

THE PLAYGROUND ATMOSPHERE RATING (PAR): EXAMINING THE EXTENT TO WHICH ADULT SUPERVISION AND PHYSICAL FEATURES OF THE PLAYGROUND ARE ASSOCIATED WITH FIRST GRADE STUDENT BEHAVIOR [607]

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Abstract

At elementary school, aggression and bullying most frequently occur on the playground. The Playground Atmosphere Rating (PAR) assesses playground characteristics that may impact student behavior, such as quality of supervision and physical features. A description of the PAR and associations between playground features and student behavior is presented.

Introduction

Having free time with peers during recess on the school playground can be beneficial to children's development. Social interactions among elementary school-age children in a free play situation can positively impact cognitive and social development (Pelligrini and Smith 1993), the formation of friendships (Blatchford 1999), and the development of social skills (Creasey, Jarvis, and Berk 1998). It is a time, however, that also can present challenges for children who experience difficulties having successful interactions with their peers. In a summary of the literature, Reinke and Herman (2002) pointed out that the school setting can protect children who enter school with coercive behavior patterns and poor peer relations and, on the other hand, can also exacerbate the development of aggression and antisocial behavior in these at-risk children. Unfortunately, poor peer interactions and aggression appear to be increasing in the school setting (Walker, Colvin, and Ramsey 1995). To prevent the occurrence and escalation of such problems, a better understanding of the playground features and supervision techniques that are associated with positive and problematic behavior is needed.

Physical Aggression and Bullying on Elementary School Playgrounds

In elementary schools, bullying and aggression occur most frequently on the school playground during recess (Whitney and Smith 1993). Observational studies demonstrate that peer aggression tends to go unnoticed by adults and often is reinforced by other students. For example, Craig and Pepler (1997) reported that peers were present during 85 percent of bullying incidents but only intervened 11 percent of the time, passively watched 54 percent of the time, and actively joined in the bullying 21 percent of the time. Students do not often report bullying incidents due to fear of retaliation from peers (Boulton and Underwood 1992) and the belief that school personnel are unlikely to intervene (Whitney and Smith 1993).

Long-term problems have been found in children who exhibit aggressive behaviors as well as in those who are the recipients of aggression. Children who display frequent acts of aggression with peers during the early elementary school years are likely to develop further behavioral problems, such as delinquency, school drop

out, and substance abuse (Gabel and Shindledecker 1991; Parker and Asher 1987). This development toward negative outcomes starts early. Kindergarten children’s aggression on the playground significantly predicted antisocial ratings by their first grade teachers (Pellegrini 1995). Schwartz and colleagues (Schwartz, McFadyen-Ketchum, Dodge, Pettit, and Bates 1998) found that peer victimization was concurrently related to externalizing behavior problems, attention problems, and immature behavior, and was predictive of problem behavior two years later. Likewise, the victims of frequent aggressive acts from peers were likely to experience later difficulties such as depression, anxiety, and school avoidance (Hawker and Bolton 2000; Kochenderfer and Ladd 1996; Olweus 1993). It is critical that effective ways to decrease aggression and bullying on the playground be strengthened and widely utilized.

Physical injury on the playground, also a concern in elementary schools, is sometimes caused by peer aggression. Thompson (1991) reported that 62 percent to 89 percent of injuries in 27 elementary schools occurred on the playground, although only about 20 percent of the students’ time at school was spent on the playground. Of the playground injuries, about 50 percent resulted from the students’ own behavior, about 25 percent were inflicted by another student, and about 25 percent were due to poor equipment, surfacing, or playground layout. Another study found that the improper use of playground equipment and child aggression accounted for the majority of injury risk situations (Coppens and Gentry 1991). Only 24 percent of the children tried to stop the action that led to risk of injury, yet children were more likely than playground monitors to react to the situation. The existing evidence suggests that both physical features of the playground and quality of supervision impact student aggression, misbehavior, and injury.

Reducing Problems on the Playground

Interventions aimed at improving the quality of the playground, such as delineating clear rules, consistently delivering consequences, and providing positive reinforcement have been effective in decreasing aggression and problem behavior in school settings. A schoolwide behavior support system involving precorrection (proactively teaching expected behavior) and active supervision (e.g., moving around and scanning) decreased aggression and other rule violations by students during transitions (Colvin Sugai Good and Lee 1997). A similar schoolwide support system targeting student behavior before school resulted in decreases in discipline referrals for disruptive behavior (Nelson, Colvin, and Smith 1996). Increases in precorrection on the elementary school playground also decreased student problem behavior, such as physical aggression, misuse of playground equipment, verbal aggression, arguing, and disrupting others’ play (Lewis, Colvin, and Sugai 2000). Consistent reinforcement of expected behaviors in conjunction with warnings for misbehavior and reminders of expected behavior also were found to improve behavior at recess (Knoff 1984). Schoolwide efforts that involve effective behavior management practices have resulted in decreased aggression and rule breaking.

On the other hand, schools that allow misbehavior to go ignored have the highest prevalence of problem behavior. Such schools have locations that are not well supervised by adults and/or do not have clear rules that are consistently reinforced (Welsh, Stokes, and Greene 2000). Antisocial behavior, aggression, and bullying are more likely to occur in school areas that are poorly supervised (Craig and Pepler 1997; Olweus 1993; Pellegrini and Blatchford 2000). Supervision in these common school areas, such as hallways, the lunchroom, and the playground, is typically done by adults who have little or no training in effective behavior management (Pellegrini and Smith 1993). Moreover, adult supervision is more difficult in playgrounds that are large and spread out and those that have low visibility, which is likely to result in increased rates of aggression (Ladd and Price 1993). Thus, a combination of effective supervision and quality playground environments are expected to enhance playgrounds in ways in which positive peer interactions and relationships would develop and thrive.

Assessing the Quality of Playground Features and Supervision

An important step for schools in understanding what improvements are needed to their playground environment and supervision practices is to find a practical way of assessing these playground features. The Playground Atmosphere Rating (PAR) was designed to be a practical assessment that school administrators, counselors, psychologists, or consultants could use for measuring the atmosphere of the playground, and in particular, the critical features that are likely to impact student behavior. Specifically, the PAR measures (a) monitoring, (b) social management and engagement, (c) playground visibility, (d) playground enrichment, and (e) overall problem behavior on the playground (e.g., fighting and rule breaking). This study examined the reliability of the measures as well as the ways in which the assessed playground features were associated with overall student behavior and with direct observations of at-risk students' behavior.

Method

Participants

Data for this study were collected at nine elementary school playgrounds in the Pacific Northwest. These schools were a subset of the schools participating in the Success through the Incredible Years project, a randomized-control evaluation of the *Incredible Years* parent, teacher, and social skills programs (Webster-Stratton 2000). The average percentage of students eligible for free or reduced lunches in participating schools was 48 percent (ranging from 33 percent to 57 percent). The average enrollment for the schools ranged from 325 to 566 students with an average class size of 23 students.

Kindergarten teachers in participating schools completed a 25-item screening questionnaire, the Child and Adolescent Disruptive Behavior Inventory (CADBI) screener (Burns, Taylor, and Rusby 2001) on all children in their classroom. Children who had autism or a developmental disability were considered ineligible for the study (2 percent were excluded). Also, 7 percent of the parents declined participation in the screening. Students with elevated ratings on the screener, those rated above the 65th percentile, were considered eligible for participating in the at-risk study sample. Of the 75 at-risk students participating in the present study, 63 percent were boys and 79 percent were Caucasian, 13 percent Hispanic, and 8 percent were African American, American Indian, or other race. About 25 percent of these families had an annual income below \$20,000.

Assessment Procedures

The PAR data from each school were collected on three different days during a recess period that included first grade students. The assessors observed the playground for 15 minutes during which brief notes were taken but waited until the observation period ended before filling out the rating. Assessors positioned themselves in a location where they could see most of the playground and moved around to see hidden areas or areas that were out of view. Procedures also involved keeping interactions with children and adults on the playground to a minimum to help maintain objectivity and minimize reactivity to their presence.

Playground observation data were also collected on participating at-risk students during spring of first grade on three different occasions. Students were observed for 15 minutes during recess. Occasionally recess periods were shorter, but no observations were shorter than eight minutes. For each minute, the observers tallied frequencies of each problem behavior exhibited by the target student. Observers also coded whether the target student was engaged in play with peers or in solitary play for each minute. Following each direct observation, assessors completed a rating of the student behavior.

Measures

Playground Atmosphere Rating

The Playground Atmosphere Rating (PAR) was designed to assess the quality of adult supervision and playground physical features that are important for decreasing and preventing problem behaviors on the elementary school playground. The PAR also includes ratings of the overall behavior of children on the playground. The PAR has 22 items on supervision and playground features and 5 items on overall children’s behavior (see Appendix A).

Two scales of the PAR measure the quality of supervision on the playground—monitoring, 7 items (reliability $\alpha = 0.86$) and social management and engagement, 6 items ($\alpha = 0.74$). Two scales measure the quality of the playground’s physical environment—visibility, 4 items ($\alpha = 0.83$) and enrichment, 5 items ($\alpha = 0.73$). The PAR also has items that measure student-to-staff ratio, grade levels out on the playground at one time, and adult use of specific praise. Items with low reliability and low variance were eliminated from the draft version of the PAR with the exception of “Children engage in physical fights with peers,” which did not occur for 90 percent of the assessments but was considered a critical child behavior to include. The average weighted proportion inter-rater agreement for the playground quality scales was 0.82 (range 0.79–0.85) and for child problem behavior was 0.88. The average agreement on student-to-child ratio was 83 percent. The means and standard deviations of the PAR and observation measures for each school and across the schools are in Table 1.

Playground Observations

For the measure of negative playground behavior a composite score was computed by adding the observed rate per minute of verbal aggression, physical aggression, and potentially dangerous behavior. Verbal aggression was defined as personalized disapproval or verbal expressions that contain specific critical judgment, threats, or display of anger to a peer who is present, physical aggression as engagement in aversive physical contact with a peer, and potentially dangerous behavior as engagement in behavior that is potentially physically dangerous to self or others (the observation manual is available from the first author). Random reliability checks were assigned for 25 percent of the playground observations. The inter-rater agreement was 92 percent for verbal aggression, 84 percent for physical aggression, and 81 percent for potentially dangerous behavior. The intraclass correlation coefficient (ICC; Shrout and Fleiss 1979) for the composite negative playground behavior was 0.90. The inter-rater agreement for percent of time nonsocial was 81 percent and the ICC was 0.93.

Observer Ratings of Student Behavior

Following the observations, observers rated students on their behavior using a 6-point scale (1 = “never occurred,” 2 = “rarely occurred,” 3 = “sometimes occurred,” 4 = “often occurred,” 5 = “very often occurred,” and 6 = “constantly occurred.” The 11 items measuring oppositional behavior (e.g., argues with adults, refuses to obey requests, bosses classmates, and disrupts activities) were averaged to create a composite score. These ratings were adapted from the CADBI version 2.3 (Burns, Taylor, and Rusby 2001). A reliability coefficient α of 0.83 was obtained for oppositional behavior rated on the full sample of 160 at-risk students.

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Table 1. Averages (Mean) and standard deviations (SD) of PAR and observations for each school

Average and SDs (in parentheses) across 3 ratings/observations for each school										
	1	2	3	4	5	6	7	8	9	Mean
Playground Atmosphere Rating (PAR)										
# children (density)	70 (10)	60 (5)	27 (10)	78 (20)	93 (40)	67 (12)	65 (48)	37 (8)	57 (6)	61 (27)
Child-adult ratio	22 (6)	24 (11)	19 (14)	29 (9)	21 (10)	33 (6)	28 (16)	16 (12)	26 (8)	24 (10)
Adult monitoring	3.00 (0.71)	2.38 (0.59)	3.00 (0.80)	3.00 (0.29)	3.05 (0.79)	3.05 (0.22)	2.10 (1.01)	3.14 (0.52)	2.52 (0.33)	2.80 (0.64)
Management/engagement	2.28 (0.42)	2.28 (0.54)	2.78 (0.35)	2.00 (0.17)	2.11 (1.18)	2.22 (0.63)	1.67 (0.73)	2.56 (0.42)	2.22 (0.67)	2.23 (0.60)
Adult praise for behavior	1.00 (1.00)	1.67 (1.53)	1.00 (1.00)	0.33 (0.58)	0.67 (1.15)	0.00 (0.00)	0.67 (0.58)	0.00 (0.00)	0.33 (0.58)	0.63 (0.88)
Playground visibility	2.67 (0.42)	1.93 (0.81)	2.13 (0.23)	2.33 (0.83)	2.87 (0.64)	2.73 (0.12)	1.53 (1.36)	3.20 (0.40)	2.47 (0.70)	2.43 (0.77)
Playground enrichment	3.25 (0.25)	3.42 (0.29)	3.75 (0.25)	3.42 (0.52)	3.08 (0.95)	3.25 (0.25)	2.92 (0.14)	3.25 (0.66)	3.08 (0.52)	3.27 (0.47)
Overall problem behavior	0.67 (0.15)	0.50 (0.20)	0.52 (0.39)	0.57 (0.62)	0.83 (0.60)	0.31 (0.12)	0.78 (0.58)	0.41 (0.32)	0.89 (0.25)	0.61 (0.39)
Observations of at-risk students										
# at-risk students	14	8	8	8	8	11	3	11	3	8
Negative playground behavior ¹	0.10 (0.06)	0.13 (0.11)	0.07 (0.07)	0.20 (0.14)	0.27 (0.21)	0.22 (0.12)	0.09 (0.05)	0.20 (0.26)	0.53 (0.45)	0.18 (0.19)
Percent time nonsocial	0.20 (0.25)	0.40 (0.26)	0.22 (0.17)	0.30 (0.22)	0.21 (0.15)	0.37 (0.18)	0.27 (0.23)	0.09 (0.07)	0.18 (0.11)	0.25 (0.21)
Rating of oppositional ²	1.25 (0.17)	1.26 (0.19)	1.34 (0.26)	1.40 (0.25)	1.22 (0.15)	1.28 (0.19)	1.16 (0.08)	1.37 (0.18)	1.76 (0.57)	1.31 (0.23)

¹ Rate per Minute of Verbal Aggression + Physical Aggression + Potentially Dangerous Behavior

² Based on a 6-point scale: “Never occurred” to “Constantly occurred,” averaged across 11 items

Results

Concurrent Associations between Playground Quality and Problem Behavior

To examine the concurrent associations between the quality of the playground environment and the overall problem behavior of children out on the playground, data from the 27 PAR assessments (3 assessments in each of the 9 schools) were analyzed. Correlations were run between the rated overall student problem behavior and the playground measures. Moderate negative correlations were found for the quality of monitoring and social management by adults and for the enrichment of the playground environment with student problem behavior (see Table 2). Better monitoring, higher quality management and engagement by playground supervisors, and an enriched playground environment were associated with fewer problem behaviors on the playground.

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Table 2. Concurrent correlations of rated playground features with overall student behavior

Playground feature	Overall student problem behavior
Density = # of children on playground	0.08
Child-adult ratio	-0.17
Adult monitoring	-0.37*
Adult specific praise	0.00
Adult social management and engagement	-0.41*
Playground visibility	-0.24
Playground enrichment	-0.58**

* p < 0.05, ** p < 0.01

The Extent to which the PAR Predicts At-risk Students’ Problem Behavior

A multiple regression model was employed with at-risk students clustered by school using MPlus (Muthén and Muthén 2004). Separate regressions were conducted for predicting (a) observed negative behavior (verbal aggression, physical aggression, and potentially dangerous behavior), (b) observed percentage of time not socially engaged, and (c) observer-rated oppositional behavior. Student gender and PAR measures—density (number of students on the playground at one time), student-to-staff ratio, monitoring, quality of social management and engagement, playground visibility, playground enrichment, and specific praise were predictors in each regression. The average of each PAR measure was computed across the three assessments to create a score for each school. Table 3 presents the significant predictors for each of the dependent variables.

Monitoring and specific praise predicted fewer negative behaviors, and playground visibility predicted more frequent observed negative behaviors of at-risk students. The higher number of students per adult was associated with more nonsocial behavior from at-risk students. More monitoring also predicted less nonsocial behavior, whereas specific praise, better visibility, and playground enrichment predicted more nonsocial behavior. Gender (boys were higher) and playground visibility were associated with observer ratings of oppositional behavior, yet these predictions were only nearly significant. Monitoring and specific praise predicted less oppositional behavior, whereas a more enriched playground environment predicted more oppositional behavior.

Table 3. Multiple regression of playground features predicting observed behavior of at-risk first-grade students (clustered by school)

Variable	Coefficient	S.E.	z-score
Predicting aggressive and dangerous behavior			
Adult monitoring	-0.25	0.15	-1.66 *
Adult-specific praise	-0.10	0.05	-1.82 *
Playground visibility	0.14	0.08	1.71 *
Predicting nonsocial behavior			
Adult-child ratio	0.02	0.00	16.23 ***
Adult monitoring	-0.17	0.10	-1.79 *
Adult-specific praise	0.08	0.03	2.87 **
Playground visibility	0.13	0.04	2.93 **

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Variable	Coefficient	S.E.	z-score
Playground enrichment	0.23	0.08	2.74 **
Predicting observer ratings of oppositional			
Gender	0.08	0.06	1.32 †
Adult monitoring	-0.46	0.27	-1.69 *
Adult-specific praise	-0.11	0.05	-2.01 *
Playground visibility	0.24	0.17	1.43 †
Playground enrichment	0.41	0.14	2.85 **

†p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Discussion

This study investigated the associations between features of the elementary school playground and children’s behavior. Specifically, the quality of supervision and the physical environment were assessed and concurrent associations with general problem behavior on the playground were examined, as well as associations with the behavior of first grade students considered to be at risk for developing disruptive behavior problems. An additional aim of this work was to examine the reliability of the PAR assessment tool, and to highlight its potential as a tool for assessing the quality of elementary school playgrounds.

Good inter-rater reliability was found for the PAR measures. Training for research staff on the PAR was relatively brief (reading materials ahead of time and a two hour training meeting), demonstrating promise for the utility of the PAR. Also, it takes about 20 minutes to complete the PAR assessment (15 minutes to observe and take notes, and 5 minutes to complete the rating), making it an efficient assessment tool so that repeated assessments for examining change over time would be practical. The next step would be to field-test the use of the instrument with school administrators, counselors, and/or psychologists.

The item reliability for the scales of the PAR (a) monitoring, (b) quality of social management and engagement, (c) visibility, and (d) enriched environment were also good. The item on specific praise, however, did not reliably fit into the scale on social management and engagement as expected. It therefore was included as an individual item in the analyses. Although in the process of the development of the instrument, items with little variance and items that had poor reliability were removed, “specific praise” was kept in the measure because of prior research demonstrating its importance in decreasing disruptive behavior (e.g., Knoff 1984; Nafpaktitis, Mayer, and Butterworth 1985).

Results indicated that the two supervision skills, effective monitoring and use of specific praise, were significantly associated with the problem behaviors measured. Better monitoring was related to fewer problem behaviors on the playground as well as less negative behavior (aggression and potentially dangerous behavior), solitary play, and oppositional behavior in first grade children at risk for disruptive behavior. These monitoring skills included actively moving around and scanning the playground. Use of specific praise by playground supervisors was not associated with overall problem behavior on the playground but was associated with problem behavior of at-risk students. More praise predicted fewer observed negative behaviors as well as less oppositional behavior. In contrast, more praise was associated with a greater amount of time in solitary play of at-risk students. It is possible that this finding indicates that students were being praised for NOT doing negative behavior and, because socially skilled replacement behaviors were also not occurring, less social engagement of at-risk students was observed. Teaching positive replacement behaviors is important for improving children’s social competence (Maag 2005).

Good quality of social management and engagement by playground supervisors was also associated with fewer overall problem behaviors but not with problem behaviors of the at-risk students. These supervision skills included being proactive, consistently following through, engaging children in play, and having caring interactions with children. These proactive methods of management are expected to help prevent problem behavior from occurring, but even when these practices are in place there will still be about 5 percent of children who continue to present challenging behavior and need more individualized intervention (Sugai and Horner 2002).

The density of children on the playground did not significantly predict any of the negative behaviors measured. Child-to-adult ratio was significant in predicting nonsocial play only. The greater number of children per adult was associated with more time spent in solitary play by the at-risk children. Studies have shown that children who exhibit disruptive and aggressive behavior are likely to be rejected by their peers (e.g., Pope, Bierman, and Mumma 1991; Schwartz 2000). It is possible that peer rejection and exclusion occur more on the playground when the child-to-adult ratio is high.

Better playground visibility was related to more problem and nonsocial behavior in at-risk students. This finding at first appears contrary to what would be expected. However, visibility on the playground most likely allowed the research staff to observe problem and nonsocial behavior when it occurred. Problem behavior may have been hidden from view on the playgrounds that had low visibility. A combination of good monitoring by supervisors and good visibility on the playground would likely prevent some problem behavior from occurring and also allow school staff to see it when it occurs so that they may intervene.

Having an enriched playground environment, one that offers a variety of play opportunities and promotes active engagement, was associated with fewer overall problem behaviors. However, the association was in the opposite direction for at-risk students' solitary play and oppositional behavior. A possible explanation for greater solitary play in at-risk students in an enriched playground setting may be that the at-risk students chose not to play with peers and got involved playing with or on the equipment (e.g., climbing on the bars and bouncing a ball, etc.). More research is needed to understand these associations with playground enrichment and at-risk student behavior.

This study demonstrated that the quality of supervision and that of the physical playground environment are associated with overall student behavior and at-risk students' behavior. In particular, a combination of active monitoring, quality social management and engagement, and providing specific praise for expected behavior were related to fewer problem behaviors on the playground. For at-risk students, monitoring and specific praise were associated with fewer problem behaviors. It would be advantageous for playground supervisors to be offered training in these approaches.

More research on the playground environment is needed, as this study has some limitations. Replication would strengthen the results, due to the somewhat low sample size in this study. Also, this study was conducted in elementary schools with predominately Caucasian students, so results may not generalize to schools with higher ethnic diversity. An important next step would be to have school personnel complete the PAR and report on its usefulness in defining areas on the playground that are in need of improvement. Second, more research involving making improvements to these playground features and examining subsequent changes in student behavior is needed.

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Appendix A

PLAYGROUND ATMOSPHERE RATING (PAR)

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School: _____ Date: ___ / ___ / ___ Total minutes: _____ Observer: _____

Observe the playground for 15 minutes and mark the answer that most closely describes what you have observed during this visit.

Background

- A. Most of the time, how many adults were present? _____
- B. Most of the time, how many children were present (estimate)? _____
- C. Child-Staff Ratio (B divided by A) = _____ to 1 ratio.
- D. Children from what grade levels were out on the playground? _____

Quality of Supervision: Monitoring

Never 0	Seldom 1	Some of the time 2	A lot of the time 3	Almost continuously 4
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- 1. Adults actively move around the playground. _____
- 2. Adults position themselves so they can see most of the playground. _____
- 3. Adults talk together, stay in one place, and do not scan areas. _____ (Reverse) _____
- 4. Adults focus on one or two children and do not scan all areas. _____
- 5. Adults scan the playground and are aware of what is occurring. _____

Never 0	Short time: under 30 sec 1	Some time 30 sec–2 min 2	Long time 2 min–5 min 3	Very long time 5+ min 4
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- 6. Adults arrive to playground late (after children). _____ (Reverse) _____
- 7. No adults are present when children are on the playground for a period of time.
_____ (Reverse) _____

Average Monitoring $(1 + 2 + 3 \text{ reversed} + 4 + 5 + 6 \text{ reversed} + 7 \text{ reversed}) / 7 =$ _____

“The playground atmosphere rating (PAR):
Examining the extent to which adult supervision and physical features of the playground are associated with first grade student behavior”

Quality of Supervision: Social management and engagement

Definitely not characteristic 0	Rarely characteristic 1	Sometimes characteristic 2	Often characteristic 3	Very characteristic 4
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8. Adults are proactive rather than reactive to problem behavior. _____
9. Adults consistently enforce rules and follow through when transgressions occur. _____
10. Overall, there is good quality of adult supervision. _____

Never 0	Seldom 1	Some of the time 2	A lot of the time 3	Almost continuously 4
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11. Adults notice children who are by themselves and try to engage them. _____
12. Adults are warm and caring toward children. _____
13. Adults seem distant, detached, and indifferent towards children. _____ (Reverse) _____

Average social management and engagement (8 + 9 + 10 + 11 + 12 + 13 reversed) / 6 = _____

Quality of the Playground: Visibility

Definitely not true 0	Not very true 1	Somewhat true 2	Very true 3	Absolutely true 4
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14. The playground is too spread out, it is difficult for staff to monitor the large area. _____ (Reverse) _____
15. Visibility of play areas are blocked by structures (e.g. high walls, buildings, fences). _____ (Reverse) _____
16. It only takes adults at one or two supervision locations to view the entire playground. _____
17. Overall, the physical lay out of the playground makes it easy to supervise well. _____

Average Visibility (14 reversed + 15 reversed + 16 + 17) / 4 = _____

“The playground atmosphere rating (PAR):
Examining the extent to which adult supervision and physical features of the playground are associated with first grade student behavior”

Quality of playground: Enrichment (promotes active engagement)

Definitely not true 0	Not very true 1	Somewhat true 2	Very true 3	Absolutely true 4
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18. There is plenty of equipment and toys offering a variety of play opportunities. _____
19. There is appropriate surfacing for variety of play (asphalt for balls, grass for field sports, bark mulch under playground equipment). _____
20. Children seem bored (e.g., inactive, wandering around aimlessly). _____ (Reverse) _____
21. Equipment is outdated, in poor condition, or disrepair. _____ (Reverse) _____

Average Enrichment (18 + 19 + 20 reversed + 21 reversed) / 4 = _____

Positive Attention

22. Adults praise children for specific behaviors. _____

Children’s Problem Behavior

Never occurred 0	Rarely occurred (once) 1	Occurred a few times (2–3 times) 2	Sometimes occurred (4–6 times) 3	Often occurred (6+ times) 4
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1. Children argue with adults. _____
2. Children break the rules on the playground. _____
3. Children engage in physical fights with peers. _____
4. Children engage in “rough and tumble” play with peers [play fighting or wrestling, chases, hits-at (playful punches and karate-style fighting) or pushes peers] _____
5. Children form groups to harass and bully others. _____

Average Child Problem Behavior (1 + 2 + 3 + 4 + 5) / 5 = _____

