

WHAT'S GETTING IN THE WAY OF PLAY? AN ANALYSIS OF THE CONTEXTUAL FACTORS THAT HINDER RECESS IN ELEMENTARY SCHOOLS

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ABSTRACT

This article describes the first two years of an ongoing, collaborative action research project focused on the troubled recess environment in 4 elementary schools in southern Ontario. The project involves an iterative, dynamic process of inquiry, planning, action, and reflection among students, teachers, university researchers, university student volunteers, and community agencies. The goal is to proactively transform the social landscape of recess into an engaging, positive, inclusive, and active environment. We present a brief review of research on recess in order to contextualize our project and highlight the important links between recess activities, school engagement, and academic outcomes. We then highlight the children's voices about their recess environment, and add perspectives from the teachers, principals, and playground volunteers. Finally, we present our collective suggestions for action that will lead us into the next phase of our project.

INTRODUCTION

No balls allowed at recess? No equipment at all? You spent recess alone, again? A significant amount of current research suggests that recess has the potential to be an essential developmental force for children – socially, physically, academically, and psychologically. Yet, academic, budget, and administrative pressures have seemingly chipped away at the resources that we allocate to recess. As a consequence, it appears that Canadian schools struggle with overcrowding, discipline issues, and social conflict – much like our US counterparts. Yet, surprisingly, there has been no research to document the recess environment in Canadian schools.

There appears to be an assumption that recess is a delightful moment in our children's day

when they are free from their academic restraints to burn pent-up energy, to laugh, and to play. And it is for some, perhaps. But we suspect many of our students are challenged by the lack of structure, the social awkwardness, the conflict, the lack of equipment, and the absence of organized activities. The students themselves had pointed this out to us – they had brought their issues and concerns forward and nudged us to pay attention.

And we did. They don't have any equipment to play with? They don't have anything to do? They are tired of the fighting? Their friends are sick because of conflict at recess? They stand by the wall, alone? She follows the mean girl? Her teacher assigns him to "the wall" at recess almost every day? We began to, anecdotally, see that the children's motivation and commitment to school was affected by their social experiences at recess. We informally polled other educators, administrators, and parents and from there we decided, as a group, to move forward and investigate formally. What can we do? We used our professional connections – our initial group was composed of an elementary school teacher, an elementary principal and vice-principal, an educational psychologist, and a pediatric nurse – to leverage resources and mobilize an interactive action research project.

Of particular interest to us were the voices of the children, and therefore we started our research by capturing their experiences with recess. From there, we explored the perspectives of teachers and principals. We used our connection with the university to draw on information, resources, and student volunteers. We met with three other principals and asked if their schools would like to be involved in the project. Armed with a baseline understanding of recess in four elementary schools we were able to create a dynamic project of planning, action, and reflection among students, teachers, university researchers, university student volunteers, the school board, and community agencies. All were committed to helping transform the social landscape of recess into an engaging, positive, inclusive, and active environment.

This report highlights our progress. We present a brief review of research on recess in order to contextualize our project and highlight the important links between recess activities, school engagement, and academic outcomes. We then present a combination of student, teacher, and administrator perspectives about their recess environment in order to construct a reliable narrative of their concerns and challenges. Finally, we present our collective suggestions for action that will lead us into the next phase of our initiative.

BACKGROUND

Children's academic success is dynamically shaped by the interacting role of cognitive, affective, social, cultural, and organizational components of the school environment. These components iteratively and cumulatively influence an array of factors: children's social adjustment, psychological health, academic engagement, work ethic, commitment to school, academic achievement, physical health, and overall student success (Durlak, et al., 2011; Wang & Holcombe, 2010; Blum, 2005; Finn, 1993). Yet constant pressure upon educators and administrators to meet the well-intentioned demands of science, math, and literacy reforms invariably shapes the way schools make administrative, financial, and scheduling decisions.

One of the implications of these decisions appears to be that less resources and attention are allocated to non-instructional factors, including recess (Pellegrini & Bohn, 2005; Jarret & Maxwell, 2000; Pellegrini & Smith, 1995). For example, limited funds for supervision and equipment invite social and behavioral challenges that are pervasive on the playground and steal from productive playtime and take from administrators' time (Robert Wood Johnson Foundation, 2010). To extend the reasoning, social conflicts – teasing, hitting, pushing, bullying – occur frequently at recess in both the US and Canada (Nansel et al., 2001; Craig and Pepler, 1997).

As a result, there is some evidence that many schools and school districts in the United States are reducing, and even eliminating, recess altogether (McKenzie & Kahan, 2008; American Association for the Child's Right to Play, 2004; Pellegrini, 2005; Zygmunk-Fillwalk & Bilello, 2005). Studies investigating the context and impact of recess are largely absent in Canada. Given that recess is a medium for interactive play, physical activity, and the development of social and emotional competencies, we are overlooking important opportunities to support children's physical and psychological health. There are immense public health costs associated with poor mental and physical health, and attention to the daily context of recess may influence healthy behaviors and developmental trajectories that lead to success and alleviate some of this burden.

We created our research project in order to initiate research on recess in Canada. We want to document landscape of recess in order to leverage attention and resources. We argue that recess has been an overlooked opportunity to proactively support children's social, psychological, physical and academic development. We began with an array of exploratory questions that we captured through iterative interviews, observations, questionnaires, and focus groups: How many children are on the playground at the same time? How many supervisors? Is equipment available? If so, how much and what kind? What are the children doing during recess? Is the playground organized? How many children are active and playing? What are the children's thoughts about recess? What are their challenges with recess? Is the situation developmentally appropriate for all children? Are there supports for vulnerable or at-risk children? Are there any guided activities? What are the teachers', parents', and administrators' perceptions of recess? And so on. To us, the lack of answers to these questions in the scholarly literature is one of the most surprisingly overlooked aspects of recess.

RECESS AND THE DEVELOPMENTAL HEALTH OF CHILDREN

Current research highlights the link between recess activity and the cognitive, social, and physical benefits that dynamically contribute to children's academic success and overall developmental health. Ramstetter et al. (2010) provide a comprehensive review of the literature on recess.

It is thought that by providing children – particularly younger children – with regular breaks from class instruction they will be more focused and attentive post-recess, which, in turn, can cumulatively influence their overall academic performance (Dills et al., 2011; Ramstetter et al., 2010; Holmes et al., 2006).

Recess is recognized as an outlet for physically active play. Physical activity has both immediate and long-term benefits in that it reduces stress, promotes feelings of well-being, stimulates neurological activity, increases energy, helps maintain a healthy weight, and prevents disease (Centers for Disease Control and Prevention, 2010; Ramstetter et al., 2010; Barros et al., 2009; Sibley & Etnier, 2003). Such factors influence children's physical and psychological health, which, in turn, support a positive developmental path that is predictive of academic success (Durlak et al., 2011; Blum, 2005).

Children's social competence develops through interaction with peers, and recess can provide children with opportunities to develop and refine social skills (Centers for Disease Control and Prevention, 2010; Ramstetter et al., 2010; Blum, 2005; Pellegrini et al., 2004). Positive interactions with peers influence children's ability to cope with a wide variety of situations. More specifically, recess provides opportunities for children to cultivate relationships with peers and develop positive peer supports. These positive peer supports mediate cognitive and emotional regulation and facilitate the development of social and emotional competencies such as empathy, problem-solving, emotional regulation, and coping strategies (Mahar, 2011; Ramstetter et al., 2010; Barros et al., 2009; Pellegrini & Bohn, 2005; Pellegrini et al., Sibley & Etnier, 2003; 2004; NAECs/SDE, 2001; Hodges, 1999; Pellegrini & Bjorklund, 1997). Importantly, children who fail to develop positive coping skills are at risk for social, emotional and/or behavioral problems – anxiety, depression, or aggression, for example – that can potentially snowball and initiate a cumulative, destructive developmental path that influences children's engagement with school (Fredericks et al., 2004; Pellegrini et al., 2004; Kochenderfer & Ladd, 1999; Tolan et al., 1995).

Taken together, recess can provide opportunities for interactive play and physical activity that allow for the positive development of social and emotional competence as well as increased energy, attention, and classroom cooperation – all factors that contribute to positive developmental health trajectories and academic success.

STUDY POPULATION AND STUDY DESIGN

We suggest that the lack of understanding of the described dynamics leads to misguided decisions associated with recess that appear to be compromising its potential. There is a need to document the contextual and cultural factors associated with recess, particularly those factors that might undermine the benefits. Therefore, the first stage of our project is intended to document, both qualitatively and quantitatively, the setting of recess – the challenges and affordances from a variety of perspectives. This means hearing from the children, the teachers, the yard duty supervisors, volunteers, parents, and administrators, as well as closely observing the activities and interactions on the playground.

The data that we present were collected from across four elementary schools in a southern Ontario, Canada school district. The participating schools' enrollments range from 150 to 400 and include kindergarten through grade eight students. All of the schools are in economically stressed neighborhoods. Research indicates that children from low SES groups tend to be characterized by multiple risk factors that dynamically and negatively

affect students' engagement and academic progress. Inadequate education and increased dropout rates perpetuate the low socio-economic status of the community and affect community health gradients (Keating & Hertzman, 1999). Hence our decision to include schools with multiple risk factors to help inform our research in order to help mitigate these risk factors. Such intentional and systematic sampling is often used in qualitative research. The purpose is to identify specific groups of people who are living or experiencing a situation relevant to the study. Specific groups are then explicitly selected because they will best inform the researcher of the problem relevant to the research (Creswell, 2007; Mays & Pope, 1995).

Because there are many complex and interacting factors that affect the setting of recess and its impact on children's development and learning, we sought information and perspectives from multiple stakeholders that provide means for viewing the environment both broadly and deeply. The questionnaire data used for this particular study are presented in Table 1 and include reports from grade three to grade eight students from two schools (N = 103), teachers from four schools (N = 22), principals from four schools (N = 3), one vice-principal, university playground volunteers from four schools (N = 9), and yard duty supervisors from two schools (N = 3). The data were collected over the course of two school years.

To obtain in-depth descriptions of the opinions, perceptions, experiences, beliefs, and needs of the different stakeholders, an inductive, qualitative approach was employed first. We chose this approach in order to establish a contextual, baseline understanding of the perceptions of the participants. The primary purpose of an inductive approach is to avoid restraints imposed by structured methodologies in order to allow the emergence of major themes and categories (Berg & Lune, 2012; Bryman & Burgess, 1994; Miles & Huberman, 1994). From the initial qualitative inquiry, the data was then conducted and analyzed in subsequent, iterative stages. We then used a mixed method approach and quantified some of our data in order to help us present a more detailed description of the project and its impact. We discussed our results with the students and teachers to inform, confirm, and clarify. This allowed us to capture more in-depth data that would contribute to a more comprehensive understanding of our results (Berg & Lune, 2012; Bryman, 2006; Miles & Huberman, 1994).

The stakeholders were given a series of open-ended questionnaires throughout the 2011-2012 school year. Descriptive and contrast questions were raised in order to unpack broader questions and begin an exploration of more specific details. These included questions that pertained to the definition and purpose of recess, beliefs, descriptions, concerns, needs, wishes, favorites, and recommendations. Follow up questionnaires were created to expand on the information provided from the first set of questionnaires and allowed us to refine our understanding of stakeholder's recess perceptions. Further, from the initial baseline data we were able to create an array of quantitative measures to assist with the interpretation and analysis of data.

Table 1: Data Collection Methods

Measurement	Tool	Schedule	Analysis
Student perceptions of their recess environment N=103	Open-ended questionnaires. Questions asked students to consider the definition and purpose of recess, descriptions, concerns, needs, wishes, and recommendations.	Fall, Spring	Responses were coded and grouped; a follow-up measure was created to allow further elaboration. Responses crosschecked with other data.
Staff (teachers, yard duty supervisors, administrators) perceptions of the recess environment N=29	Open-ended questionnaire. Questions asked students to consider the definition and purpose of recess, beliefs, descriptions, concerns, logistics, needs, wishes, challenges, and recommendations.	Fall	Responses were coded and grouped; crosschecked with other data.
Researcher perceptions	Non-participant observations of the recess environment. Field notes document general description and organization of playground, activities of students, number of supervisors, activity of supervisors, and equipment details.	Fall, Spring	Field notes were crosschecked with other data and used to support emerging themes.
University volunteers' perceptions of the recess environment N=9	Written journal entries detailing their experiences with the children and staff on the playground: successes, challenges, barriers, and general comments.	Weekly	Journals were reviewed weekly by research team, analyzed for themes, and crosschecked with other data.
	Open-ended questionnaire of their overall experience as playground volunteer	End of school year	Responses were crosschecked with other data and used to support emerging themes.
Information from principals N=3	Unstructured follow-up interviews with principals to obtain more in-depth information on certain findings	Fall, Spring	Responses were used to support emerging themes.

Triangulation of data is an important technique in qualitative research that lends trustworthiness and validity to the findings (Berg & Lune, 2012; Eisenhart & Howe, 1992; Kuzel & Like, 1991). The questionnaire data were crosschecked and complemented with other sources of data. This included other participant's questionnaires as well as observational data – though one of our challenges with capturing observational data on the playground is that children are spread out across a wide area and out of hearing range.

Further, students will likely behave differently and in a more controlled manner if a researcher is present (see Craig and Pepler, 2011). Because we are conducting an action research intervention study, we had arranged for university volunteers to assist on the playground on a regular basis for the entire school year in each of the schools. Their position required them to engage the children in games (skipping, Octopus, two-on-two basketball, etc.), model pro-social behaviors, and assist them with conflicts. They became familiar with the children and their dynamics on the playground. They were asked to take notes weekly about their experiences as well as respond to surveys that we provided them. Their notes and surveys are a valuable source of data for us.

For all data, we searched actively for further evidence that would confirm or disconfirm the findings, which ultimately paved the way for the emergence of reliable themes (Berg & Lune, 2012; Kuzel & Like, 1991).

RESULTS

Participants’ reports on the setting and general details of recess are provided first. This section is followed by a description of the four major challenges that are perceived to be impeding a productive recess: 1) social conflict, 2) lack of activities, 3) lack of equipment, and 4) minimal staff support. Finally, in our discussion, we review stakeholders’ recommendations for effectively re-designing the setting of recess.

GENERAL DESCRIPTIONS OF RECESS

All schools in Ontario have the option of implementing a newer initiative based on increasing the length of learning blocks often called the ‘balanced day’ in which there are two longer breaks in the day instead of three short breaks (Table 2). All of our participating schools have adopted this schedule. Though exact bell times may differ slightly at each school, each break is divided into two 20 minute parts: a 20 minute “nutrition break” whereby students eat lunch/snack at their desks in their classrooms, followed by a 20 minute “fitness break” whereby the students are expected to go outside, weather permitting. The first break is at approximately 10:30 a.m. until 11:20 a.m. and the second break is approximately 12:50 p.m. to 1:30 p.m. Schools have the option to stagger their student body to reduce the number of children outside at any one time. This was the case in one of our schools with a population over 400. The primary (K-3) groups have a nutrition break first, followed by a fitness break, while the intermediate (4-8) groups have a fitness break first, followed by a nutrition break.

Table 2: Sample ‘Balanced Day’ Schedule

8:50 - 9:40 a.m.	Period 1
9:40 - 10:30 a.m.	Period 2
10:30 - 11:10 a.m.	NUTRITION/FITNESS BREAK
11:10 - 12:00 p.m.	Period 3
12:00 - 12:50 p.m.	Period 4
12:50 - 1:30 p.m.	NUTRITION/FITNESS BREAK
1:30 - 2:20 p.m.	Period 5
2:25 - 3:10 p.m.	Period 6

In our observations, the ratio of students to yard supervisors/teachers was roughly 50:1. One principal mentioned that teachers are limited to, on average, 45-50 hours per year for supervision, which includes the playground, hallway, bus, and lunch, for example. For recess, then, part-time Yard Duty Supervisors are hired by each school to fill the remaining need. Another principal reported that a background in child development or education is not required for the position. In two schools, parent volunteers assisted, regularly, on the playground. The job description, for both teachers on yard duty and staff yard duty supervisors, is one of a supervisory role only (as opposed to one that requires planning and organizing, for example). In each of our schools, they are designated to certain areas of the playground.

Our initial questionnaires were designed to help us gain a baseline understanding of the recess environment. All teachers and administrators reported that recess was an essential part of the school day – psychologically, physically, socially, and academically. A general consensus of the description and purpose of recess emerged from the data and included the following: *interacting with friends, fresh air, physical activity, and a break from learning.*

“My definition of recess is that you get to play with your friends, have fun, get some fresh air, take a break from learning.” Grade 6

“My definition of recess is free time and playing with friends.” Grade 6

“It is that you can have a break, stretch, and have some fun time.” Grade 4

“A fun time to talk and hang out with your friends.” Grade 8

“A period for students to exert themselves, a time to socialize with peers, a break from academics.” Teacher

“It is a good time to de-stress, run off steam, and stimulate the brain and get blood flowing so students can be more settled to learn after recess.” Teacher

BARRIERS TO AN EFFECTIVE AND HEALTHY RECESS

In spite of the positive definitions of recess, participants characterized it as needing attention. In the participant schools, there was discrepancy between the definition and purpose of recess and what actually happens at recess. When teachers were asked to describe the playground, responses suggested that many children were not actively and positively engaged. They indicated that while some children are actively playing, “There is a lot of loitering” and “Most stand around.” Another teacher connected the disparity to lack of organization: “The self-directed children have no trouble finding things to do, but there are many children who can’t negotiate the lack of structure.”

Thirty-four percent (10/29) of school personnel reported that, on average, less than half of the children appeared to be meaningfully engaged or active at recess; 31% reported it was 60%. Field notes indicate the primary groups (grade JK-3) are generally more active than

intermediate groups (grade 4-8), and grades 7/8 tend to be the least active. Many respondents shared one teacher's comment, "Our kids do not know how to play."

Table 3: Barriers to a healthy, effective recess

Barrier	Details
Social conflict	Mixed ages, social skills difficult to negotiate Difficult to negotiate uncertain or awkward social patterns Uncertainty of 'what to do' during recess Intermediate's social patterns established; exclusive pods Boredom, "pent-up energy," lack of equipment leads to arguments, discipline issues Minimal supervision Exclusion, bullying, social conflict Rejected children have few places to "hide," are not protected, have nothing to do Antisocial or unskilled peers are difficult for children to engage with Lack of knowledge of prosocial, problem-solving strategies
Lack of activities	Leads to boredom, discipline issues Students have difficulty negotiating activities Students have limited repertoire of games, esp. collaborative and non-competitive games Lack of options – does everything have to be physical (all the time) at recess? Nobody available or trained to teach the children instructions for tarmac games, collaborative games (uncertainty with whose "role" it is)
Lack of equipment	Lack of ability to manage equipment Stolen, broken, lost Lack of funds for equipment Liability issues Discipline issues Safety issues
Minimal staff support	Lack of understanding and perceived benefit of recess Lack of priority – allocated minimal funds and attention Lack of clear purpose Teachers too busy to volunteer Lack of funds for support staff; 50:1 ratio Unproductive discipline: Withholding recess (inside, or on "The Wall" outside); sent to principal

SOCIAL CONFLICT

This study was designed to be an exploration of recess in general, and initial measures did not ask any specific or leading questions about bullying or social conflict so as to avoid predetermined categories. Though students mentioned that their favorite part of recess is "being with friends" (53%) and "playing games" (23%) it appears to be often complicated by social conflict. In a follow up measure, when asked what they liked least about recess, 21% indicated 'bullying/fighting'. The volume of reports of 'bullying/fighting' during recess

was surprising, particularly for the students in grades 5 through 7 (35%). Students generally used the term “bullying” quite loosely; therefore the definition may vary and include a continuum of social conflict. Yet the children are undeniably struggling with social challenges and they indicated their concerns are not being addressed. One student wrote in the margins of our questionnaire, “We had a bully consultant come in once but nothing’s changed. Can you help us?” Other students expressed similar concerns:

“I wish there was less bullying and exclusion.”

“Some kids get real aggressive when the teacher is not looking....”

“I wish everyone would get along.”

“When kids argue it wastes my recess time.”

“Most students don’t like each other.”

“We need help out here.”

“Sometimes, I am worried I will get bullied.”

When teachers and staff were asked, *What is your biggest challenge with recess?* 16/29 (55%) indicated social and behavioral issues, particularly arguments and exclusion. For example, one teacher reported “Too many arguments.” Another described “Teasing or physical violence.” Six of the teachers/staff (20%) offered an elaboration and attributed these challenges directly to the lack of structure and engagement in activities.

We had asked the students a question about how “safe” they felt at recess. The majority (70%) indicated that they felt “safe”, but the rest indicated they felt “somewhat safe” or “not safe.” In a follow-up we asked the students to explain further and their elaborations provided us with interesting information with respect to the social landscape of recess. Many students reported feeling safer at recess when they are with their friends. For instance, a grade 6 student reported that friends are important “to help us if something is not right.” Others echoed similar sentiments, with 12% of the students specifically mentioning they didn’t feel safe because of the bullying.

“I feel very safe when I am with my friends.” (Grade 5)

“Feel comfortable and safe at recess because you have friends around to help you when you need help they will defend you as much as you will to them” (Grade 6)

“Yes, but sometimes people exclude me and then I don’t feel comfortable.” (Grade 5)

"I feel really comfortable no one bullies me or anything." (Grade 4)

"...having friends to stand up for you." (Grade 6)

Note the unacceptably large number of students feeling only "somewhat safe, sometimes" (27%). One student described "I sort of feel comfortable at recess because I never know if I will get bullied or not." Others reported mostly feeling safe, but "sometimes worried that I will get bullied" and "sometimes I feel safe but not all the time because some people get real aggressive when the teacher is not looking or they swear at me or push me." In all participating schools, children were consistently and obviously excluded from the entire student body. These children often walked the perimeter of the school or hung by the door or wall.

LACK OF ACTIVITIES

"I wish there were more activities."

The children were asked, *If you could create your own recess, what activities would you have?* They were quite articulate, and surprisingly reasonable. Some mentioned organizing the playground into different zones or designated spots for a variety of activities – a place for friends to hang out, a place for soccer or baseball or other structured sport, a place for organized games and group activities, different areas for younger and older children to play (in part so the younger children don't get hurt walking into the older children's games, and in part because the younger children annoy them), areas for free play, chalking, and skipping areas. Specifically, students indicated they would like more sports (45%), games (39%), equipment (20%), and options in general (13%).

Observations confirm a lack of activities on the school playground. While there are classic tarmac games (hopscotch, 4-square), basketball hoops, and climbing structures, the interest is not high or consistent among the students. Children seem to be expected to come up with their own games or ideas for what to do, with limited equipment and toys to help mediate play and physical activity. Further, some stakeholders notice that many students often do not know what to play, or how to play, and end up "loitering". Children with higher levels of physical and social competence tend to engage in competitive and physically active games. But with limited equipment, games are often invented with changing and conflicting rules, and are often exclusive to the group that creates it. Stakeholders indicate that children struggle with an unstructured, crowded, and unsupervised environment. They report that it appears to invite uncertainty and anxiety among some children, especially children who shy away from competitive or overly physical activities. There are few alternatives for these children.

LACK OF EQUIPMENT

In all participating schools, very little equipment was available to the children – a few basketballs, soccer balls, and footballs. In two schools, no equipment was allowed out

(unless university volunteers were present to assist). Thirty-two percent of the students wished they had more equipment. Principals mentioned they were frustrated with lost, stolen, and broken equipment and this makes them reluctant to purchase more. As one student explained, "People take things, drop them, and people steal them or take them to a friend's house and keep it."

Teachers and yard supervisors mentioned that when more equipment is out on the playground, there are more discipline issues – and some of these discipline issues lead to safety and liability issues that make the yard supervisors uncomfortable (jump ropes, for example, were used as "leashes" to walk children or tie them to trees; balls being used to play forbidden games – dodge ball, for example). Furthermore, students often leave the equipment on the playground when the bell rings, consequently creating more work for the supervisors or volunteers when they have to round up the neglected equipment.

Not surprisingly, children indicated that they are in dire need of equipment.

"We need equipment." (grade 5)

"There is nothing to do." (grade 7)

"More equipment." (grade 4)

"More sporting equipment." (grade 6)

"More things to play with." (grade 5)

"We want more [equipment] because we have a lot of kids in our school and so we have more things to do." (grade 5)

Further, in all of the schools that we observed, there was very little attention given to creating a system for managing equipment. Teachers and principals mention that they have tried a variety of checkout systems but get frustrated with the lack of time to manage it.

"People take things, drop them, and people steal them or take them to a friend's house and keep it." (Student, grade 6)

"Another problem was the cost, because the price of material went up so did the equipment prices." (Principal)

"Before there was just a few balls and like 20-30 skipping ropes and they all went missing after a while." (Student, grade 4)

Many students commented on how a lack of equipment often aggravated arguments among the students.

"I think that there is not enough equipment because there is a lot of kids in the school and everyone just takes it all. And then the bullying starts." (Grade 6)

MINIMAL STAFF SUPPORT

A student noted, "I think there should be more teachers on duty." Another felt that instances of social conflict, bullying, teasing and excluding are all more likely to occur at recess "because there is a limited amount of teachers that are not always around to hear what is going on."

Minimal staffing at recess appears to force all yard supervisors and teachers to operate in "repair" mode as opposed to preventive mode. In other words, they intervene if there is a larger, obvious problem that needs attention (and it appeared there often was). Field notes and journals indicate discipline issues often went unaddressed, either because staff could not attend to it or were unaware of it. For example, field notes describe a situation that happened far on the field and very quickly. A grade 8 student threw the contents of a box of sugar-filled straws in the air towards a very large group of students (upwards of 50) who were surrounding him at recess. The students subsequently scrambled and grabbed for candy, and then proceeded to eat it and also to flick the sugar at each other. Because it was far from the supervisors on duty, and both were attending to another matter, they could not intervene (it appeared they did not notice what happened).

When troubles were acknowledged, discipline often consisted of assigning children to stand on "the wall" for the duration of recess or a trip to the principal's office. Several teachers regularly assigned "the wall" as a consequence for in-class misbehavior. When assigned to "the wall", however, students easily 'escaped' as it was often impossible for staff to carry out and oversee.

Principals report that they have the option to stagger recess, subsequently dividing the recess population in half. They mentioned they would be willing, but have previously rejected this option because it requires funds to hire more yard supervisors and would be a complicated logistical process to carry out.

DISCUSSION AND RECOMMENDATIONS

This study provides insight into the painfully understudied context of recess in elementary schools. The results support the idea that many years of inadequate attention to recess has manifest in less effective practices and contexts. When the individual differences in ages, personalities, and social skills were situated in the context of an unorganized, ill-equipped, minimally supervised recess, many children were vulnerable to social conflict, difficulties, and marginalization. Previous research suggests that this is particularly true for young children and children with risk factors (Doll, et al., 2003). Social difficulties, in turn, made it more challenging for the children to engage in respectful, collaborative, and inclusive physically active play that supports a positive development trajectory. Although our study is small and not designed to generalize, the similarity with other literature suggests these findings have applicability beyond this particular group.

Table 4: Recommendations

Suggestion	Rationale
Modify the 50:1 ratio of students to supervisors	Minimal supervision acts as a catalyst for many of the concerns and challenges that the students and staff have.
Organize recess, provide activities	Need for a continuum of free play to organized games and activities.
Create Junior Recess Leader positions	Role models, culture change.
Create calendar of events, activities	Overall awareness; assist with organization; catalyze culture change.
Create volunteer positions - university volunteers, high school co-op positions, community members	Role models, assist with conflict resolution, encourage play, additional supervision.
Provide equipment and a system to manage it	Equipment availability can make a difference in activity levels, relieve boredom, and reduce social conflict.
Attention to students' bullying/conflict concerns and explicit teaching of prosocial skills	Social conflict at recess is an issue. Preventive approach rather than repair approach.
Teach instructions for collaborative games, blacktop games, individual games	Stakeholders feel children don't know how to play.
Enhance stakeholders' understanding of the merits of recess and provide yard duty training	Many of the teachers and administrators are unaware of the developmental impact that an effective recess environment can have on children.
Reconceptualize job description and responsibilities of Yard Duty Supervisor (change title to "Recess Leader") to reflect engagement and prevention rather than strictly supervision	Need an available, consistent person to look after Junior Recess Leaders and other volunteers; to organize activities and monitor progress.
Create teacher or administrator connection	Need a committed staff to act as school link with School Recess Leader/Yard Duty Supervisor
Provide options and activities	Non-physical options (crafts, chalking, music clubs) offered occasionally may mediate friendships, relieve boredom and stress; Zumba and Yoga (for example) classes may provide a safe, organized, supervised option.

Questioning participants and analyzing existing themes and categories resulted in a preliminary set of recommendations. Transdisciplinary perspectives that include sociocultural, social cognitive, developmental health, and population health frameworks further supported final recommendations.

A well-designed recess environment should offer an array of opportunities for children to be active, inclusive, and protected from the effects of bullying and exclusion. Akin to previous research (Durlak et al., 2011; Centers for Disease Control and Prevention, 2010; Sibley & Etnier, 2003), the students in the study could benefit from instruction and scaffolding to help them manage their own (and others') emotions and frustrations to engage effectively in interactive play, collaboration, and teamwork. They also need effective

outlets for play and physical activity in which to develop and practice these skills. Without these protective opportunities, they risk developing inadequate coping skills that may cumulatively affect their overall developmental health and engagement with school (Durlak et al., 2011; Centers for Disease Control and Prevention, 2010; Pellegrini & Bohn, 2005; Pellegrini et al., 2004; Pellegrini & Bjorklund, 1997).

Overall, a prevention model is recommended to encourage cooperative, physically active play and positive social strategies. Attention should be given to reorganizing recess as a whole, with options that run the continuum from free play to organized, guided activities. Peer leaders, community partners, and perhaps a change in the job description and responsibilities of yard supervisor are suggested as catalysts to reshaping the context and culture of recess.

CONCLUSION

The goal of this report is to initiate further research activity in Canadian schools and pull together an array of documentation that will lead to improvements in the social landscape of schools, recess in particular. It has been suggested that we view schools as a series of intersecting points whereby social interactions among people in their setting engenders patterns of thought, behavior, beliefs, values, and norms (Rosaldo, 1989). Such patterns ultimately influence the ways that children relate to each other, the kinds of individuals they will become, and the kind of society they will create. Given the recent reports of remarkable rates of mental illness and poor physical health among adolescents worldwide (WHO, 2012), there is a sense of urgency that lies in the understanding that social issues are intimately linked to psychological and physical health and dynamically, overall population health (Keating & Hertzman, 1999).

Understanding the perspectives of stakeholders is a critical first step in developing intervention strategies. Further exploratory and intervention research is recommended to gain a better understanding of the variety of interacting factors that affect the setting of recess. More research can lead to better practices and advocacy, which in turn can help provide children with more positive social experiences. Positive social experiences influence mental health and well-being and, in turn, alter the developmental health trajectories of the children (Sameroff et al., 2003).

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