

*Exploring Teacher and Student Perceptions of the Impact
of Two Recess Periods Per Day*

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Exploring Teacher and Student Perceptions of the Impact of Two Recess Periods Per Day

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Purpose: The primary purpose of this study was to explore teacher and student perceptions of the implementation of two recess periods per day. Method: Participants were 12 teachers (representing all grade levels and areas) and 13 students (representing all grade levels) from a K-5 elementary school in the Southeastern United States. All participants took part in interviews regarding their perceptions towards having two recess periods per day. Data analysis included transcribing data, detecting preliminary themes through constant comparison, and narrowing of themes from preliminary themes. Results: Five themes were ultimately revealed: Activity, behavior and student engagement, quantity vs. quality, socialization, and teacher-student “contract.” Conclusions: A school-wide policy of two recess periods per day was perceived positively by faculty and students because they believed students are more active, stronger bonds formed between students and teachers, primary children played together, earlier, and lessons had more depth and intensity.

Children in the United States are not meeting the recommendations of 60 minutes or more of physical activity each day suggested by the Centers for Disease Control and Prevention (Dentro et al., 2014). Physical inactivity, along with a number of other factors, leads to obesity and other health risks, including type 2 diabetes, high blood cholesterol, and high blood pressure (United States Department of Health and Human Services [USDHHS], 2008). Thus, one would think providing more time and opportunities for youngsters to be active would intuitively lead to more activity. However, not all playing fields are equal, meaning that access, parental support, adequate weather, and other determining factors for activity are not the same for everyone.

Schools can play a role in preventing childhood obesity and potentially leveling out the playing field by providing adequate physical activity opportunities for youth. More than 95% of youth attend public and private schools, and well-designed and implemented school programs promote physical activity for students (Centers for Disease Control and Prevention [CDC], 2013). These include incorporating a Coordinated School Health design, designating a health coordinator, assessing policies related to physical activity, and increasing opportunities for students to engage in physical activity, among others. Thus, utilizing schools as a site for promoting health behaviors for youth is one way to reach a large population.

The Society for Health and Physical Educators (SHAPE America), with support from the CDC, strongly recommends that schools incorporate a Comprehensive School Physical Activity Program (CSPAP) to help students become more physically active (SHAPE America, 2015). A CSPAP is an approach in which school personnel utilize as many opportunities for school-based physical activity in order for students to reach the 60-minute per day mark, as well as, develop skills, knowledge, and attitudes to be physically active for life (SHAPE America, 2013). It encompasses five components: Quality physical education, physical activity during school, physical activity before and after school, staff involvement, and family and community engagement. Within these components, opportunities for physical education and physical activity during the school day are typically under the jurisdiction of the school administrator, site-based decision-making council, and sometimes the teachers/staff themselves.

Due to academic pressure derived from standardized testing, staff and administrators making decisions regarding school schedules are cutting time devoted to subjects and activities such as social studies, science, art and music, physical education, lunch, and/or recess in favor of more time for reading, math, and science (Center on Education Policy [CEP], 2007). As a whole, instructional time

devoted to these areas has decreased by 32% since legislation emphasizing these test scores was implemented (CEP, 2007). Of the subject areas being reduced, physical education is the one area focusing on student health.

Physical activity has demonstrated positive effects not only on health outcomes for youth but on student academic outcomes as well (Donnelly et al., 2016; Rasberry et al., 2011). *Physical activity play*, defined as “a playful context combined with a dimension of physical vigor” (Pellegrini & Smith, 1998, p. 577), has also been identified as a key factor in children’s physical, mental and emotional health (Miller & Almon, 2009, pp. 36-50). In fact, one study on physical activity play demonstrated that children who were allowed to engage in make-believe play exhibited lower stress levels than those without the same opportunity (Barnett & Storm, 1981). Another study regarding play or unstructured time demonstrated that 6-7-year-old children showed better executive functioning, or were better able to meet goals, when they had “less-structured” time (Barker et al., 2014).

One example of physical activity play that is currently implemented in schools is recess or physical activity breaks. Recess, defined as “regularly scheduled periods within the elementary school day for unstructured physical activity and play” (CDC, 2011) is a critical time within the school day that youth can accumulate physical activity, engage in play, and socialize with peers simultaneously (American Academy of Pediatrics, 2013). Recess participation has demonstrated benefits for the whole child cognitively (Ginsburg, 2007; Jarrett et al., 1998), socially and emotionally (Bjorklund & Brown, 1998; National Association for Sport and Physical Education, 2004; Pellegrini, Kato, Blatchford, & Baines, 2002), and physically (Robert Wood Johnson Foundation, 2011). Recess offers unstructured time for youth to be creative, engage in activity, and socialize with same-aged peers. Yet, as mentioned earlier, time for children to “play” during the school day has decreased in an attempt to increase academic achievement in the form of test scores.

As of late, however, a host of schools and/or administrators in schools/districts are making a push *back* towards more physical activity in the school schedule because parents and teachers are realizing the critical benefits of exercise and movement (Flannery, 2016). The study described in this paper took place with teachers and students in a maverick elementary school attempting to incorporate two recess periods per day. As described elsewhere (Erwin, 2017), this decision to increase time for recess was a long process, but it began when the physical education teacher inquired about students walking laps as punishment during recess. Many teachers in the school were using this system, with the same students being punished frequently throughout the entire year. Simultaneously, the principal conducted a student voice survey that polled the students on aspects they really liked about school, as well as, things they would like to change. A major result from the survey was that students wanted more physical activity. The physical education teacher approached the principal with the idea to implement more recess, and the principal was completely supportive.

The number of minutes that recess could be counted as instructional time based on state requirements was determined. From a motion by the principal and physical education teacher, the school site-based decision-making council voted to allow 20 extra minutes per day of recess for all students. This would be offered in two recess periods - the morning time being “protected,” meaning all students would be provided with this time (15 to 20 minutes) regardless of behavior or homework submitted. The afternoon recess period was considered a “privilege,” or a special right granted to students, which was not guaranteed. The time (15 to 20 minutes) of the morning recess was determined by grade level with teachers deciding what time that recess would be offered before lunch. This recess could be unstructured time on the playground or in an open field, or it could be a structured activity in the classroom (i.e., GoNoodle) or outside.

The primary purpose of this study sought to explore teacher and student perceptions of the implementation of two recess periods per day at the maverick school described above. The following questions and hypotheses guided the current study:

1. What are teacher perceptions (benefits and barriers) towards the implementation of an additional recess period each day at their school? We hypothesize that given the emphasis on academic outcomes and the limited time in which schools have to teach the students, some teachers will see mostly benefits to the second (morning) recess period while others will present more challenges they face because of it.
2. What are student perceptions (benefits and barriers) towards the implementation of an additional recess period each day at their school? We expect students to be overly positive toward the inclusion of an additional recess period at their school due to the innate nature of children wanting to play and its role in development of the whole child.

Method

Participants

Participants included 12 teachers (two kindergarten, one each for 1st, 2nd, 3rd, 4th and 5th grades, one physical education specialist, two special education, and one assistant principal and one principal) and 13 students (three kindergarten, two 1st grade, one 2nd grade, three 3rd grade, one 4th grade, and three 5th grade) from a K-5 elementary school in the Southeastern United States. All teachers were female. Of the students, nine were boys and four were girls. No other demographic data were collected on participants. The school had an enrollment of 674 during the 2016-2017 school year when the study was conducted.

Procedures

This study was approved by the Institutional Review Board at the University of Kentucky. All teachers/staff at the school were invited to participate via an email from the lead investigator with support from the principal. If a teacher initially agreed to participate (via an email response), an interview time was arranged. Twelve teachers agreed to participate. The response was well representative of the school teaching staff in terms of grade levels and areas represented (all grade levels, two special education, one physical education teacher, and two administrators).

Student recruitment was done through a selective method. The assistant principal nominated three students from each grade level to participate, attempting to pull a representative sample of students from a gender, ethnicity, and socioeconomic status perspective. Informed consent forms were sent home with all 18 students. Of those, 13 returned signed forms and assented to participate in the interviews.

Instruments

Semi-structured individual interviews were conducted with all twelve teachers/faculty (with the exception of a two-person focus group interview with the assistant principal and principal) during the school day. These occurred within a three-day span, and all interviews were done during a teacher's planning period. The interview was conducted by a female researcher, and a semi structured interview guide was utilized to ensure consistency across interviews (see Table 1 for guide). This included open-ended questions relating to the teachers' view/purpose of recess, definition of recess, perspective on whether recess is a right or a privilege for students, and

perspectives (benefits and barriers) to having two recess periods per day. The duration of individual interviews ranged from 8 to 18 minutes per teacher.

Semi-structured focus group interviews were conducted with the students during the school day, in groups of two or three, depending on what the schedule allowed. Focus groups were chosen for the children in this study because it was believed that group support and group dynamics would foster a much richer discussion between the interviewer and the participants and because the interview topic itself was not too sensitive for participants to share among peers (Morgan, Gibbs, Maxwell, & Britten, 2002). Again, an interview guide was used. The questions were very similar to those for the teachers, except asked in a language more appropriate for children. The duration of focus group interviews ranged from 10 to 23 minutes.

Data Analysis and Trustworthiness

All interviews were recorded using a GoPro HERO4 and transcribed verbatim into a word-processed document. One child focus group interview was inadvertently not recorded; however, once this was discovered (immediately following the interviews), the researcher instantly wrote as detailed notes from the interview as she could remember. Qualitative data sources included five student focus groups and eleven teacher interviews (one was a two-person focus group interview). First, the lead researcher listened to the interviews and transcribed them, followed by reading the transcripts to become familiar with the interview data. Next, researchers used constant comparison techniques to detect preliminary themes (Corbin & Strauss, 1990). The lead researcher analyzed data for each interview question using open coding; the second researcher then used selective coding to determine final themes. Color codes were applied to represent the preliminary themes with frequency counts utilized to see replicated responses. Finally, themes were ultimately determined through the narrowing of preliminary themes, frequency counts of topics, and reflecting upon the initial purpose of the study itself.

Trustworthiness was confirmed through member checking, peer debriefing, multiple researchers analyzing the data, and ongoing conversation among both researchers during coding periods (Lincoln & Guba, 1985). Teachers were provided with direct quotes taken from the interviews and general themes that evolved and asked to confirm the accuracy. The researchers worked in close proximity with regard to the analysis of interview data, noting specific quotes teachers and/or students said and highlighting them with different colors to indicate possible themes in the responses. They also had multiple conversations to determine how they each interpreted the responses, and how those could possibly fit within an initial theme or if they warranted the addition of another theme. Ultimately, the themes were agreed upon with example quotes to support each.

Results

Interview data from both sets of participants ultimately became saturated as the interviews continued, with slightly different responses from teachers based upon grade level taught. The following themes were ultimately revealed: *Activity*, *behavior and student engagement*, *quantity vs. quality*, *socialization*, and *teacher-student "contract."* Each theme is described below with specific quotes provided to support them. Pseudonyms were used for all participants.

Activity

Overwhelmingly, the teachers agreed that recess was an excellent opportunity for students to accumulate physical activity and that most students were active during the recess time provided. There was ample playground space and open field areas at the school. Two specific playground areas were designated with jungle gyms and swings on both. There were abundant flat, grassy fields available, as well, that teachers often used for one of their recess times if the playground areas were already in use. All grade levels designated the same two 15- or 20-minute time slots for morning and afternoon recess (these were different by grade level, but the same within grade level). The principal determined this prior to the school year beginning so every grade level had the same recess schedule.

The teachers were split on how they used their morning and afternoon recess periods. For the first recess period, several teachers would use an open space near their classroom for sake of time. “We have a lot of space right outside our classroom, and my door leads straight outside, so it is easy for us to line up and get out, play, and re-enter the room without losing transition time,” mentioned Carla (1st grade teacher). Other teachers preferred to stay indoors and relied on physical activity videos for the students to get activity in. Becky (4th grade teacher) commented,

“The kids are so used to it now that they just move their desks off to the side and get up and ready to move to GoNoodle. They love it. We have a system, and the leader chooses which ones we do that day. It just works.”

This recess was determined a “protected” time (as determined by the site-based decision-making council), meaning the teachers could not take time away from students or have them perform exercise for punishment.

For the afternoon recess, all twelve teachers took their students to the designated playground area with a jungle gym and other equipment available. Most felt like it was appropriate to use recess time as punishment by having students walk laps or by taking time away. Of the seven classroom teachers interviewed, six did say they used exercise as punishment when needed but said they did not have to do that very often. Diane (5th grade teacher) said,

Having two recess periods is nice because I do think recess is a right for kids, but I also think it is a privilege. They are at school to learn, and if they cannot behave appropriately during learning time, then they should not be able to take part in the ‘fun’ time completely. The protected recess definitely gives them the freedom to play, but the other time is something they earn.

The other teachers made similar comments regarding recess as a *right*. “As teachers, it is part of our job to help students behave appropriately in order to help them best learn. Using the second recess to retrain helps reinforce our expectations,” stated Becky (4th grade teacher). Sara (3rd grade teacher) added, “We have a system, and the students know what we expect from them. It doesn’t happen very often, but sometimes they need a little redirection.”

Chenelle (1st grade teacher) commented, “They look forward to the extra recess. They never lose extra recess unless under extreme circumstances. If they walk, it happens at the longer recess, so they are able to play once they are done.”

The students were overwhelmingly positive about the physical activity outcomes from two recess periods. Alan (2nd grade student) said, “Recess gets your heart pumping.” Libby (1st grade student) added, “Recess helps us get more active.” Several students, including Hope (3rd grade student) said, “We run, and we swing, and we play tag. It makes me tired, but I love breathing hard.”

Behavior and Student Engagement

Only one teacher indicated that she did not notice a difference in behavior as a result of the two recess periods. Most mentioned differences in focus, behavior, and being more on-task. Sherry

(kindergarten teacher) said, "Students seem to be more focused after recess breaks...more alert!"

Amber (2nd grade teacher) added,

"Behavior is much improved! Students are able to get out their wiggles and are instead more focused and on task in the classroom, which I see as a positive! They are able to accomplish more and are more engaged than last year."

Sara (3rd grade teacher) concurred,

"Students are more focused after we get to move around." Emily (kindergarten teacher) responded, "I love it! My kinders need that break and it has been a huge help with their focus, their ability to collaborate with one another." Becky (4th grade teacher) stated,

I have noticed a refocus of students after a morning movement break. It is almost like a reward for their hard work and then they are willing to continue working hard because they see that they reap rewards from it. I have also noticed that if they get this break there just isn't an issue with being off task because they are fidgety.

Teachers also indicated students had fewer consequences as a result of behavior, in part due to the two recess periods. The students agreed with these benefits of two recess periods per day.

Alan (2nd grade student) said, "It helps me concentrate...lots of benefits for your brain. It helps me focus." Jamelia (5th grade student) mentioned, "I don't feel as antsy when I know we have two times to go outside and move. It gives me something to look forward to."

Most teachers indicated the two recess periods had really helped their students engage in discussion during class. Diane stated, "I am really amazed at how much deeper our conversations go. The kids really participate in discussions during class. I think it helps them hone in."

"The students I work with really need the activity time, the release from constant school work. I find that the two recess periods, along with integrating activity into my lessons really helps them give a better effort in class and focus on the topics," Kendal (special education teacher, 3rd and 5th grade).

Quantity vs. Quality

Of all the themes that developed from the interviews, quality vs. quantity stood out the most. Five different teachers said in separate, individual interviews "it's about the quality of time we get with the kids versus quantity of time." The lead researcher who was conducting the interviews asked if this was a motto the administration had instilled or touted in a faculty meeting, and all teachers indicated it was not, making the theme even more notable. Amber (2nd grade teacher) said, "Even though on paper we lose 15 minutes of instruction time, we gain that time back because of the students' ability to focus and stay on task as a result of both recess periods." As will be described in the last theme (Teacher-Student Contract), the teachers felt like the time they had with the students was more valuable and rich with learning because the students knew they had the reward of recess coming soon. Another teacher (Becky, 3rd grade) was adamant that doing activity breaks prior to testing "helped the students with their concentration and performance on the test. I think every teacher should be forced to get their students moving before they take a standardized test."

Sonny (5th grade student) agreed that even though they had a bit less time focusing on math and reading, it was more useful to him because he was able to, "release my energy during both recess periods. It made me feel fresher coming back inside so I could do a better job for my teachers when it was time to get back to work."

Socialization

An unexpected finding regarding multiple recess periods was the positive social outcomes the teachers indicated, especially for the younger children. Chenelle (1st grade teacher) was skeptical about the two recess periods at first:

With the transition time to walk through the entire building and back, adding another recess seemed tedious. But what I have noticed is the kids learn to socialize with each other so much quicker into the year than they ever have before. Initially it was parallel play halfway through the year. Now they are playing with each other and organizing games together before the first quarter is over. It is amazing what they can do when you let them.

Other teachers of children in younger grades echoed these comments. Emily (kindergarten teacher) mentioned, “It usually takes a while for the kids to play together and get along, but they are able to work out differences on their own so much quicker with two recesses.” Sherry (kindergarten teacher) added, “I have an active classroom anyway, as I believe it is just so important for kids to be kids and be able to move throughout the day. It helps them interact with each other in a better way.”

While parallel play is typically observed in children ages two and three, these teachers noted that even kindergarten and 1st graders showed signs of this type of play (playing side-by-side without much involvement among them) early and into the middle of the school year. However, giving them more opportunities for unstructured play seemed to push the children into associative play (playing the same thing without working together to create something) and cooperative play (participating in the same activity and working together to reach a common goal) sooner, allowing them opportunities to share, take turns, negotiate rules, and try to accomplish similar tasks.

The children also emphasized how recess provided them with time to interact socially with others. Carl (1st grade student) indicated the importance of peers at recess: “Friends are important at recess. I am sad if my friends aren’t there or if they have to walk.” Libby (1st grade student) said she loved recess because, “I get to see friends from other classes. We play and slide down the pole.”

Teacher-Student Contract

The inclusion of two recess periods did not seem to faze teachers or make them anxious about teaching all the content. In fact, most of them indicated that it tended to serve more as an agreement between them and the students to focus hard in class, then have a break, and then come back and work hard again. The notion of having content time, then a recess break, content time, then another break (e.g., specials or lunch), then content time, then another break (e.g., lunch or specials), content time, and afternoon recess seemed to be the focal point that the teachers kept praising. Candace (special education teacher, 4th grade) said she would tell her students,

“My students know they have to give me 30 minutes of hard work and concentration, and then they get to go out and release their energy. It’s a give and take. I think there’s just an understanding there that they give me their best effort and then they’ll get some free time to go out and spend with friends.”

Teachers felt empowered in that they could negotiate with students much more, noting that they would provide constant reminders that students needed to focus now so they could proceed to their break later. “In a sense, we get to use recess as a carrot, with the classwork as the stick. But we’re still working together in a way. Be determined. Be focused. Then go out and release your energy. Come back in and do it all over again,” added Sara (3rd grade teacher). Faith (principal) emphasized, “We love how it is bringing a sense of togetherness to our teachers and students. They both see the benefits, and they feel like they can be on the same ‘team’ to help their teacher teach and their students learn.”

Discussion

The purpose of this study was to explore teacher and student perceptions of the implementation of two recess periods per day at an elementary school in the Southeastern U.S. The first research question was (1) what are teacher perceptions towards the implementation of an additional recess period each day at their school? We hypothesized that given the emphasis on academic outcomes and the time crunch for schools, some teachers would see mostly benefits to the second recess period while others would present more challenges they faced because of it. Ultimately, there was only one teacher out of the twelve who indicated any real negative emotions about the multiple recess periods. She admitted she was skeptical at first, but ultimately, she changed her mind to be in favor of the school policy.

The most resounding themes to develop from teachers were the value of recess (and support of two recess periods) for the benefits of student activity and behavior. Teachers of K-1st grade students also discussed how more time for play led to positive socialization sooner in the school year for students, in contrast to children learning these skills later in the school year when they only had one recess period per day. Finally, the teachers felt like they could really reason with students with regard to giving high effort in class when students knew they were going to get two different breaks. It also helped with the quality of the time they had with the students and the engaging discussions that transpired.

The second research question was (2) what are student perceptions towards the implementation of an additional recess period each day at their school? We expected students to be overly positive toward the inclusion of an additional recess period at their school due to the innate nature of children to want to play and its role in development of the whole child. As hypothesized, the students were overwhelmingly in favor of the multiple recess periods per day. They seemed to be grateful for the opportunity, as they were aware that kids at other schools were not afforded the same opportunities. They also were very cognizant of the fact that they “owed” it to their teachers to work hard while they were in class, so they could have the extra time to go outside and be active elsewhere. They were in favor of teachers using laps around the playground as punishment, when needed, because they felt it was their responsibility to follow instructions and do what the teacher asked of them. The student’s believed the benefits of recess were to allow them to get more activity, focus more on school, and socialize with friends, especially those that were not in their homeroom class.

Limitations

A number of limitations existed within this study, which included data collection from one elementary school in the Southeastern U.S., decreasing the generalizability of the findings. Studies investigating samples from a variety of school contexts are warranted. The potential small sample size may have hindered the generalizability of the results; however, saturation of the interview data was evident with this particular sample. It was found that the youngest participants did not add much substance to the findings, so perhaps the questions were too higher-order thinking or abstract for them. Future quantitative studies could compare physical activity and behavioral outcomes to control for schools offering one recess period.

Conclusion

In conclusion, the principal and teachers at this school were able to implement a school-wide policy of two recess periods per day, and it was perceived positively by faculty and students. The principal put the power in the teachers’ hands with regard to the scheduling of the recess times.

Each grade level was to determine when they would offer their second recess period as time slots were staggered by grade level; and if the playgrounds were open, they were allowed to use that space. Due to spatial issues, this particular approach may not be possible at other schools, however, several of the teachers did not utilize the outdoor playground space for their second recess period. If other schools were to replicate this policy, the second recess period could be indoors or it could be required on a space other than the playground (if the school only had one), such as a blacktop area or open field.

When exploring means of effectively applying components of a CSPAP into a school, increasing time for recess and the number of recess periods appears to be an effective approach in terms of teacher and student perceived outcomes. With regard to the physical activity during school component, this study supports the notion that teachers and students can make a change (see physical educator's role in this change and student voice survey described earlier), and that school time devoted to physical activity can actually benefit the students in multiple ways.

While no empirical research has been conducted on the impact of multiple recess periods on student academic outcomes, a handful of teachers eluded to the notion that their state test scores may have improved due to the new policy. This might be something of interest, given that teachers really felt providing activity breaks before testing helped. The timing of recess and academic outcomes is another possible future research topic to be addressed.

There is no question that both teachers and students in this study were in favor of multiple recess periods each day. The perceived benefits far outweighed the barriers in terms of student activity gained, student-teacher bonds formed, student socialization that occurred, and the depth and intensity of the teaching and learning that transpired.

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Table 1. Example Student/Teacher Interview Questions

Participant	Example
Students	What does <i>recess</i> mean to you? <ul style="list-style-type: none"> Probe: Describe your typical recess activities. Why? Probe: What would help you be more active during recess?
	Do you believe all students have a right to recess? Or do you think it is a privilege and should be earned by good behavior or grades? Why?
	At XXX school, you have two recess periods each day. Not all students at other schools have two. Most have one. Do you remember having one recess last year? If you were to talk to teachers or principals of other schools about having one or two recess periods per day, what would you tell them about it? <ul style="list-style-type: none"> Probe: Do you think two recess periods per day benefited you? How?
Teacher	What is your view of recess? What is its purpose for your students and for you as the teacher? Is there a specific definition of recess that teachers at XXX school have adopted?
	Do you believe recess is a <i>right</i> or a <i>privilege</i> ? Please expand. <ul style="list-style-type: none"> Probe: Do you or other teachers use walking or other activity as punishment during recess? Why or why not? Probe: Do you or other teachers take recess time away as a punishment? Why or why not?
	What are your perceptions of offering recess two times per day at XXX school? <ul style="list-style-type: none"> Probe: What differences do you notice in the students, if any? Probe: Has it changed your teaching practices at all? If so, how? Probe: What are the benefits (if any) that you perceive from two recess periods per day? Probe: What are the barriers (if any) that you perceive from two recess periods per day?