main predictor variables were moderated by child gender. The four 2-way interaction terms were tested in a mutually exclusive sequence (ie, steps 2a through 2d) to keep the number of model predictors to a minimum. The 0-order correlations, means, and SDs of the variables used in the logistic-regression analysis predicting verbal abuse by the teacher are presented in Table 1. In Table 2 we present the overall model fit and \(\chi^2\) change associated with each step of the logistic regression, as well as the specific odds ratios associated with each predictor with respect to membership in the high-risk group. The results showed that girls were significantly less likely to experience repeated verbal abuse from the teacher than boys (odds ratio: 0.22; \(P < .01\)). In addition, high levels
of both antisocial behavior and inattention significantly increased the odds of being a consistent target of verbal abuse by the teacher during elementary school (odds ratio: 2.37; \( P < .001 \); odds ratio: 1.52; \( P < .05 \)). A significant interaction involving gender and inattention, however, revealed that the predictive effect of inattention was true for boys only (odds ratio: 1.93; \( P < .01 \)), whereas no such link was found in girls (odds ratio: 0.27; \( P = .19 \)). No other interactions were significant.

### Predictive Links of Verbal Abuse Trajectories to Child Adjustment in Early Adolescence

In the final set of analyses \((n = 302)\), we examined to what extent repeated verbal abuse by the teacher would predict children’s subsequent behavioral, emotional, and academic adjustment problems in early adolescence and whether the observed predictive links would be moderated by childhood levels of adjustment problems or social preference during childhood. Because only 2 girls were in the high-risk group for this set of analyses, no moderating effects of gender on the effects of verbal abuse by the teacher on child adjustment could be examined. A series of 3 separate linear regressions was performed where membership in the high-risk group versus the no-risk group was entered as the predictor variable, and depression, delinquency, social, and academic performance, respectively, were used as the criterion variables. For each of the 3 criterion variables, average scores across grades 5 and 6 were used to maximize variance and reliability of measurement. Apart from group membership, the following variables were included as predictors in each regression analysis: gender, socioeconomic status, and children’s average social preference score during childhood (ie, from kindergarten through grade 4). In addition, because criterion variables were not measured before grade 5, the childhood adjustment score that conceptually corresponded to, and that showed the strongest correlation with, a given criterion variable was included as a control variable. Specifically, in the analysis predicting delinquency, children’s average antisociality score during childhood (ie, from kindergarten through grade 4) was included in the model as a control variable. In the analysis predicting depression, children’s average anxiety score during childhood was included in the model as a control variable. Finally, in the analysis predicting academic performance, children’s average inattentiveness score during childhood was included in the model as a control variable. In each series of regression analyses, the main predictor variables were entered on the first step, fol-

### TABLE 1 Zero-Order Correlations, Means, and SDs of the Variables Used in the Analyses Predicting Verbal Abuse by the Teacher

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<th>Variable</th>
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<td>1. Verbal abuse</td>
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<td>2. Gender</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Socioeconomic status</td>
<td>—0.07</td>
<td>0.08</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Kindergarten antisociality</td>
<td>0.50(a)</td>
<td>—29(a)</td>
<td>—0.07</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Kindergarten anxiety</td>
<td>—0.06</td>
<td>—0.05</td>
<td>0.01</td>
<td>0.07</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Kindergarten inattention</td>
<td>0.29(a)</td>
<td>—22(a)</td>
<td>—25(a)</td>
<td>0.40(a)</td>
<td>0.37(a)</td>
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</tr>
<tr>
<td>7. Kindergarten social preference</td>
<td>—21(a)</td>
<td>0.15(a)</td>
<td>0.10(a)</td>
<td>—41(a)</td>
<td>—0.07</td>
<td>—0.39(a)</td>
<td>—</td>
</tr>
<tr>
<td>Mean</td>
<td>0.13</td>
<td>0.44</td>
<td>43.25</td>
<td>3.91</td>
<td>1.72</td>
<td>1.64</td>
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</tr>
<tr>
<td>SD</td>
<td>—</td>
<td>—</td>
<td>7.05</td>
<td>3.57</td>
<td>1.33</td>
<td>1.39</td>
<td>0.65</td>
</tr>
</tbody>
</table>

\(n = 399\). Verbal abuse is coded such that 0 indicates the no-risk group and 1 indicates the high-risk group. Gender is coded such that 0 indicates girls and 1 indicates boys. For verbal abuse and gender, the percentage of children in the high-risk group (1) is provided instead of means. Correlation coefficients are weighted by individuals’ posterior assignment probabilities into the trajectory groups, corresponding with subsequent multivariate analyses (see text).

\(a\) \(P < .001\), 2-tailed tests.

\(b\) \(P < .01\), 2-tailed tests.

\(c\) \(P < .05\), 2-tailed tests.

### TABLE 2 Logistic-Regression Analysis Predicting Risk of Verbal Abuse by the Teacher

<table>
<thead>
<tr>
<th>Variable</th>
<th>(\chi^2) Change (Degrees of Freedom)</th>
<th>(P)</th>
<th>Nagelkerke (R^2) Change</th>
<th>Odds Ratio</th>
<th>(P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>97.31 (6)</td>
<td>&lt;.001</td>
<td>.36</td>
<td>0.22</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>0.88</td>
<td>ns</td>
<td></td>
<td>0.08</td>
<td>ns</td>
</tr>
<tr>
<td>Kindergarten antisociality</td>
<td>2.37</td>
<td>&lt;.001</td>
<td></td>
<td>0.76</td>
<td>ns</td>
</tr>
<tr>
<td>Kindergarten anxiety</td>
<td>1.52</td>
<td>&lt;.05</td>
<td></td>
<td>0.80</td>
<td>ns</td>
</tr>
<tr>
<td>Kindergarten inattention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten social preference</td>
<td>10.09 (1)</td>
<td>&lt;.001</td>
<td>.03</td>
<td>5.32</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

\(n = 399\). Only significant interactions are reported. Gender is coded such that 0 indicates boys and 1 indicates girls. The no-risk group serves as comparison group for model tests and odds ratios. ns indicates not significant.
lowed by a 2-way interaction term “group membership × childhood social preference” on the second step. For the analysis predicting delinquency, we also included a second 2-way interaction, that is, between group membership and childhood antisociality. Similarly, for the analysis predicting depression, we included the interaction between group membership and childhood anxiety. For the analysis predicting academic performance, we included the interaction between group membership and childhood inattention. To facilitate interpretation, all of the dependent and continuous independent variables were z standardized before creating the interaction terms and the z standardized variables were used in the analyses (see ref 52). As in the previous logistic regression, the linear regressions were weighted by individuals’ posterior assignment probabilities into the 2 trajectory groups. The 0-order correlations, means, and standard SDs of the variables used in the regression analysis predicting child adjustment in early adolescence are presented in Table 3. The overall model F, F change, the change in R², and the regression coefficients and corresponding t values from the 3 regressions are provided in Table 4.

The analysis predicting self-reported delinquency revealed that boys were more delinquent than girls (β = −.38; P < .001) and that children with higher childhood levels of antisocial behavior showed higher levels of delinquent behavior in early adolescence (β = .14; P < .05). Although verbal abuse by the teacher during childhood had no main effect on delinquent behavior during early adolescence, results from the second step revealed a significant interaction between verbal abuse by the teacher and social preference. Following the procedure described by Jaccard et al,52 we examined the effect of verbal abuse by the teacher at 3 levels of social preference: low (1 SD below the mean), moderate (at the mean or 0), and high (1 SD above the mean). The regression coefficient and t value associated with verbal abuse by the teacher at a medium level of social preference was provided in the second step of the regression equation (β = .41; t = 2.06; P < .05). When social preference increased by 1 SD, the effect of verbal abuse by the teacher on delinquent behavior was even more pronounced (β = .69; t = 2.37; P < .05). However, when social preference decreased by 1 SD, verbal abuse by the teacher had no significant effect on delinquent behavior during early adolescence (β = −.02; t = 0.77; P not significant).

The analysis predicting depressive feelings during adolescence revealed that girls were more depressed than boys (β = .21; P < .01) and that low levels of social preference during childhood predicted high levels of depression (β = −.27; P < .001). Verbal abuse by the teacher during childhood did not significantly contribute to depressive feelings during early adolescence, and no interaction effects between verbal abuse by the teacher and either social preference or anxiety were found.

The analysis predicting academic performance during early adolescence showed that high levels of inattention and low levels of peer social preference during childhood were predictive of low levels of academic performance (β = −.60; P < .001 and β = .12; P < .001, respectively). Verbal abuse by the teacher during childhood had no main effect on academic performance during early adolescence, but there was a significant interaction between verbal abuse by the teacher and inattention during childhood. To interpret the nature of the interaction, we examined the effect of verbal abuse by the teacher at 3 levels of inattention: low (1 SD below the mean), moderate (at the mean or 0), and high (1 SD above the mean). The regression coefficient and t value associated with verbal abuse by the teacher at a medium level of inattention was provided in the second step of the regression equation (β = −.21; t = −1.41; P not signifi-

![Table 3](image)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Verbal abuse</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2. Gender</td>
<td>−.29a</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<td>3. Socioeconomic status</td>
<td>−.07</td>
<td>.08</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Childhood antisociality</td>
<td>.65a</td>
<td>−.37a</td>
<td>−.14a</td>
<td>—</td>
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<td>—</td>
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<td>—</td>
</tr>
<tr>
<td>5. Childhood anxiety</td>
<td>.09b</td>
<td>−.05</td>
<td>−.10b</td>
<td>.20a</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Childhood inattention</td>
<td>.39a</td>
<td>−.29a</td>
<td>−.25a</td>
<td>.56a</td>
<td>.43a</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Childhood social preference</td>
<td>−.35a</td>
<td>.13c</td>
<td>.20a</td>
<td>.29a</td>
<td>−.12b</td>
<td>.24a</td>
<td>.02a</td>
<td>.12c</td>
<td>.10b</td>
<td>—</td>
</tr>
<tr>
<td>8. Early adolescent delinquency</td>
<td>.19a</td>
<td>−.26a</td>
<td>−.12</td>
<td>.24a</td>
<td>.02a</td>
<td>.12c</td>
<td>.10b</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9. Early adolescent depression</td>
<td>.02</td>
<td>.08a</td>
<td>−.12</td>
<td>.08b</td>
<td>.22a</td>
<td>.13a</td>
<td>−.27a</td>
<td>.32a</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>10. Early adolescent school performance</td>
<td>.26a</td>
<td>.16a</td>
<td>.27a</td>
<td>.31a</td>
<td>−.31a</td>
<td>−.68b</td>
<td>.46a</td>
<td>−.07</td>
<td>−.21a</td>
<td>—</td>
</tr>
<tr>
<td>Mean</td>
<td>.11</td>
<td>.47</td>
<td>.4325</td>
<td>3.91</td>
<td>1.71</td>
<td>1.64</td>
<td>.00</td>
<td>29.12</td>
<td>35.02</td>
<td>3.31</td>
</tr>
<tr>
<td>SD</td>
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<td>7.05</td>
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<td>1.88</td>
<td>1.97</td>
<td>.92</td>
<td>5.06</td>
<td>5.80</td>
<td>0.97</td>
</tr>
</tbody>
</table>

n = 302. Verbal abuse is coded such that 0 indicates the no-risk group, and 1 indicates the high-risk group. Gender is coded such that 0 indicates girls and 1 indicates boys. For verbal abuse and gender, the percentage of children in the high-risk group (1) is provided instead of means. Correlation coefficients are weighted by individuals’ posterior assignment probabilities into the trajectory groups, corresponding with subsequent multivariate analyses (see text).

a P < .001, 2-tailed tests.
b P < .05, 2-tailed tests.
c P < .01, 2-tailed tests.
When inattention increased by 1 SD, the effect of verbal abuse by the teacher on academic achievement was also not significant ($\beta = .06; t = 0.58; P$ not significant). However, when inattention decreased by 1 SD, verbal abuse by the teacher was significantly related to lower levels of academic achievement ($\beta = -.47; t = 2.08; P < .05$).

**DISCUSSION**

Many adults mention past incidences of verbal abuse by the teacher as the most overwhelming negative experience in their lives. To date, however, very little is known about children’s verbal abuse by the teacher and how it is related to child development. In an attempt to shed light on this issue, the present study examined (1) the course and stability of verbal abuse by the teacher from kindergarten through grade 4 and (2) the link between verbal abuse by the teacher, on the one hand, and children’s behavioral, emotional, social, and academic adjustment, on the other hand. With respect to the first goal, our results showed that most children (85%) have almost 0 risk of becoming a target of verbal abuse by the teacher throughout the course of elementary school. Notably, although our measure of verbal abuse by the teacher was based on peer reports, the percentage of children identified as recipients of repeated verbal abuse by the teacher in our study is similar to that found in the Casarjian study, which was based on self-reports.

Our findings indicate that the probability of experiencing verbal abuse by the teacher is highly stable for at-risk children, even as teachers change from 1 year to the next. One possible explanation for this high stability is that teachers talk during staff meetings about children they perceive as particularly problematic, thus creating negative expectations in colleagues who may teach these children in subsequent years. Such negative expectations, in turn, may not only sensitize new teachers to any negative behavior that the children may display but may also shape the new teachers’ behavior toward these children. Communication of negative experiences with a child from 1 teacher to the next may not completely explain the high stability of verbal abuse by the teacher over time, however. Thus, Howes et al showed that teacher perceptions of relationship quality with a child were stable across the transition from community child-care centers (preschool) to formal school (kindergarten). Howes et al argue that, because there was little or no communication between preschool and kindergarten teachers about the children, kindergarten

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**TABLE 4** Multiple Linear-Regression Analysis Predicting Child Adjustment in Early Adolescence

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$F$ Change (Degrees of Freedom)</th>
<th>$R^2$ Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Set A: predictions to delinquent behavior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>$-0.38^a$</td>
<td>$-4.53$</td>
<td>13.16 (5598)</td>
<td>0.10$^a$</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>$-0.01$</td>
<td>$-0.00$</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Childhood antisociality</td>
<td>$0.14^b$</td>
<td>2.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood social preference</td>
<td>$0.03$</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>$0.17$</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse $\times$ childhood social preference</td>
<td>$0.28^b$</td>
<td>2.16</td>
<td>6.64 (1591)</td>
<td>0.01$^b$</td>
</tr>
<tr>
<td><strong>Set B: predictions to depressive feelings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>$0.21^b$</td>
<td>2.58</td>
<td>12.58 (5598)</td>
<td>0.10$^b$</td>
</tr>
<tr>
<td>Socioeconomic status</td>
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<td>0.00</td>
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<tr>
<td>Childhood anxiety</td>
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<td>1.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood social preference</td>
<td>$-0.26^a$</td>
<td>$-5.66$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>$-0.16$</td>
<td>$-1.19$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Set C: predictions to academic performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>$-0.06$</td>
<td>$-0.87$</td>
<td>110.38 (5598)</td>
<td>0.48$^a$</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>$0.01$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood inattention</td>
<td>$-0.60^a$</td>
<td>$-15.86$</td>
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</tr>
<tr>
<td>Childhood social preference</td>
<td>$0.12^a$</td>
<td>3.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>$0.06$</td>
<td>0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse $\times$ childhood inattention</td>
<td>$0.27^a$</td>
<td>2.64</td>
<td>11.59 (1591)</td>
<td>0.01$^a$</td>
</tr>
</tbody>
</table>

$n = 302$. Only significant interactions are reported. Gender is coded such that 0 indicates boys and 1 indicates girls.

$^a P < .001$, 2-tailed tests.

$^b P < .05$, 2-tailed tests.
teachers’ perception of the children were not influenced by prior knowledge of the child but by the child’s own characteristics.

Predictive Links of Kindergarten Characteristics to Verbal Abuse by the Teacher

Support for the notion that child characteristics may affect teachers’ perception of (and subsequent behavior toward) a child is provided by our findings that the child’s antisocial behavior and inattention in kindergarten predicted the risk of verbal abuse by the teacher from kindergarten through grade 4. This finding is consistent with research showing that teachers’ interactions with aggressive-disruptive children is often angry, critical, and punishing and that child problem behavior is related to an increase in teacher-child conflicts. Interestingly, inattention seemed to provoke the teacher’s scorn, especially for boys but not for girls. One possible explanation may be that, in girls, a lack of attention may be considered a temporary lapse and, thus, be more readily excused or ignored than in boys. In line with this notion, low-achieving boys have been shown to be treated more negatively by both male and female teachers than their female counterparts. Boys’ higher risk of becoming the target of teacher verbal abuse is also indicated by our finding that only 5 of the 52 children in the high-risk group were girls and that gender was by far the strongest predictor of verbal abuse by the teacher, above and beyond the effect of the other assessed independent variables. This finding is in line with the gender differences found in the Casarjian study and with studies showing that boys are more likely to have a conflictual relationship with their teachers. As such, gender differences with regard to mean levels of antisocial behavior and inattention do not in and of themselves explain boys’ higher risk of verbal abuse by the teacher.

In contrast to antisocial behavior and inattention, anxiety in kindergarten did not predict children’s risk of verbal abuse by the teacher from kindergarten through grade 4. This finding corroborates results from previous studies showing that early anxiety during preschool does not predict the quality of the teacher-child relationship in subsequent years. Anxiety may be considered a rather normative behavior, especially in young children and, perhaps more importantly, is unlikely to interfere with teaching efforts the same way that antisocial behavior and inattention do. Together, our results thus suggest that repeated verbal abuse by the teacher seems to be preceded by behavior on the part of the child, notably, antisocial behavior and inattention, that compromises the teacher’s efficient and orderly management of the classroom. The next question to be answered, then, is what potential impact verbal abuse has on children’s subsequent developmental adjustment.

Predictive Links of Verbal Abuse by the Teacher to Child Adjustment

The first developmental outcome examined in our study was delinquent behavior. Repeated verbal abuse by the teacher significantly predicted delinquent behavior during early adolescence above and beyond the effects of gender and childhood levels of antisociality, but only for children who were at least moderately accepted by their classmates. In contrast, verbal abuse by the teacher had no effect on delinquent behavior if children were rejected by their peers. How can these findings be explained? Kaplan suggests that rejection by valued socializing agents, such as teachers, might lower children’s motivation to conform to the usually conventional and nondelinquent expectations put forth by these agents. Instead, youngsters are increasingly likely to adopt delinquent attitudes and behaviors and to affiliate with peers who might reinforce those delinquent patterns. Research shows that adolescent delinquent acts are indeed usually perpetrated in the company of peers and that, apart from children’s own behavioral characteristics, affiliation with delinquent friends is among the strongest predictors of delinquent behavior. Children’s opportunities to affiliate with a peer group and to find friends, however, are significantly reduced if they are disliked and rejected by peers. As such, although repeated verbal abuse by the teacher during elementary school may increase youngsters’ disposition toward delinquent attitudes and behaviors regardless of their level of acceptance in the peer group, the actual perpetration of delinquent acts may be more probable if they are at least moderately accepted by their peers and, thus, have access to a friendship network. Only perpetration of delinquent acts was assessed in the present study, but future research should investigate the effect of verbal abuse by the teacher on the development of youngsters’ attitudes toward delinquency.

Another outcome variable that was affected by verbal abuse by the teacher was children’s academic achievement. Specifically, repeated verbal abuse by the teacher from kindergarten through grade 4 was related to lower academic achievement in early adolescence, above and beyond the effects of childhood levels of social preference and attention problems, but only for children who had very low levels of attention problems during childhood. In contrast, verbal abuse by the teacher had no effect for children with moderate or high levels of inattention. This pattern of results may be explained by a ceiling effect. Indeed, childhood attention problems were far the strongest predictor of academic maladjustment, explaining 36% of the variance of this outcome variable. As such, children with even moderate levels of attention problems may already be at such high risk of academic maladjustment that even repeated verbal abuse by the teacher does not significantly increase this risk. In contrast, children with low levels of atten-
tion problems are likely to be highly motivated to study and participate in class, at least at the beginning of their schooling career. Many of these attentive children also do not show any other behavior problems, as indicated by the moderate correlation between inattention and antisocial behavior, and are, thus, at low risk of becoming the target of verbal abuse by the teacher. Nevertheless, some children may display antisocial behavior despite low levels of attention problems, which may then elicit strong negative reactions from the teacher. Repeated scolding or criticism by the teacher in front of their classmates may gradually undermine these children’s achievement motivation and academic self-perceptions, which are significant predictors of children’s academic performance.

In contrast to delinquency and academic achievement, depressed feelings were not uniquely predicted by verbal abuse by the teacher. Instead, peer rejection during childhood emerged as the most important predictor of depression during early adolescence. This result is noteworthy, because it emphasizes the vital role of peers for youngsters’ emotional well being during early adolescence, which has been supported in a wide range of empirical studies (eg, refs 65–68). Nevertheless, given the significant effects of verbal abuse by the teacher on delinquency and academic achievement for some children, the potentially damaging effect of such experience on child development should not be underestimated.

Strengths and Limitations of the Study
The present study is the first to examine the longitudinal course of verbal abuse by the teacher and its predictors, as well as its effect on subsequent child adjustment. In addition to its longitudinal framework extending from kindergarten through early adolescence, the strengths of this study include the use of multiple sources, thus reducing the risk of shared source variance and associated reporter bias. In addition, the control of important confounding variables, such as peer rejection, as well as the consideration of potential moderating variables allowed for a detailed test of the unique effects of verbal abuse by the teacher on subsequent child adjustment. Despite its strengths, however, the present study also has several limitations. One such limitation is the fact that the measure of verbal abuse was based on a single, albeit peer-rated, item. Although this item is similar to measures used in research on verbal abuse from other sources, notably peers (eg, ref 32), it does not differentiate between the various behaviors that constitute verbal abuse (eg, shouting, scolding, and criticizing). Moreover, our measure did not consider other types of abusive behavior, such as acts of neglect, which may also be harmful to children’s healthy development. The use of a more comprehensive peer-rated measure of global psychological abuse by the teacher with young children poses a challenge, however, and consistency of measurement over time was of primary concern in the present study. In a related vein, it should be noted that children’s academic achievement was measured through teacher ratings. Teacher’s attitudes regarding students not only influence their behavior toward students but also their grading. Despite the substantive correlation between teachers’ grades and standardized test scores (eg, ref 69), teachers’ evaluations are a more subjective measure and may, thus, also show a stronger link to verbal abuse by the teacher than standardized test scores. Finally, it should be noted that, despite the relatively large sample size, the small number of girls in the high-risk group impeded the detection of potential moderating effects of gender, especially with regard to the outcomes of verbal abuse.

CONCLUSIONS
Despite its limitations, we believe the present study provides important insights into verbal abuse by the teacher, its predictors, and its consequences. Verbal abuse by the teacher was found to be a highly stable phenomenon for at-risk children. As maintained by Casarjian, teachers who have experienced particular students as potential threats to their ability to maintain control of the classroom are likely to expect similar behavior from these students in the future. As a result, these students may elicit hostile behavior from the teacher either because of the teacher’s attempt to maintain authority of the class or because of the teacher’s anger and frustration. In turn, the teacher’s hostile responses provide the children with a model of aggressive behavior as an acceptable means of social interaction, thus perpetuating the cycle of negative interactions. Our findings show that children who are relatively well adjusted are at low risk of becoming the target of verbal abuse by the teacher. If they do, however, these children seem to be the most vulnerable to subsequent developmental difficulties. Our findings have important practical implications, because they suggest that information about the importance of positive teacher-child relationships need to be included in early education teacher training. Moreover, teachers experiencing difficulties with a particular child might benefit from specific interventions. Indeed, intervention programs focusing on changing teacher behaviors have reported some success in changing the observed quality of teacher-child relationships. In light of the reciprocity of the teacher-child relationship, it will also be important to teach children skills for developing and maintaining positive relationships with teachers and perhaps to solicit parental participation in the context of multilevel interventions to maximize intervention success. In addition, pediatricians, school psychologists, and other clinicians need to be informed about the risk associated with verbal abuse by the teachers to facilitate early detection of symptoms and to help prevent potential negative consequences for child adjustment and health.
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