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The Impact of Peer Praise Notes Issued During Recess:
Effects on Office Disciplinary Referrals

Elise A. Teerlink

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Educational Specialist

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December 2014

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ABSTRACT

The Impact of Peer Praise Notes Issued During Recess: Effects on Office Disciplinary Referrals

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School recess can be a problematic setting due to inadequate safety, supervision, and structure. Peer praise notes (PPNs) is a school-wide positive behavior support strategy that was implemented during recess to address these concerns at a Title I elementary school. An ABAB reversal design across all students was employed to evaluate the effectiveness of PPNs. Overall changes in office disciplinary referrals (ODRs) in each phase of the design, an effect size that reflects a highly effective treatment, and a moderately strong and statistically significant negative correlation suggest that PPNs decreased ODRs. Results from social validity surveys completed by eight recess aides and 88 students indicated that participants had positive perceptions of PPNs improving student behavior and peer relations, communicating playground rules, extending supervision responsibilities, and offering structured activity to peer praisers. Students' perceptions were overall more positive than the recess aides' perceptions. Limitations, future research, and implications are addressed.

Keywords: recess, playgrounds, recess aides, school-wide positive behavior support, peer praise notes, social validity, office disciplinary referrals, school-wide information system

ACKNOWLEDGMENTS

I would first and foremost like to thank my husband, Chris, for his love, support, and patience while I was writing this thesis. He and I have always shared the motto, “Work hard. Play hard.” I thank Chris for motivating me to put in the needed hours to complete my research by providing fun and encouraging incentives along the way. The getaways to Ocean Shores, Park City, Heber, Rexburg, Portland, Catalina, Ensenada, Disneyland, San Diego, San Francisco, Sacramento, Newport Beach, Los Angeles, Tahoe, Logan, Las Vegas, Seattle, Vancouver, Jackson Hole, Ogden, Seaside, Washington, D.C., Kapolei, Waikiki, Rockaway Beach, and Tempe, have helped me to maintain balance in my priorities and have given me a goal to work towards when motivation was lacking. Not only did my husband provide all of these memorable vacations, but he was also there beside me every step of the way. His frequent notes of love and praise have been a constant reminder to me of why I believe that peer praise notes are effective. He patiently tolerated my alarm clock often waking me up at 4:00 in the morning so that I could work on my thesis when my mind was fresh. He understood when I was unavailable to talk or spend time together because I was trying to reach deadlines. He encouraged me when I wanted to give up. And most of all, his love inspired me to keep going.

I would like to thank my parents for teaching me that fulfilling dreams is always possible with hard work and persistence. Growing up, they instilled in me the value of never settling for less than the best. They taught me to never get too comfortable, because great things usually happen outside of the comfort zone. Because I had expectations for myself to achieve great things, I learned to never get so comfortable that I stopped trying. Throughout my childhood and adolescence, my parents hosted teenagers and young adults from all around the world that would stay with us for months at a time. Seeing them struggle to reach their goals gave me a clear

example of what is needed to be self-motivated and reach success. I am appreciative of my parents' support of these individuals because of the models that it provided me.

My Uncle Larry has played a large role in the production of my research. A year before I started graduate school, Larry was diagnosed with amyotrophic lateral sclerosis (ALS), a progressive neurodegenerative disease that paralyzed his muscles. When I started graduate school, he invited me to live in his home so that I could tutor his children and provide relief to his wife. While it was difficult to see his family enduring a constant physical and emotional battle, I witnessed firsthand how praise can turn a seemingly undesirable situation into a meaningful learning experience. Each Monday night my uncle led his family and me in explicitly practicing giving specific compliments to one another. I witnessed how this had a direct impact on my cousins and prevented them from engaging in problem behavior.

I would also like to thank Dr. Caldarella for his support and for his direction with this project. He was quick to help me arrive at my research topic and then saw an immediate opportunity for a study that I could conduct. Paul was diligent in monitoring the progress of my research on a weekly basis. He never hesitated to answer any questions I had, and he never complained about our meeting time of 8:00 on Monday mornings. He often sent me articles that supported my research. Throughout the research process, Paul encouraged me to present the research at a number of different conferences: the 2013 and 2014 McKay Mentored Research Conferences, the National Association of School Psychologists 2014 Annual Convention, Utah Multi-tiered Systems of Support (UTMSS) Connections Conference 2014, and the 2014 Teacher Educators of Children with Behavioral Disorders Conference. He served as a secondary presenter at the 2014 UMTSS Connections Conference and will also help present at the upcoming 2014 TECBD Conference. He held me to a high standard, but he was also

understanding of the fact that attending to my uncle's needs, preparing for my wedding, nurturing my marriage, frequently accommodating family visitors, and taking care of my husband when he was sick in the hospital took precedence over my research. I would not have been able to do this without Paul's example of hard work, his constant energy, and his ability to stay positive and keep pushing me forward.

I would also like to thank Geovanni Guzman for his willingness to be a part of research, for his help with data collection and Spanish translations, and for his help presenting this research at the 2014 UMTSS Connections Conference. Thank you also to Ben Young for his help in analyzing the data. I would also like to thank my committee members, Darlene H. Anderson and Michael J. Richardson, for their time and support.

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Chapter 1: Introduction

School-wide positive behavior support (SWPBS) aims to create a positive school climate, prevent and reduce problem behavior, and support academic achievement and prosocial development. The SWPBS framework views problem behaviors as an interaction between a student and his or her environment, rather than simply an internal problem within the student (Young, Caldarella, Richardson, & Young, 2011). Altering the students' environment and teaching clear behavioral expectations on a consistent basis can help prevent problem behaviors. SWPBS helps school staff to (a) define appropriate behaviors that are expected in specific school settings, (b) teach children these behavior expectations in all school settings, (c) support appropriate behavior through encouragement and direct feedback, and (d) use data to further guide decisions regarding supportive interventions (Lewis & Sugai, 1999). SWPBS emphasizes positive interventions and supportive environmental strategies rather than punishment.

Praise is a positive intervention that is supported by the aims of SWPBS. Praise is genuine recognition for specific desired behavior within a particular context. Behavior-specific praise is a research-based strategy shown to increase participation (Duchaine, Jolivete, & Fredrick, 2011), desired academic and social behavior (Burnett, 2002; Thompson, Marchant, Anderson, Prater, & Gibb, 2012), on-task behavior (Sutherland, Wehby, & Copeland, 2000), and self-regulated learning (Chalk & Bizo, 2004).

Written praise is a cost- and time-effective strategy that offers positive reinforcement when the written praise is issued and additional reinforcement when shared with others or when read long after it was issued (Howell, Caldarella, Korth, & Young, 2014). Although it is unclear whether peer praise (Morrison & Jones, 2007) or teacher praise (Lannie & McCurdy, 2007) is more effective, peer praise has been shown to reorganize peer social networks that involve

bullying or other coercive practices (Skinner Neddenriep, Robinson, Ervin, & Jones, 2002), increase social interaction of withdrawn students (Peterson Nelson, Caldarella, Young, & Webb, 2008), and encourage students to recognize and report helpful, appropriate peer behaviors (Skinner, Cashwell, & Skinner, 2000).

Elwell and Tiberio (1994) hypothesized that peer acceptance may be more important than teacher acceptance. In addition to improving desired behavior, peer praise may (a) increase the amount of praise given, (b) offer a feeling of teamwork, (c) give students a responsibility that they can rise to, (d) be more sustaining than teacher praise, and (e) reduce competition among peers for teacher attention. These potential benefits may be especially applicable in unstructured school environments where greater supervision is needed (e.g., the playground).

Elementary school recess has become strained by increased demands for academic instructional time (Henley, McBride, Milligan, & Nichols, 2007; Powell, Higgins, Aram, & Freed, 2009) and problem behaviors that cannot be controlled by recess aides (Lewis, Colvin, & Sugai, 2000). Limited recess aides, fatigued teachers, and untrained parent volunteers cannot be depended on for adequate supervision, so why not rely on students? Peer praise notes (PPNs) are an SWPBS intervention that can be implemented on the playground to potentially reinforce good behavior and increase supervision while preventing problem behavior. Very little research has been done regarding PPNs on the playground.

Using an existing data set, this study evaluated whether PPNs significantly changed student behavior at recess as reflected in office disciplinary referrals (ODRs). This study also evaluated whether teachers and students perceived PPNs as socially valid. The study evaluated data collected by a local elementary school that issued PPNs on the playground during the 2012–2013 academic year as part of their SWPBS program. The purpose of this study was to evaluate

the PPN intervention's effectiveness, treatment fidelity, and social validity by answering the following research questions:

- Were PPNs effective when issued during recess (as evidenced by visual graphic analysis of changes in ODRs across A-B-A-B phases, percent of data points exceeding baseline medians, and examination of the correlation between PPNs and ODRs)?
- Were PPNs administered by students as designed (treatment fidelity, as evidenced by the distribution of PPNs across grade levels)?
- Were PPNs socially acceptable (social validity, as evidenced by quantitative and qualitative surveys responses from school staff and selected students)?

The implications of this study are that other schools may be able to use PPNs as an evidence-based practice on the playground. This is a low-cost intervention that may also make a difference in overall school climate. PPNs have the potential to increase supervision, provide reinforcement for appropriate behavior, improve peer relationships, and decrease the occurrence of problem behaviors.

Chapter 2: Literature Review

School discipline inconsistencies and problematic behavior are some of the highest-ranking problems according to teachers and parents (Skiba & Sprague, 2008; Utley, Kozleski, Smith, & Draper, 2002). It is crucial that schools have access to the most successful behavioral strategies and interventions possible to maximize positive student behavior outcomes.

Traditional, negative responses to student problem behavior are unsuccessful (Oswald, Safran, & Johanson, 2005; Skiba & Peterson, 2000).

School-wide Positive Behavior Support

SWPBS is a preventative, data-driven framework that provides a systematic approach to preventing the development of new behavioral problems while providing the necessary level of support to manage existing behavioral concerns (Sugai & Horner, 2006). It is a decision-making framework for assisting schools to establish positive and effective school environments that heighten academic achievement and social competence of all students (Sugai & Horner, 2009). SWPBS programs include strategies to (a) teach, reward, and support appropriate behavior; (b) create a positive school climate; (c) prevent and reduce problem behavior; and (d) support academic achievement and prosocial development (Young et al., 2011).

Guiding elements. Because students' needs and educators' resources vary, SWPBS looks different from school to school (Young et al., 2011) but is always guided by the four key elements: data, outcomes, practice, and systems (Sugai & Horner, 2002). Data is used to make decisions and evaluate specific outcomes. For example, administration can use school-wide occurrences of ODRs, tardies, and unexcused absences to evaluate the effectiveness of an intervention and guide future decisions in regards to the intervention. Empirically supported practices are used to ensure specific outcomes are achievable. For example, teachers offer

behavior-specific praise because research supports its effectiveness in yielding desired behavior (Thompson et al., 2012). Schools establish formal systems that efficiently and effectively encourage implementation of and identify needs and progress associated with these practices (Sugai & Horner, 2006). For example, teachers and future teachers are trained to implement evidence-based practices. These four key elements are based on five principles:

- Use data to solve problems.
- Create an environment that prevents problem behavior.
- Instruct and support prosocial skills and behaviors.
- Implement evidence-based behavioral practices thoroughly and responsibly.
- Monitor student performance and progress continuously. (Sugai & Horner, 2002)

SWPBS framework. It is important to meet the specific academic, behavioral, and emotional needs of all students. SWPBS conceptualizes three intervention systems as tiers to develop interventions based on students' behavioral and emotional needs (Sandomierski, Kincaid, & Algozzine, 2007; Sugai & Horner, 2002). The first tier provides key school-wide universal positive behavior supports for all students. The second tier offers more focused, targeted interventions for students at risk, who require more support in terms of environmental modifications, social skills instruction, and practice opportunities. For students who are at high risk who do not respond to universal supports or more focused, targeted supports, the third tier provides specialized, individual supports (Lewis & Sugai, 1999).

Using the SWPBS framework, problem behaviors are viewed as an interaction between a student and his or her environment rather than simply an internal problem with the student (Young et al, 2011). To prevent problems, the students' environment should be altered and clear behavioral expectations should be taught on a consistent basis. SWPBS acknowledges the

complex motives for problem behavior and helps school staff to define, teach, and support appropriate behavior to create an atmosphere where appropriate behavior can thrive (Lewis & Sugai, 1999).

SWPBS helps school staff (a) define appropriate behavior that is expected in specific school settings, (b) teach children these behavior expectations in all school settings, (c) support appropriate behavior through encouragement and direct feedback, and (d) use data to further guide decisions regarding supportive interventions (Lewis & Sugai, 1999). Positive interventions and strategies in environmental support systems are emphasized rather than punitive punishment. Clear expectations and recognition of positive behavior help improve school climate, while punitive measures and reactive interventions decrease students' feelings of safety (Kitsantas, Ware, & Martinez-Arias, 2004).

School-wide expectations. The underlying theme to implementing SWPBS is teaching behavioral expectations in the same manner as any core curriculum subject is taught. Sugai and Horner (2002) explain the implementation process of a behavioral expectation curriculum. A team of approximately ten people (administrators, educators, and paraprofessionals) represents the school at a two- or three-day training provided by skilled trainers. Rather than telling students what not to do, the school focuses on three to five preferred behaviors that suit the needs of the school. For example, (a) be responsible, (b) be respectful, and (c) be safe. After the team members choose three to five behavioral expectations, they take this information back to the school to ensure at least 80% of the staff buy into the chosen expectations. Consistency from class to class and adult to adult is very important for successful implementation of SWPBS.

The team then creates a matrix of behavioral expectations in all the areas of the school (see Figure 1). This matrix will have approximately three positively stated examples for each

	Be Respectful	Be Responsible	Be safe
Assembly	-Sit on pockets -Pay attention -Show appreciation appropriately	-Raise my hand to gain speaker's attention	-Hands, feet, and objects to self -Stay in assigned area
Bathroom	-Respect privacy of others -Quiet voice	-Keep it clean -Go, wash, leave -Report problems to a teacher	-One squirt of soap, two towels
Classroom	-Raise hand to gain teacher attention -Communicate appropriately	-Follow directions the first time -Stay on task and finish work	-Hands, feet, and objects to self -Stay with class
Computer Lab	-Follow directions the first time -Keep hands on own laptop	-Stay only in the programs I am assigned to be in -Use the program only for what it is assigned for	-Line up to get laptop in an orderly fashion -Hold laptop with both hands when walking
Halls	-Quiet voice -Keep hall clean	-Keep walking -Stay with the class	-Walk in straight lines on the right
Library	-Use a quiet voice -Go to the end of the line when lining up	-Handle books with care	-Hands, feet, and objects to self
Lunchroom	-Use polite voice -Help others if necessary -Leave in a quiet voice	-Clean up my area (table and floor) before I leave	-Sit, eat, clean up
Office	-Wait my turn -Quiet voice	-Stand or sit quietly -Sit in chair properly	-Hands, feet, and objects to self
Playground	-Follow directions the first time -Be kind and friendly	-Return equipment -Follow game rules -Use equipment appropriately	-Keep myself and others safe while having fun

Figure 1. Sample of school-wide expectations (location specific).

area (Lynass, Tsai, Richman, & Cheney, 2012). For example, students are *respectful* on the playground when they follow directions the first time they are given and are kind and friendly. Students show their *responsibility* on the playground when they return equipment and follow game rules. Students are *safe* on the playground when they keep themselves and others safe while having fun and use equipment appropriately. Many schools choose to use several days at the beginning of each year to take the students around the school to stations where the skills are taught in specific settings (Sugai & Horner, 2002).

Another responsibility for the school's SWPBS team is to offer consistency in what is not accepted and what is praiseworthy (Sugai & Horner, 2002). If it is not acceptable to use foul language in class, then it should also not be acceptable in the cafeteria. Teachers must decide what behaviors constitute an ODR (Horner, Sugai, Todd, & Lewis-Palmer, 2005). If a student is praised for staying on task in math, they should also be praised for staying on task in reading.

Reinforcing appropriate behavior. Another task for the SWPBS team is to determine how they intend to reinforce students who are demonstrating the behavior expectations. Some schools use a systemized program for reinforcing appropriate behavior known as a “gotcha program.” Gotchas are written notes distributed with behavior-specific praise to students who exhibit appropriate behaviors in common areas. Gotchas are a form of praise notes and vary from school to school, but are unique because they express the desired behavior and location in writing, and (b) are shared with more than just the student (teachers, parents, office, etc.). Schools can use no carbon required (NCR) paper to specify the student, behavior being reinforced, and any other information the school agrees on (see Figure 2). One copy goes home with the student to be shared with parents, one goes to the classroom teacher, and one goes to the office administration.

Teachers and office administration can use their copies of students' Gotchas to keep data on who is being recognized for good behavior, how often, and the location. They can also use their copies of students' gotchas to offer further positive reinforcement through weekly or monthly prize drawings, public recognition during class or school announcements, or posting them on a bulletin board for others to see (OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports, 2013). Alber and Heward (1996) found that the use of gotchas created much more dialogue between the students, teachers, and the parents about on-task behavior in specific settings and served as a positive reinforcement to students for following rules and expectations.

CHALLAND
LANCERS

Gotcha!!

Date: _____
 Student: _____
 Teacher: _____

() Be Respectful
 () Be Responsible
 () Be There-Be Ready

Location and Comment: _____

Signature: _____

Steps:

- Name behavior and expectation
- Fill out slip
- Give positive verbal/social acknowledgement
- Give slip to student
- Remind student to take to Enrichment

Figure 2. Sample gotcha note.

Benefits of a positive school climate. As stated earlier, a healthy school climate is a major focus of SWPBS. Research shows that a positive climate has many benefits for students' behavior and their overall well-being. Students are less likely to be referred to the office, miss

school, and be suspended when their school climate is positive and healthy (Haynes, Emmons, & Ben-Avie, 1997). When students feel trusted by adults they are more likely to confide in their teachers (Brookmeyer, Fanti, & Henrich, 2006). The positive school climate that SWPBS strives to create can be linked to less delinquency, aggression, antisocial behavior, and drug use as well as fewer problems with low self-esteem and depression (Brand, Felner, Seitsinger, & Burns, 2008). Students are more likely to have higher aspirations and self-confidence and to be more ambitious and cooperative in a healthy school climate (Plucker, 1998). Students show significant optimism and ability to cope with challenging situations in a positive and supportive school setting (Ruus et al., 2007).

Drawbacks of a reactive approach. The traditional response to undesired behavior at school tends to be reactive, rather than preventative. Discipline is harsh and unfeeling and does not consider the broader context and function of the behavior. It serves as a quick fix that does not teach positive replacement behaviors (Walker, Ramsey, & Gresham, 2004). A punitive approach gives temporary relief to the authority, but does not focus on truly fixing mistakes, learning effective new behaviors, or making restitution. Fear of punishments discourages students and teachers from preventing potential problems.

The negative school climate that a reactive approach creates causes students to respond with anger and fear, which leads to negative school outcomes. Students tend to avoid interaction with the punisher (Young et al., 2011) and don't feel trusted by them (Kitsantas et al., 2004). This can lead to an attitude of "What can I do without being caught?" (Young et al., 2011). Some students respond to coercive correction with vandalism, aggression, and antisocial behavior (Walker et al., 2004). Students who are sent out into the hallway, sent to the office, or suspended often miss classroom instruction, and therefore their academic outcomes suffer.

Although surveillance cameras and metal detectors are meant to ensure safety, for some students they are a constant reminder that they are potentially in an unsafe environment.

Office disciplinary referrals. An ODR is a record of an event where a) a student engaged in a behavior that violated a rule/social norm in the school, b) the problem behavior was observed by a member of the school staff, and c) the event resulted in a consequence delivered by an administrative staff who produced a permanent (written) product defining the whole event (Sprague, Sugai, Horner, & Walker, 1999). An example of a form used to document information when referring a student to the office for disciplinary purposes is provided in Appendix A.

ODRs are an indicator often used to track problem behaviors and the surrounding conditions when behavioral concerns occur (Flannery, Fenning, Kato, & Bohanon, 2013). They are also used for screening (Tobin, Lewis-Palmer, & Sugai, 2002), making decisions (Sugai, Sprague, Horner, & Walker, 2000), measuring outcomes (Nelson, Benner, Reid, Epstein, & Currin, 2002), choosing the appropriate intervention levels (Sprague et al., 1999), and consulting with educators (Putnam, Luiselli, Handler, & Jefferson, 2003). ODRs are useful in identifying patterns in problem behavior (Sprague et al., 1999), and evaluating a school's overall functionality and climate, making them a valuable resource for monitoring and evaluating the effects of a SWPBS program. They are the most common form of data used to make decisions and evaluate program effectiveness (Lohrmann-O'Rourke et al., 2000). ODRs can also be triangulated with other student data, such as attendance and direct observations, for these purposes (Irvin, Tobin, Sprague, Sugai, & Vincent, 2004).

ODRs are the most frequently used form of school discipline, as well as the most documented (Lassen, Steele, & Sailor, 2006). There are many reasons why schools use ODRs instead of other outcome measures. ODRs are inexpensive (Tobin et al., 2002), easily obtained

(Lewis & Sugai, 1999), and record real-time interactions (Tobin et al., 2002). Because continual monitoring and feedback are important for evaluating program success, the majority of schools already gather ODRs, resulting in less intrusion and work for the school staff when using them to make important decisions. School faculty document the student(s) involved in the problem behavior, where and when the problem behavior occurred, what behavior occurred, the possible motivation, and the disciplinary action taken. This recorded information serves as immediate feedback to the student involved and allows administration to better understand the details of what occurred, even if they did not witness it firsthand.

Although ODRs are convenient and practical to use for decision-making and program evaluation, they have drawbacks as well. While the majority of schools gather ODRs as part of their data collection, they have not been as often assessed or researched (Wright & Dusek, 1998), causing their reliability and validity to be questioned. It is also important to recognize that ODRs pass through many hands and information has the opportunity to be changed, misinterpreted, or lost. The reliability and validity of ODRs are also affected by multiple sources of input. Because many people work together on entering ODR information into a database, if there is lack of communication, an ODR can be entered multiple times or not at all. ODRs account for problem behavior that is externalized and easily observed (e.g., physical aggression, profanity), but do not account for problem behavior that is internalized (e.g., depression, anxiety; Young et al., 2011). All of these issues make it difficult to obtain accurate information regarding ODRs. In order to prevent inconsistencies with the ODRs, it is important to standardize their purpose, use, administration, and documentation procedures. Despite their weaknesses, the strengths of ODRs make them a common source of outcome data used to evaluate SWPBS programs.

School-wide Information System. Many schools choose to use the School-wide Information System (SWIS), a web-based program, which graphs ODR data. This program creates instant graphs for behavioral incidents (swis.org). The graphing program provides many other options. SWIS is an example of a system that can organize ODRs. Trained school staff members use this secure web-based data system to identify the student's name, problem behavior, the motive for the problem behavior, the staff that referred the student, the date, time, location, administrative decision, and the student's reaction. SWIS then can organize this information to efficiently display ODRs by month, time of day, infraction, location, student, grade, or teacher (Young et al., 2011). Some behavior issues that SWIS accounts for are abusive language/profanity, defiance, disrespect, noncompliance, physical aggression, and physical contact. It is important that an ODR system have clear-cut definitions of the behaviors that constitute a referral to the office. Teachers need to be aware of differences in biases and tolerance levels for problem behavior to avoid reacting to a problem that does not exist or ignoring a serious problem.

Recess

When considering the many different settings in elementary school, recess playgrounds are noted as particularly susceptible to problem behavior (Colvin & Lowe, 1986; Cuccaro & Geitner, 2007; Passmore, Gallagher, & Guyer, 1989; see Appendix B). During recess, students congregate together in a setting with little routine and minimal supervision, a combination that often contributes to problem behavior and issues of safety (Hendricks, 1993; Leff, Power, Costigan, & Manz, 2003; Walker et al., 2004).

Lack of safety. In order to have a positive experience at recess, students need to feel physically and emotionally safe. Students' safety and well-being must be ensured. An average of

177,000 children are physically injured each year on playgrounds in America (Heck, Collins, & Peterson, 2001). Studies show that high structures, slides, monkey bars, and swings are specifically hazardous when it comes to physical injury among students (Heck et al., 2001; Loder, 2008; Mott et al., 1997; Olsen, Hudson, & Thompson, 2010). The playground environment is also more prone to emotionally unsafe behavior such as aggressive behavior (Pellegrini & Bohn, 2005), teasing, harassment, defiance, isolation, social withdrawal, bullying, tattletelling, and social cliques (Marchant, Lindberg, Fisher, & Solano, 2012).

Inadequate supervision. Lack of adequate supervision on the recess playground is a catalyst for behavior issues. Active supervision can more effectively ensure students' physical and emotional security on the playground (Colvin & Lowe, 1986). In order to adequately supervise an elementary school playground, the following must be safeguarded: (a) children use the playground equipment in a safe and orderly manner (Heck et al., 2001), (b) threatening events or settings are identified and responded to quickly (Loder, 2008), and (c) students play appropriately (Colvin & Lowe, 1986; Olsen et al., 2010). These important components of active supervision are often not taken seriously. Many playground supervisors lack adequate training in proactively and systematically addressing problem behavior on the playground (Lewis et al., 2000).

Recently, there is a trend for playground supervision to be conducted by the classroom teachers (Novak & Strohmer, 1998; Ramstetter, Murray, & Garner, 2010), parent volunteers (O'Brien, 2003), and classified staff (Nelson, Smith, & Colvin, 1995). Teachers are commonly assigned "recess duty" as a part of their contract hours (Marchant, et al. 2012), but the unstructured nature of recess can allow worn-out teachers to feel less accountable and to perceive it as a break from their daily routine (Novak & Shrohmer, 1998). Recess supervision has also

shifted from certified staff to classified staff and parent volunteers with less formal training in instruction and managing student behavior (Nelson et al., 1995). Tired teachers, inadequately trained volunteers, and inexperienced classified staff weaken the quality of recess supervision (Lewis et al., 2000).

Lack of structure. All too often, there are little or no such structured supports in place at recess. Unstructured playtime is prone to create an atmosphere where physical aggression, disrespect, fighting, harassment, inappropriate language, and bullying are more likely to occur. Functions of these negative behaviors include (a) escaping responsibilities or situations, (b) gaining attention, (c) obtaining items or gaining access to a person or activity, and (d) sensing physical pleasure (Cooper, Heron, & Heward, 2007). Effective recess offers structured opportunities for healthily escaping from the regular classroom routines; gaining positive attention from adults and peers; obtaining respect, compliments, and praise; accessing friends and playground equipment; and enjoying the sensation of exercise.

Recess rules should focus on what students should do in order to be proactive and socially appropriate instead of what they shouldn't do to avoid getting in trouble (Young et al., 2011). Clearly defined expectations for the playground setting can be posted as a visual reminder (Franzen & Kamps, 2008).

Playworks is an example of organization that encourages structured activities while at the same time allowing students to enjoy the freedom of recess. Playworks sends full-time recess coaches to schools to teach and supervise structured activities (<http://www.playworks.org/playbook>) in designated areas and offer leadership opportunities to students. Playworks coaches train fourth- and fifth-grade students to be junior coaches who lead

their peers in games, use tools and strategies for conflict resolution (such as rock-paper-scissors), and offer praise through positive messages and high-fives (Bleeker et al., 2012).

Recess is undervalued. Recess has been reduced or eliminated in up to 40% of school districts across the country (Zygmunt-Fillwalk & Bilello, 2005). The reduction or elimination of recess is often linked to increased concerns about safety (Heck et al., 2001), problem behavior at recess (Cuccaro & Geitner, 2007), lack of supervision (Colvin & Lowe, 1986; Nelson et al., 1995), subpar playground equipment (Adams, 2011), increased pressure to maximize instruction time (Colvin & Lowe, 1986; O'Brien 2003), and the new emphasis on high-stakes testing (Adams, 2011). The trend of scaling back recess, or cutting it all together, started in the late '80s (Colvin & Lowe, 1986) and was accelerated under No Child Left Behind (Adams, 2011). Some schools do not have recess because administrators believe that recess time should be replaced with instruction time (Henley et al., 2007; Powell et al., 2009).

Recess is indispensable. Although recess is prone to problems, the benefits outweigh the potential problems, making it a vital part of the school day. While many principals and teachers say that a bad recess has a negative effect on the entire school day, new research shows that a good recess benefits students and school faculty for the entire school day (Bleeker et al., 2012). Recess provides elementary-school children with time to socialize, exercise, take a break from the classroom routines, and practice good behavior in an informal setting. An awareness of potential benefits of recess can help create a positive and safe environment for children to learn and grow.

Studies show that there is a strong connection between recess and improvements in cognition (Ginsburg, 2007; Sibley & Etnier, 2003; Tomporowski, Davis, Miller, & Naglieri, 2008). When elementary school children are allotted time for recess, they tend to be more

actively engaged in the classroom, have better executive functioning when completing a variety of school-related tasks, and have improved response accuracy (Hillman, Erickson, & Kramer, 2008). Students tend to be more focused and attentive in the classroom as a result of recess time (Catering & Polak 1999; Evenson, Ballard, Lee, & Ammerman, 2009; Pellegrini, Huberty, & Jones, 1995; Taras, 2005).

Because recess has been linked to improvements in overall cognition, it can also be linked to improvements in academic success (Ginsburg, 2007; Pellegrini et al., 1995). A recent, national poll shows that most elementary school principals strongly believe recess has a positive impact on academic achievement (Bleeker et al., 2012). Studies have shown no evidence that time spent in recess is negatively associated with cognitive skills, attitudes, academic behaviors or academic achievement (Ahamed et al., 2007; Trudeau & Shephard, 2010; Taras, 2005).

Recess offers students an irreplaceable opportunity to work, play, and form positive peer relationships (Pellegrini & Bohn, 2005), which are necessary to their long-term success (Bleeker et al., 2012). Students experiment with social strategies such as sharing and conflict resolution (Zygmunt-Fillwalk & Bilello, 2005; Molloy, 1989). This time positively influences social skills development and emotional maturity (Pellegrini et al., 1995; Bleeker et al., 2012). When schools invest in effective, quality recess, it has the potential to increase in prosocial behaviors (Ginsburg, 2007), and effective problem-solving strategies (Molloy, 1989).

Recess can prevent behavioral problems in classroom and non-classroom settings (Rasberry et al., 2011). Allowing short breaks for physical activity significantly impacts on-task behavior in elementary school classrooms (Mahar, 2011). When expectations on the playground are clear, aggression and bullying decrease (Leff, Costigan & Power, 2004). Investing in recess

and organized play impacts good behavior in all settings throughout the day (Bleeker et al., 2012).

SWPBS interventions to improve recess. Instead of viewing recess as a liability, a drain on teaching time, and a behavioral headache, some view the potential opportunity recess has to improve the school climate, contribute to children's healthy development, and boost academic performance. However, in order to achieve this, school-wide recess interventions need to be implemented and studied to ensure quality recess for all students. Table 1 summarizes the effectiveness of SWPBS interventions implemented in various school playgrounds. As evidenced in Table 1, pre-correction (Colvin, Sugai, Good, & Lee, 1997; Lewis et al., 2000), teaching clear recess playground expectations (Colvin et al., 1997; Franzen & Kamps, 2008; Lewis et al., 2000; Lewis, Sugai, & Colvin, 1998; Low, Frey, & Brockman, 2010), changing environmental factors (Fagerstrom & Mahoney, 2006), increasing active playground supervision (Colvin et al., 1997; Franzen & Kamps, 2008; Lewis et al., 2000), and reinforcing appropriate student behavior (Chelvakumar et al., 2010), particularly with group contingencies (Franzen & Kamps, 2008; Lewis, et al., 1998), can result in improved playground behavior. Praise has also been found to be a particularly promising way of reinforcing student behavior.

Praise

Definitions of praise vary widely. Canter and Canter (1992) define praise as positive and sincere recognition for behavior that meets expectations. Harrop and Swinson (2000) note that praise is an expression of approval with description. Thompson et al. (2012) outline praise as a vocal expression of approval that explains a specific desired social or academic behavior that the student demonstrated, and it includes a praise word (e.g., admire, awesome, excellent). In this

thesis, praise is defined as genuine recognition for specific desired behavior within a particular context that implies a rationale for that behavior.

Effective praise. The proper use of praise is essential to the successful implementation of SWPBS (Caldarella, Christensen, Young, & Densley, 2011). Consistency and immediacy are key components of effective praise. The more consistent and immediate the praise is, the more its effects are enhanced (Thompson et al., 2012). It is important that reinforcement is targeted at the behavior, not the student (Chalk & Bizo, 2004). Instead of putting value on the overall student by using personal value statements like “you are great,” value should be directed at a behavior by using statements like “Wow! It is great how quickly you lined up after recess!” It is also effective to state or imply the reason why a behavior is desired (Thompson et al., 2012). For instance, “Since you were kind and friendly at recess, other students will want to be kind and friendly to you.” Behavior-specific, contingent praise consistently results in improved social behavior (Sutherland et al., 2000). It is a research-based strategy for reinforcing good behavior in specific contexts (Lampi, Fenty, & Beaunae, 2005; Mesa, Lewis-Palmer, & Rienke, 2005).

Table 1

Summary of Studies Addressing Staff and Student Behavior on the Recess Playground

Authors	Year	Independent Variable	Dependent Variables	Outcome
Colvin, Sugai, Good, & Lee	1997	Staff members trained to use pre-correction strategies and to increase their use of active supervision strategies across the three problem transition settings: (a) entering the school building, (b) moving to the cafeteria for lunch, and (c) exiting the school building.	Supervisor behavior. Student behavior.	Increases in pre-correction and active supervision behaviors by staff. Substantial reductions in student problem behavior.
Lewis, Sugai, & Colvin	1998	Intervention consisted of two components: (a) teaching rules, routines, and desired behavior, and (b) a group contingency.	Frequency counts of problem behavior were collected during a 10-minute period within each recess session.	Intervention reduced the frequency of problem behavior across three recess periods.
Lewis, Colvin, & Sugai	2000	Intervention package comprised of two major components: (a) pre-corrections and (b) active supervision.	Student problem behaviors. Recess aide active and non-active supervision.	During structured activities, relatively low rates of problem behavior were observed. During unstructured activities, data indicate an overall decrease in rate of problem behavior following intervention. No clear effects on aide behavior as a function of the intervention.
Fagerstrom & Mahoney	2006	Strategic recess scheduling: recess breaks were given more often but for less time; recess breaks were scheduled before and after academic lessons throughout the whole day.	Observed on-task behavior.	Recess breaks scheduled directly before or after academic lessons positively affect student on-task behaviors.

Authors	Year	Independent Variable	Dependent Variables	Outcome
Franzen & Kamps	2008	Multi-component SWPBS recess intervention (a) teaching rules, routines, and desired behavior (give me five), (b) increasing active supervision including re-teaching zones, (c) using individual and group contingencies.	(a) Disruptive behavior, (b) inappropriate use of equipment, (c) physical aggression, (d) inappropriate physical contact, and (e) inappropriate verbal behaviors. Target teacher behaviors included (a) active teacher supervision and (b) teacher reprimands.	Increased frequency of teacher active supervision. Decreased total frequency of student problem behaviors.
Chelvakumar, Sheehan, Hill, Lowe, Mandich, & Schwebel	2010	Stamp-in-Safety program consisted of encouraging adults to reward children with an attractive ink-stamp on an adhesive nametag when children demonstrate safe behaviors.	Teacher verbalizations (warnings, explanations, redirects), teacher location (core, outskirt, fringe of playground), child risk-taking behaviors, number of injuries.	Stamp-in-Safety program appears to be modestly effective. Teachers were less likely (a) to use warnings, (b) teacher group stayed closer to the action at the playground core, (c) one of the child risky behaviors (on the climbing equipment) trended towards statistically significant change ($p=0.058$), and (d) there was an absolute but not statistically significant reduction in child risk taking for the intervention group.
Low, Frey, & Brockman	2010	Bullying prevention program that explicitly addresses relational forms of aggression such as malicious gossip and social exclusion.	Observed (a) malicious gossip on the playground, (b) beliefs about aggressive norms, and (c) friends' social support.	Reduced relational aggression.
Bleeker et al.	2012	Intervention package included (a) structured recess activities, (b) class game time, (c) coaches, (d) junior coach program, (e) after school program.	Teacher perceptions of (a) school climate, (b) conflict resolution and aggression, (c) learning and academic performance, (d) recess experience, (e) youth development, and (f) student behavior.	Intervention resulted in (a) a positive impact on safety and inclusive behavior, (b) less bullying and exclusionary behavior, (c) fewer difficulties and time transitioning from recess to classroom, and (d) better behavior and attention, better student behavior.

Impact of praise on behavior. Research has shown that praise has a dramatic impact on academic and social behavior (Burnett, 2002). Praise inspires correct behavior and strengthens its occurrence (Thompson et al., 2012). Several studies show that levels of on-task behavior increase when teachers increase general rates of praise delivery (see Chalk & Bizo, 2004; Reinke, Lewis-Palmer, & Martin, 2007; Sutherland, Wehby, & Copeland, 2000). Praising students for engaging in appropriate nonacademic behaviors such as working well in a group, picking up trash, and appropriately transitioning from recess to the classroom, may decrease the number of school-wide ODRs (Wilmott, 2012). Behavior-specific praise increases a learner's knowledge of the effort required for success, thus increasing self-regulated learning (Chalk & Bizo, 2004).

Social validity of praise. While many studies suggest that praise has a positive impact on behavior (Burnett, 2002; Chalk & Bizo, 2004; Thompson et al., 2012), the effectiveness is not sufficient when actually implementing praise as a SWPBS intervention (Gresham & Lopez, 1996). The intervention and behavior changes must also be perceived as socially valid (Sugai et al., 2000).

Social validity is generally defined as the evaluation of the social significance and acceptability of interventions (Gresham & Lopez, 1996). If a praise system is considered socially significant and acceptable, it is more likely to be implemented. The social significance of goals, social appropriateness of procedures, and social importance of outcomes of the praise system should be evaluated (Wolf, 1978). Social validity can be assessed through surveys, questionnaires, direct observations, and interviews (Finn & Sladeczek, 2001).

Many studies have researched the effectiveness of praise, but few have examined its social validity (Howell et al., 2014). In one study, surveys were given to secondary school

students to assess perceptions of teacher praise (Elwell & Tiberio, 1994). Results revealed that students tended to like teacher praise and preferred private praise over public praise. Student perceptions of praise were further studied with Australian elementary school students (Burnett, 2001; Burnett & Mandel, 2010). Results of this study suggested that that students positively viewed praise and that younger students preferred ability-focused feedback, while older students preferred effort-focused feedback. In a third study, survey responses from secondary students regarding a PPN intervention showed that PPNs were positively perceived and that students and teachers would like to write PPNs again in future classes (Peterson Nelson Caldarella, Young, & Webb, 2008). Because the level of social validity becomes clearer when perceptions of multiple groups are studied (Finn & Sladeczek, 2001), student, parent, and teacher perceptions of teacher praise notes were collected by Howell et al. (2014) in an elementary school that was implementing a school-wide teacher praise note system. Survey results indicated that participants had positive perceptions of praise notes and that there was a great level of buy-in for the intervention, with parents and students being particularly supportive of it.

Criticisms of praise. Although research shows that praise has a positive impact on behavior and that it is socially valid, there are some who criticize giving praise. Most criticisms of praise, however, are targeted at ineffective praise. Kohn (1999) explained that if a student expects to receive praise, but then does not receive it, he or she may feel punished. He claimed that issuing praise potentially increases competition, decreases intrinsic motivation and creativity, and causes individuals to be less likely to engage in behavior that has not previously been praised. According to Kohn, ineffective praise encourages doing the right things for the wrong reasons. However, these perspectives are not well supported by empirical research, but rather are based primarily on theoretical implications that students are more successful when more value is placed on the students' autonomy than on teacher control. Katz (1993) cautions

that frequent praise may lose its usefulness and that adults may find it difficult to maintain consistent, genuine praise. Bennett (1988) critiqued praise that focuses on ability and personal qualities instead of praise that is behavior specific. Zentall and Morris (2010) argued that praising uncontrollable factors, such as ability or intelligence, can inhibit intrinsic motivation. Larrivee (2002) argued that praise creates unnecessary reliance on teachers and manipulates students. Deci and Ryan (2010) whose studies on praise are empirically based, stated that excessive praise and praise that is always expected is a problem, particularly when it is not subsequently given. This ineffective praise can make students more passive about learning because they can become dependent on praise from their teachers in order to perform tasks. However, research reveals that motivation is not decreased by praise (Cameron & Pierce, 1994). In response to criticisms of praise, Strain and Joseph (2004) have contended that thoughtful praise interventions have positive effects on children when implemented with fidelity.

Verbal praise vs. written praise. Praise can be given in multiple forms. Praise may be verbal and spoken directly to the person or object of admiration, such as telling a student that they did a great job of completing a difficult math problem, or it can be in written form, such as writing “excellent job” on a returned test. A common use of praise in the classroom setting is when a teacher makes a verbal comment to a student or group of students about their behavior, motivation, or quality of work. Teachers are encouraged to give students at least four statements of praise for every negative or corrective statement (Thompson et al., 2012). Verbal praise is easy to give (Nelson, Young, Young, & Cox, 2009).

Written praise is used less frequently than verbal praise in educational settings (Elwell & Tiberio, 1994). However, there are times when written praise is given to students. Often teachers comment on student work by writing on the papers before handing them back to the student. Also, teachers often make praise comments on report cards when students receive

excellent grades. Written praise is a cost- and time-effective strategy that offers positive reinforcement immediately when the praise note is issued and additional reinforcement when it is shared with others or read long after the time it was issued (Howell, et al., 2014).

Currently few studies on praise notes exist, but the outcomes of these studies are promising. Studies have correlated written praise with decreases in undesired student behavior, specifically with social withdrawal (Peterson Nelson et al., 2008), ODRs (Nelson, et al., 2009), disruptive behavior (Wheatley et al., 2009), and tardiness (Caldarella et al., 2011). Although such studies have demonstrated positive outcomes, the specific effects of praise notes are challenging to interpret because these studies have included other components such as explicit instruction and extrinsic rewards (Nelson et al., 2009; Wheatley et al., 2009). Current results to these studies conclude that praise note *systems* have been correlated with positive results.

Peer praise. Encouraging students to praise their peers can be a meaningful way for them to lead and serve. The use of peer praise makes logical sense in areas of the school where leadership, initiative, active supervision, and positive peer interactions are needed. Although it is unclear whether peer praise or teacher praise is more effective (Lannie & McCurdy, 2007; Morrison & Jones, 2007), peer praise has been shown to reorganize peer social networks that involve bullying or other coercive practices (Skinner Neddenriep, Robinson, Ervin, & Jones, 2002) and increase social interaction (Peterson Nelson et al., 2008). Elwell and Tiberio (1994) speculated that peer acceptance might be more important to students than teacher acceptance.

Peer praise notes at recess. Considering the established and potential benefits of peer praise and that recess is one of the most problematic settings at school, it is worthwhile to investigate the effects of peer praise on the playground. Peer praise may increase student involvement by supporting student autonomy, giving students a responsibility that they can rise to, better communicating recess rules so students can take ownership of their recess experience,

creating a feeling of teamwork because students will want to give and receive praise, and being more sustaining because it isn't solely coming from an authority figure. It is hypothesized that PPNs issued on the playground during recess can decrease problem behavior and referrals to the office from the playground.

Chapter 3: Method

PPNs were implemented during recess at a Title I elementary school. An ABAB reversal design across 462 students was employed as teachers selected 12-15 students in fourth through sixth grade every three weeks during intervention phases. Eight recess aides and 88 students completed social validity surveys regarding the intervention.

Participants and Setting

School-wide data were analyzed from an existing data set from the 2012–2013 academic year. Participants were four recess aides (all women), one male administrator, and 462 students (252 boys [55%], 210 girls [45%]; 83% received free or reduced-price lunches, 38% English language learners; 32% students with disabilities; 52% Hispanic, 39% Caucasian, 4% Pacific Islander, 2% African American, 1% Native American, 1% multiple ethnic groups). Additional information about the school and students is listed in the table below.

Table 2

School Demographics

Demographic Information	%
Average daily attendance	95
School mobility rate	13
Students absent \geq 10 days	42
Students proficient in language arts	70
Students proficient in mathematics	78
Students proficient in science	51
Students proficient in direct writing	53

The school was a Title I elementary school, located in a suburban neighborhood in the western United States. This school was in its fourth year of implementing a SWPBS model when the playground PPN program was initiated in 2011. In years prior to the 2011–2012 academic year, the school had gone through phases of using teacher-written praise notes as a positive reinforcement for students reaching behavioral expectations. Due to their familiarity with praise notes, documentation of ODRs on the playground as an area of concern (see Appendix B), and the SWPBS team’s particular interest in the impact of PPNs, the school decided to implement PPNs on the playground and continue to collect data on ODRs. This school made the existing data set available to be evaluated, analyzed, and discussed.

Independent Variable

The independent variable was the delivery of PPNs on the playground during lunch recess (see Figure 3). PPNs were printed in triplicate on no-carbon required (NCR) paper, allowing students, their teachers, and the office administration to each have a copy. Teachers were encouraged to acknowledge students who received PPNs when they returned to the classroom from recess. The copies that went to the office were used for data input, and then were entered for school-wide weekly drawings and prizes.


Recess Paw	
Student _____	Teacher: _____
BE RESPONSIBLE <input type="checkbox"/> Return equipment. <input type="checkbox"/> Use equipment appropriately. <input type="checkbox"/> Play by the game rules.	
BE RESPECTFUL <input type="checkbox"/> Follow directions the first time. <input type="checkbox"/> Be kind and friendly.	
BE SAFE <input type="checkbox"/> Keep your self and others safe while having fun.	
Praiser: _____	Date: _____
	
<small>White Copy: Student Yellow Copy: Office Pink Copy: Teacher</small>	

Figure 3. Sample PPN.

The goal was to have 70–90 PPNs issued daily to well-behaved students across all grades. This goal was set assuming that the average peer praiser (a) could issue two PPNs every five minutes, (b) would issue PPNs over the course of 15 minutes (three five-minute increments), and (c) there would be 12–15 designated peer praisers.

Dependent Variable and Other Measures

There were three measures collected by the school: ODRs, PPN treatment fidelity, and social validity surveys. The dependent variable for this study was ODRs that occurred on the playground during recess. When students were sent to the office, the administrator typically engaged in a teaching interaction, rather than administered a punishment. The ODRs were entered and tracked by the school in a district-maintained database called SWIS (swis.org).

To measure treatment fidelity, the school also entered and tracked the delivery of PPNs in a school data management system called Filemaker. The school administrator responsible for the PPN intervention wanted to obtain student and staff satisfaction (social validity) surveys to make needed adjustments for the following school year. Social validity surveys were developed by the school administrator (see Appendices A–C) with assistance from a university consultant and were adapted from a study done at the same school in 2010–2011 (Howell et al., 2014).

School Procedures

Each day, 12–15 peer praisers (depending on the three-week phase) were given the opportunity of seeking out peers whose behavior exemplified SWPBS goals at lunch recess, which lasted 15 minutes. Peer praisers were trained to (a) verbally state the desired behavior they observed, (b) legibly document information on a PPN (name of student, name of teacher, behavior for which the student was praised, date, peer praiser's name (see Figure 3), and (c) issue them the PPN.

Selection process of peer praisers. Two fourth-grade teachers (one male, one female), two fifth-grade teachers (one male, one female), one sixth-grade teacher (female), and one upper-grade resource teacher (female) participated in selecting students from their classes to go through the training program to become “peer praisers” who issue PPNs for a three-week period (nicknamed “Pumas” at this particular school). In selecting students to be peer praisers each three-week period, teachers were given the criteria of choosing two to three students from their grade level who were high achieving or well-behaved and two to three students from their grade level who were low achieving or exhibited challenging behavior. There were 75 students in fourth, fifth, and sixth grades, including students with special needs, who participated in the training program and issued PPNs on the playground for at least one three-week period during the 2012–2013 academic year. There were six students selected to help school administrators with training and to be substitutes when needed. They helped with training and substituting after consistently giving specific and meaningful praise on the playground during their initial three-week period.

Training of peer praisers and recess aides. Every three weeks, a new group of peer praisers was invited to attend a one-hour training. Parents of these selected students were also invited, but not required to attend the meeting. However, the school required parent consent for their child to participate in the training and issuing of PPNs on the playground. A consent form and information sheet was sent home with potential peer praisers (see Appendix D). Due to the high percentage of Spanish-speaking students, this document was translated into Spanish by two administrators (two females, both Hispanic).

Roll was taken at each training meeting. If someone who was selected to be a peer praiser and had parent consent was not able to make it to the meeting, they met with selected students who had previously been peer praisers to be trained.

The school administrator created and facilitated an interactive PowerPoint presentation that guided each training session. Students who had previously served as peer praisers occasionally were asked to help teach new peer praisers at the training sessions. The interactive training reviewed the following: playground rules, the role and responsibilities of a peer praiser, how to issue a PPN, a schedule of what grades should be targeted for praise at what time, and possible mystery motivators (see Appendix E). Examples and non-examples of PPNs were shown and discussed; peer praisers role-played giving PPNs to each other and parents; and frequently asked questions were discussed (see Appendix E). This training meeting was always translated into Spanish. Pizza was provided for all those who were present at each training meeting.

Since the recess aides were the adults responsible for the students at lunch recess time when PPNs were being issued, they were required to attend two information meetings during the year, one in November and one in March. Recess aides were shown the daily routine of peer praisers and the peer praiser training PowerPoint presentation with a focus on the playground rules. Specific benefits of issuing PPNs were discussed, including increased supervision and fewer problem behaviors.

PPN distribution goals. Peer praisers were encouraged to find and recognize six students each lunch recess who were meeting behavioral expectations. To ensure that students in all grades had an equal opportunity to receive PPNs, the peer praisers were encouraged to equally distribute PPNs across grade levels. The school administrator created a visual schedule of PPN distribution goals (see Figure 4) as a guideline for peer praisers. This schedule was based on when various grades were at lunch recess. Peer praisers in fifth and sixth grades were trained to target students in grades ranging from kindergarten to third grades. Peer praisers in fourth grade were trained to target students in grades ranging from fourth to sixth grades. Each

specific grade level was to be targeted for five minutes. The recess bell rang every five minutes to prompt a new grade level to line up to go back to class. This also conveniently signaled peer praisers to shift their focus to a different age group of students. If peer praisers were successful in issuing six praise notes, they were rewarded with a piece of candy from the administrator's office where the carbon copies of the PPNs were returned. Even though peer praisers were encouraged to equally distribute six PPNs to their three specific grade levels, they were ultimately encouraged to genuinely give the maximum amount of PPNs possible to students that demonstrated exemplary behavior on the playground.

Peer Praisers	Time	Grade Level Targeted for PPNs	Goal of PPNs to issue
5th and 6th grade	12:20–12:25	2nd	2
	12:25–12:30	K/1st	2
	12:30–12:35	3rd	2
	12:35–12:50	Personal lunch	
4th Grade	12:30–12:45	Personal lunch	
	12:45–12:50	5th	2
	12:50–12:55	6th	2
	12:55–1:00	4th	2

Figure 4: Schedule of grades targeted/goals for PPN distribution among grade levels.

PPN process. Two fifth- or sixth-grade peer praisers were selected each day to transfer a bag of clipboards from the administrator's office to the equipment cart located on the playground. All designated fifth- and sixth-grade peer praisers then picked up a clipboard with an attached pen and blank PPNs. Peer praisers were encouraged to give out as many PPNs as they could while still being genuine and writing legibly. Administrators secured a schedule and goals (created to ensure equal distribution among grades) to the clipboard as a guideline for how the peer praisers should spend their time (see Figure 4). The recess bell rang every five minutes, which helped peer praisers stick to the target schedule. Peer praisers were encouraged to spread

out from one another and to keep moving around to all areas of the playground. They gave the completed white copy of the PPN to the student being praised and told the student what rule they were keeping. They then clipped the yellow and pink copies to the side on the clipboard. When peer praisers in fifth and sixth grades were finished issuing PPNs for the day, they put their clipboards back in the bag that was hanging on the equipment rack so that it would be ready for the peer praisers in fourth grade, who were just finishing lunch. They were allowed to enter the administrator's office and obtain a piece of candy for their helpful efforts during recess.

Because of the school schedule in place, peer praisers in fourth grade had the privilege of skipping to the front of the lunch line so that they could ensure that they would be finished eating by the time their duties as peer praisers began. Peer praisers in fourth grade followed the same routine as fifth- and sixth-grade peer praisers during recess. At the end of recess, however, two fourth-grade students transferred the bag back to the administrator's office.

They then removed all of the pink and yellow copies of issued PPNs from the clipboards and sorted them. Pink PPNs were separated into piles based on the teacher of the student that received the PPN. These were paper clipped together and delivered to each teacher by an office administrator. Yellow PPNs were rubber-banded together and placed on the administrator's desk. Once all the information on a yellow PPN was entered into the system, it was marked with a check in the upper right hand corner and placed into a jar for a weekly prize drawing.

Data collection. There were four administrators (two men, two women; 75% Hispanic, 25% White) who collected ODR data and entered it into SWIS. There were four local university students (two men, two women; 100% White) who each came to the school on a regular basis to collect PPN data from the playground and enter it into FileMaker. PPN data entry was generally up to date by Fridays right after lunch so that appropriate candidates for the mystery motivator could be entered into the weekly drawing that took place on Friday afternoons.

Mystery motivator. Each Friday, usually in the last hour of the school day, the administrator drew a random name from the PPN jar. The administrator announced this student's name, their teacher, and the appropriate playground behavior that was observed over the intercom. The student was also invited to come down and claim the mystery motivator of the week. Mystery motivators included a pizza party, five-dollar bill, fieldtrip, gift certificate to a local restaurant, lunch with the principal, and Wii game time. New names were added to the jar each week.

Social validity survey procedures. The school administrator collected social validity surveys that were completed by 15 random students in first through sixth grades (every other name on class attendance rolls until 15 were selected for grade level). Surveys were conducted in the second week of May. The school administrator made electronic copies of all of the survey responses. Names of students and their teachers were removed when hard copies were made.

Design

An ABAB reversal design (Cooper et al., 2007) was used to evaluate the effects of the PPNs on ODRs. The school collected ODR baseline data from August 21 to October 24. In the last week of October, when the new academic quarter began, the PPN intervention began and continued until February 1. The school withdrew the PPN intervention for the month of February to determine the effects of no intervention on ODRs. Beginning in March, the PPN intervention was put back in place for the remainder of the year.

Analysis

ODRs per day by week from the 2012–2013 academic year were graphed. Visual comparisons of baseline to treatment phases were conducted. Researchers have claimed that visual analysis should be the primary method for examining and interpreting the effects of an intervention because it (a) visually reveals significant intervention effects, (b) produces low error

rates, (c) is a conservative method of determining treatment effect, and (d) allows for ongoing investigation of raw data to guide decisions (Baer, 1977).

Although visual analysis can be an appropriate way to analyze the effect of an intervention, it is advantageous to also calculate treatment effect statistics in conjunction with visual analysis (Rakap, Snyder, & Pasia, 2014). Treatment effect statistics (a) are objective, (b) offer more accurate measurement in the absence of a stable baseline or variability in intervention conditions, and (c) allow researchers to compare intervention effect across studies with similar outcome measures (Kazdin, 1982; Parker, Vannest, & Davis, 2011). The many different approaches that have been developed to calculate these statistics can be classified as parametric approaches or nonparametric approaches (Shadish, Rindskopf, & Hedges, 2008). For this study, parametric and nonparametric approaches were used in addition to visual analysis.

As a nonparametric approach, the percent exceeding the median (PEM) was calculated for each intervention phase. While there are several nonparametric approaches proposed in the literature (Parker, Vannest, Davis, & Sauber, 2011), the PEM was selected for this study because it (a) assumes the median best summarizes data points in the baseline phase, (b) does not exclude any data points, and (c) still reflects effect size in the presence of floor or ceiling data points where other nonparametrics do not (Rakap, Snyder, & Pasia, 2014). Ma (2006) reported that PEM had a higher correlation with original authors' judgments of treatment effect than did percent of non-overlapping data (PND), concluding that PEM was superior to PND. Similarly, Wolery, Busick, Reichow, and Barton (2010) showed that PEM had higher agreement with the judgments of visual analysts when compared with PND and pairwise data overlap squared (PDO2) for graphs on which all judges determined a change had occurred between baseline and intervention phases.

As a parametric approach, the correlation between PPN and ODR data was analyzed quantitatively using SPSS (Version 20). The Pearson correlation coefficient is an index of the strength of linear association between two variables, such as PPNs and ODRs. It does not imply causality, but can show whether rates of PPNs and decreases in ODRS are strongly correlated.

Treatment fidelity was measured by examining PPN distribution across grade levels over the entire school year. The total PPNs issued to each grade level was projected on a pie chart. In addition, the actual number of PPNs each week was compared to the goal set at training.

Social validity survey data were summarized by calculating the percentage of respondents who agreed or strongly agreed (4 or 5 on the 5-point Likert scale; happy face, or really happy face on the face scale) with each question of the survey. The open-ended comments were analyzed qualitatively, similar to the methods of Corbin and Strauss (2007), Miles and Huberman (1994), and Howell et al. (2014). First, the student and the recess aide statements were analyzed independently by two researchers and then compared. Statements were organized and coded to reveal patterns associated with satisfaction or dissatisfaction regarding the PPNs. Next, the two researchers collaborated to make a list of common themes based on both of their findings, grouping the comments according to the themes and calculating the percentage of participants whose comments fit the themes (Howell et al., 2014).

Chapter 4: Results

Overall changes in office disciplinary referrals (ODRs) in each phase of the design, an effect size that reflects a highly effective treatment, and a moderately strong and statistically significant negative correlation suggest that PPNs decreased ODRs. Results from social validity surveys indicated that participants had positive perceptions of PPNs improving student behavior and peer relations, communicating playground rules, extending supervision responsibilities, and offering structured activity to peer praisers. Students' perceptions were overall more positive than the recess aides' perceptions. Limitations, future research, and implications are addressed.

Effect on Playground ODRs

The first research question was “Were PPNs effective when issued during recess (as evidenced by visual graphic analysis of changes in ODRs across ABAB phases and examination of the correlation between PPNs and ODRs)?” To answer this question, this section will describe the visual graphic analysis, percent exceeding the median, and correlations between ODRs and PPNs. The total number of ODRs issued each week was divided by the number of school days in that week to get a daily average for that week. These ODR data were charted for each week. The following analyses of these data are provided below.

Baseline (A1). The baseline phase lasted eight weeks. ODRs per day averaged by week are presented in Figure 5. Baseline data for playground ODRs per day ranged from 0 to 1.2, mean = .74, median = .7.

PPN intervention (B1). The first PPN intervention phase lasted 13 weeks. During the first phase of PPN intervention, daily ODRs averaged across weeks ranged from 0 to 2.5, mean = 0.55, median = 0.4. The mean playground ODRs per day decreased by 25.7% and the median playground ODRs per day decreased by 42.9% when compared to baseline.

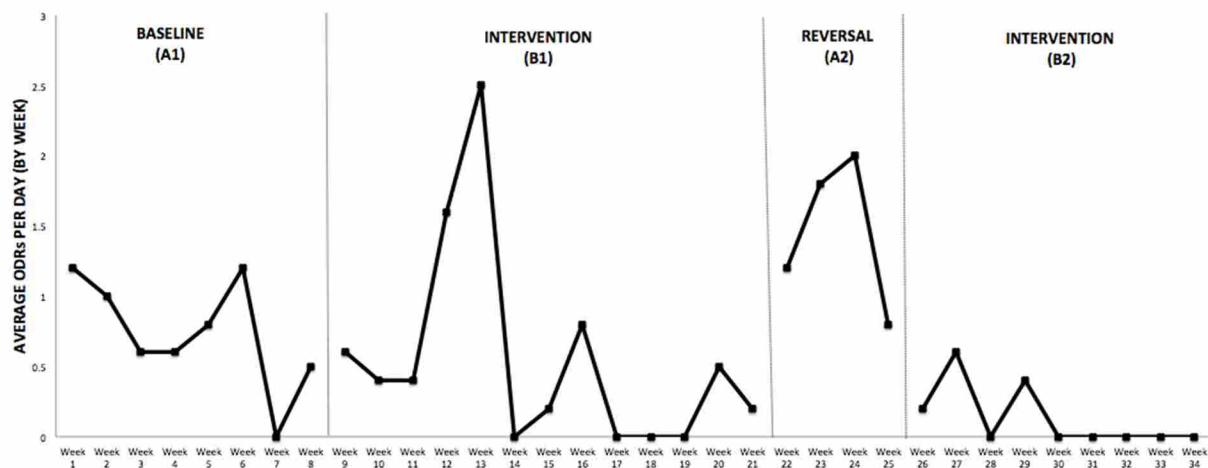


Figure 5: Playground ODRs per day (by week).

Reversal (A2). The PPN intervention was removed during the second baseline (i.e., reversal) phase for four weeks. During this reversal phase, mean = 1.45, median = 1.5. There was a 62.1% increase in mean playground ODRs per day and a 73.4% increase in the median playground ODRs per day when compared with the data in the first PPN intervention phase. Overall, these data from the second baseline (reversal) were higher than the data from the first baseline condition.

Reintroduction of PPN intervention (B2). The reintroduction of PPNs resulted in a 91% decrease in mean ODRs when compared to the reversal phase. During this phase, daily ODRs across weeks ranged from 0 to 0.6, mean = 0.13, median = 0.

Baseline phases vs. intervention phases (A1 + A2 vs. B1 + B2). When both baseline phases were considered together, the playground ODRs per day by week ranged from 0 to 2.0, mean = 0.97, median = 0.9. When both PPN intervention phases were considered, the playground ODRs per day ranged from 0 to 2.5, mean = 0.35, median = 0.2. In comparing both intervention phases to both baseline phases, there was a 63.8% reduction in mean playground ODRs per day and an 88.8% reduction in median playground ODRs per day.

In the first intervention phase, 10 out of 13 playground ODR data points (76.9%) were below the 0.7 median found during the first baseline phase (see Figure 6). This is considered to be in the “moderately effective” range (Ma, 2006). In the second intervention phase, 9 out of 9 playground data points (100%) were below the 1.5 median found in the reversal phase (see Figure 6). This is considered to be in the “effective” range.

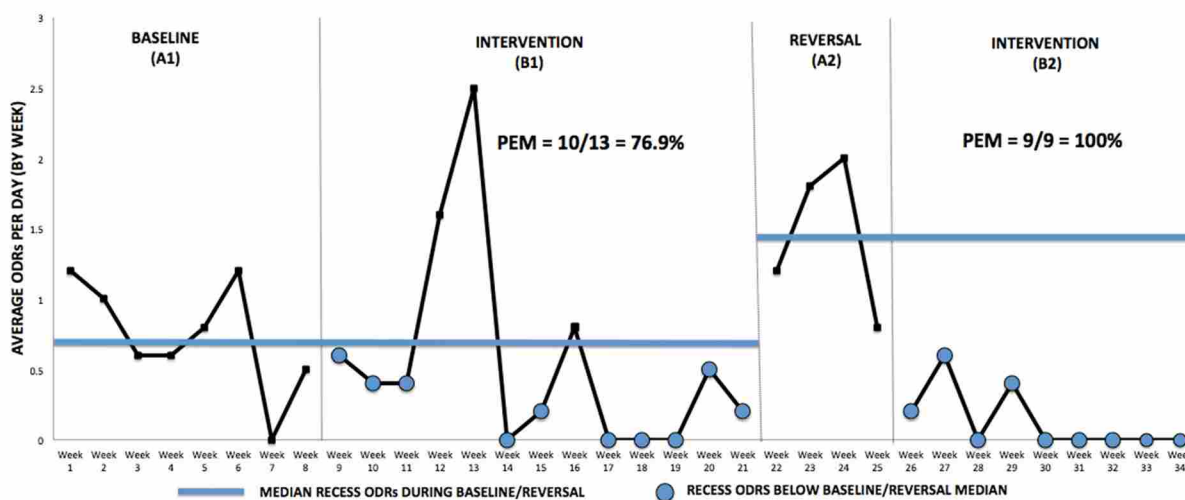


Figure 6: Intervention data points exceeding baseline/reversal medians.

A Pearson correlation coefficient was computed to assess the relationship between school-wide PPNs and ODRs after the PPN intervention was implemented ($n = 26$ weeks). There was a moderately strong and statistically significant negative correlation ($r = -.56$, $p = .003$) between the total number of PPNs and the total number ODRs written at recess. As PPNs on the playground increased, ODR rates on the playground tended to decrease.

Treatment Fidelity

The second research question addressed whether the distribution of PPNs across grade levels were administered by students as designed (see Figure 4). To answer this question, the

total number of PPNs distributed was compared to the expected number distributed. A pie chart was also created to determine whether PPNs were equally distributed across grade levels.

Expected vs. actual number of PPNs distributed. To calculate the expected number of PPNs, the following formula was used: 6 PPNs x peer praisers x school days. The actual number of PPNs distributed each week was divided by the expected number, which yielded a percentage reflecting treatment fidelity. These percentages were calculated for each week during both treatment phases (Weeks 10–21, 26–34) and are shown in the below. On average, peer praisers distributed 34.5% of the PPNs they were asked to distribute.

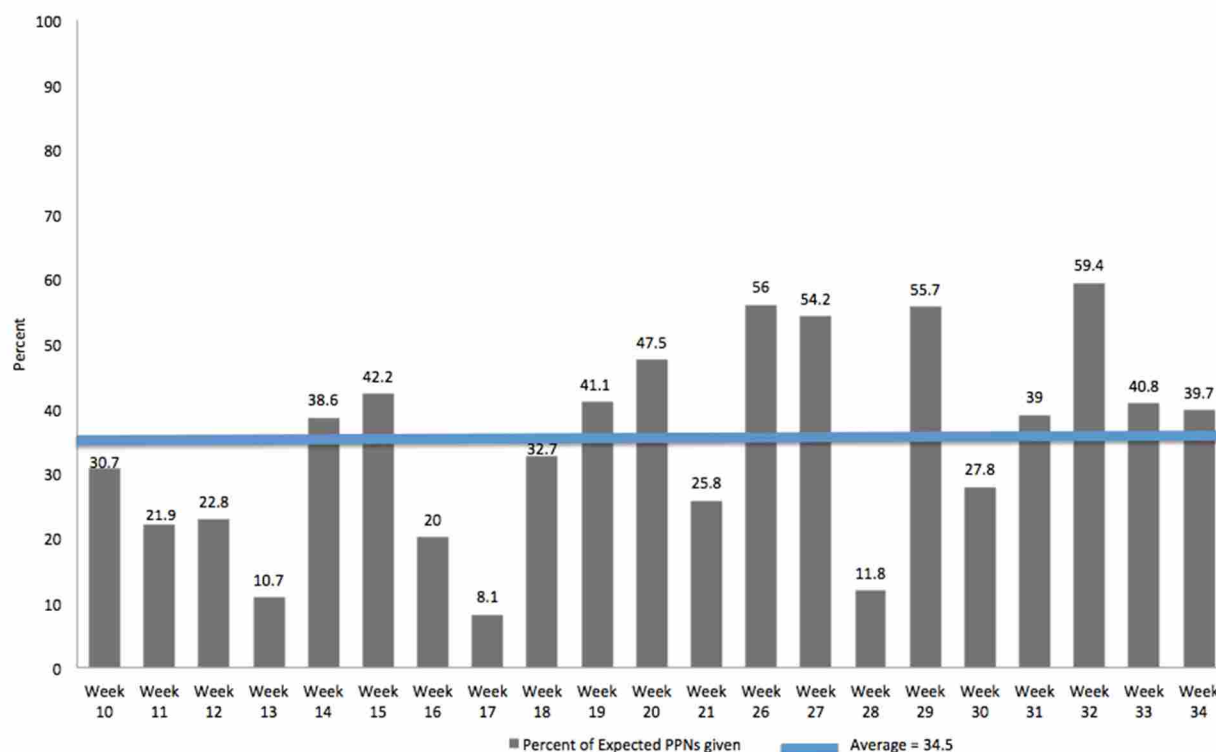


Figure 7. Percent of expected PPNs given each week during treatment phases.

PPN distribution across grade levels. Peer praisers were trained to equally distribute the total amount of PPNs across six grade levels (16.67% of total PPNs to each grade level). The actual percentages of the total PPNs across grade levels are charted in Figure 8. The expected

distribution of PPNs across grade levels was determined by dividing 100% (total PPNs) equally by six grade levels (see Figure 4), yielding 16.67%. To assess whether PPNs were equally distributed, the difference between the actual and expected distributions across grade levels were calculated. Notable differences were in kindergarten and first grade (+5.07%), third grade (-5.9%), fourth grade (+12.17), and sixth grade (-9.12).

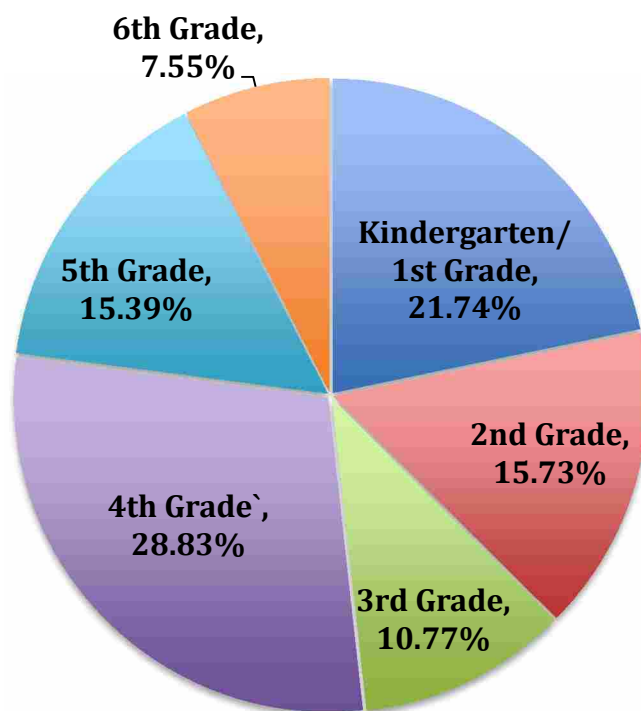


Figure 8: Distribution of total PPNs across grade levels.

Social Validity of Participants

The third research question was “Were PPNs socially acceptable (as evidenced by a majority of positive quantitative and qualitative survey responses from school staff and selected students)?” To answer this question, this section will describe quantitative and qualitative results for students and recess aides (see Table 3). Results are also organized by the goals, procedures, and outcomes of the PPN intervention (Wolf, 1978).

Table 3

Percentage of Participants Who Agreed on PPN Survey Items

Items	% of Aides (<i>n</i> = 8)	% of Students (<i>n</i> = 88)
<i>Goals</i>		
Students should get Puma Paws for doing good things at recess.	100	93.4
Puma Paws are an important way of communicating playground rules.	71.4	72.8
Playground Puma Paws should continue to be used next year.	37.5	70.2
Playground Puma Paws help students improve their playground behavior.	12.5	74.4
Playground Puma Paws help with behavior in the classroom.	12.5	--
I try to get Playground Puma Paws at recess.	--	73.4
Puma Paws help me talk to my parent(s) about friends.	--	48.5
<i>Procedures</i>		
It is important to know the playground rules.	--	94.9
Playground Puma Paws take too much time.	62.5	--
Students like to give Playground Puma Paws.	25	--
I would like to be a Puma (peer praiser).		54.3*
I got enough Playground Puma Paws this year.	--	38.65
<i>Outcomes</i>		
Students like receiving Playground Puma Paws.	100	84.3
I enjoy bringing Puma Paws home to my parent(s).	--	76.9
Parents like it when their child receives a Playground Puma Paw.	75	--
Peer relations are improved by Playground Puma Paws.	42.9	62.45

*This item was only on the survey given to grades 3–6.

Quantitative perceptions of recess aides. Eight recess aides responded to the quantitative survey items. Five items on the recess aide survey focused on the *goals* of the PPN intervention. The item with the highest percentage of agreement was “students should get Puma Paws (PPNs) for doing good things at recess,” with 100% of the recess aides agreeing. More than 70% of recess aides agreed that PPNs “are an important way of communicating playground rules.” There was 37.5% agreement among recess aides that the PPN intervention “should continue to be used next year.” Of the eight recess aides who responded to the survey, just 12.5% agreed that PPNs help students improve behavior on the playground and in the classroom.

There were two survey items on the recess aide surveys that focused on the PPN *procedures*. Over half of the recess aides (62.5%) felt that this intervention “took too much time.” Only 25% of recess aides agreed that “students like to give Playground Puma Paws.”

Three items focused on the *outcomes* of the praise note intervention. All of the recess aides agreed that “students like receiving Playground Puma Paws.” Agreement on the item “parents like it when their child receives a Playground Puma Paw” was 75%. There were 42.9% of recess aides who agreed, “Peer relations are improved by Playground Puma Paws.”

Quantitative perceptions of students. There were 88 students who completed the social validity survey. There were six items on the student surveys that addressed *goals* of the PPN intervention. On the item “students should get Puma Paws for doing good things at recess,” 93% of students agreed. Student agreement was just under three quarters (74.4%) on the item, “Playground Puma Paws help students improve their playground behavior.” There were 73.4% of students who agreed that they “try to get Playground Puma Paws at recess.” There were 72.8% of the students who agreed that PPNs “are an important way of communicating playground rules.” Over 70% of student respondents felt PPNs “should continue to be used next

year.” Almost half (48.5%) of the students agreed on the item “Puma Paws help me talk to my parent(s) about friends.”

Three of the items on the student survey focused on *procedures*. Agreement on the item “it is important to know the playground rules” was 94.5%. Only 38.65% of students felt they received enough PPNs. Of upper-grade respondents, 62.7% agreed they would like to be a peer praiser.

There were four items on the student survey that focused on *outcomes* of the PPN intervention. The majority (84.3%) of students liked receiving PPNs. Over three quarters (76.9%) of the students reported that they enjoy bringing PPNs home to their parents. Agreement on the item “peer relations are improved by Playground Puma Paws” was 62.45%.

Qualitative perceptions of recess aides. All of the eight recess aides, who responded to the survey, also responded with comments regarding what they liked and disliked about the PPN intervention. The ratio for positive to negative comments from recess aides was 1.2:1. After reviewing the responses, three main themes were found for the positive comments, and three themes were found for the negative comments. Appendix F provides a full list of comments from recess aides.

The most common theme was that PPNs had a positive influence among peers; 44.5% of positive comments included this theme. For example, recess aides wrote that the PPN intervention “builds trusting relationships between peers” and “increases peer pressure in a positive way.”

The second most common theme was that PPNs give students a responsibility; 33.3% of the positive comments included this idea. For example, recess aides wrote that the intervention “extends the expectations to the school body” and “it gives kids some responsibility because they have something they need to get done.” Also, 22.2% of comments suggested that students liked

PPNs. Recess aides stated, “I feel this idea is a good one” and “students are excited to have a turn handing them out.”

As far as what the recess aides disliked about the intervention, 46.2% of comments included the theme “three weeks is too long to be a peer praiser.” Teacher comments included “after the first week of handing them out, the Pumas (peer praisers) were tired of doing this” and “three weeks seems to be a little long.” Almost a third (30.8%) of negative comments mentioned that peer praisers handed out their PPNs quickly so that they could be relieved of their responsibilities: “Kids were trying to hurry and pass out Puma’s so they could be done” and “They do it fast to get it over with.” Almost a quarter (23.1%) of recess aides mentioned that Peer Praisers handed out PPNs to friends or younger kids who haven’t earned them. Comments included “Some students gave to their friends even if they weren’t following playground rules” and “Students give them to their own friends.”

Qualitative perceptions of students. Of the 88 students who responded to the survey, 92% responded to the open-ended questions regarding what they liked, and 37.5% responded regarding what they disliked. The ratio for positive to negative comments was 2.5:1. Appendix G provides a full list of student comments. After reviewing the responses from the students, two main themes were found for the positive comments, and two themes were found for the negative comments. Themes representing less than 20% of student comments were not included due to the low sample size. The most common theme was that PPNs were reinforcing; 42.2% of positive comments included this theme. Students wrote, “You sometimes get prizes” and “Every puma paw I get, my mom owes me one dollar.” The second positive theme, which included 20.5% of comments, was that PPNs promote better behavior. Students noted, “It helps me behave ...” and “They help students be nice and follow the rules.”

Regarding what students disliked about the intervention, 50% of comments included the theme that not everyone receives what they deserve (“They sometimes don’t give them to people who deserve them” and “I dislike when you do something good and they don’t give you a puma paw.”). The second negative theme was that it was hard to get a PPN; 25% of negative student comments included this theme. Students wrote, “It’s hard to get them.”

Chapter 5: Discussion

The purpose of this study was to evaluate PPNs administered school-wide as a universal intervention in a Title I elementary school during recess. Previous research has shown a connection between praise notes and positive changes in behavior, such as decreased social withdrawal (Peterson Nelson et al., 2008), tardiness (Caldarella et al., 2011), and ODRs (Nelson et al., 2009). To date, this is the first study to evaluate a school-wide implementation of a praise note system in which students issued PPNs on the recess playground. As decisions regarding school improvement should be based on data (Lewis & Sugai, 1999), the playground setting was chosen because the school's ODR data showed it was the one of the areas in which problem behavior was most likely to occur (see Appendix B). To extend previous findings regarding the relationship between praise and ODR's (Nelson et al., 2009; Wilmott, 2011), this study specifically investigated the effect of PPNs on the occurrence of ODRs during recess. Since simply showing the effectiveness of interventions is often not sufficient for actual implementation (Gresham & Lopez, 1996), this study also examined whether recess aides and students viewed this intervention as socially valid, and whether peer praisers distributed PPNs with fidelity.

Overall, the results of this study suggest that the PPN intervention contributed to a significant reduction in ODRs compared to baseline. The lower percentages of expected PPNs distributed each week suggested that distributing six PPNs per day may have been difficult to implement for the average student to implement. The unequal distribution of PPNs across grade levels also shows that, overall, peer praisers had difficulty praising their peers equally across grade levels. Generally, students viewed the goals, procedures, and outcomes more favorably than the recess aides. The outcomes regarding ODRs, treatment fidelity, and social validity will be further discussed below.

Effect on ODRs

Although variability was high within phases, ODRs generally changed as expected in each phase of the experiment. Because A-B-A-B designs have high internal validity and suggest causation when the target behavior changes as expected in each phase (Gall, Gall & Borg, 1999), it can be concluded that changes in ODRs were the result of the PPN intervention. Although it was not a focus of the study, it is also informative to compare the 2012-2013 ODR data to other years when PPNs were not in effect (see Appendix J). This comparison shows that months when PPNs were administered were generally months with much lower ODRs.

Due to the presence of outlying data points throughout the study that would offset the mean (Ma, 2006), the PEM (rather than other effect size metrics) was calculated to more accurately reflect the overall changes in ODRs. Approximately 80% of the ODR data points during the intervention phase (B1) were below the 0.7 median found during the baseline phase (A1). This is considered to be in the “moderately effective” range (Ma, 2006). As time progressed, the intervention effect size increased. In the intervention phase (B2), 100% of the data points exceeded the 1.5 median found in the reversal phase (A2). This is considered to be in the “effective” range (Ma, 2006).

In this study, the correlation between average PPNs and ODRs per day found in this study ($r = -.56$) was very similar to previous findings (Nelson et al., 2009) indicating a moderately strong relationship between total number of teacher-written praise notes and number of ODRs. The moderately strong and statistically significant negative correlation suggests that increases in praise notes were associated with decreases in ODRs. However, the correlation by itself should be interpreted with caution and not as a causal relation. Breaks in daily routines could have played a role in undesired student behavior. For example, weeks when the most ODRs were given typically revolved around major breaks and holidays. ODRs may have also

decreased as recess aides became more skilled in responding to behaviors that led to ODRs and as students became more aware of the playground rules over time. It is also possible that when peer praisers noticed and praised positive student behavior, recess aides overlooked or become less focused on inappropriate behaviors. Another consideration is that approximately half of the students recruited to be peer praisers were originally identified as at risk for problem behavior. The structured nature of giving PPNs may have caused at-risk students to be too busy to misbehave. Their responsibility probably reminded them of the recess rules. Even if their peer praising period had passed, having served in that role, at-risk students may have been primed to remember and follow the rules.

It should also be noted that peer praisers were inconsistent with the number of PPNs given each week. Peer praisers tended to give relatively more PPNs in the first weeks of their praise period and relatively fewer PPNs at the end of their praise period. Even though the number of PPNs given fluctuated during intervention phases, the inverse pattern between ODRs and PPNs was prevalent. Approximately three quarters of students agreed that they tried to get PPNs at recess, yet the same number of students said they didn't always get them when they deserved them and they were hard to get. The fact that behavior improved despite the fact that PPNs were hard to obtain suggests that students became motivated to display better behavior at recess. Students' behavior may have also improved because they remembered the recess rules when the praisers were present. While the cause of varying ODR rates on the playground cannot be fully determined by this study, the combination of (a) expected overall changes in ODRs in each phase of the A-B-A-B design, (b) an effect size that reflects a moderately effective treatment, and (c) a moderately strong and statistically significant negative correlation suggest that PPNs helped to decrease rates of ODRs at recess.

Treatment Fidelity

As noted earlier, treatment fidelity was measured by comparing the actual number of PPNs distributed to the amount that students were asked to give. Peer praisers gave about one third of the PPNs that they were asked to distribute. Treatment fidelity was also measured by comparing the actual distribution across grade levels to the expected distribution across grade levels. The distribution of PPNs varied across grade levels despite the expectation that they would be evenly distributed.

Expected vs. actual number of PPNs distributed. There are a number of possible explanations for why peer praisers, on average, gave about one third of the PPNs they were asked to give: (a) at-risk students selected to be peer praisers gave minimal PPNs, (b) there was a lack of upper-grade students who desired to be peer praisers, (c) students burned out after two weeks of giving PPNs, (d) it took more time than expected to give PPNs, and (e) some students moved or were absent throughout the study. Each of these will be discussed below.

Although it was not a focus of the study, it is very insightful to note that students who were not at risk gave considerably more PPNs than students who were at risk. Of the total PPNs issued during the study, students identified by teachers as “well behaved” gave an average of 4.3 PPNs per day, while those students identified by teachers as behaviorally at risk gave an average of 0.3 per day. The at-risk students might not have praised others as often, but they may have behaved better while they were peer praisers and even afterwards, since they were reminded of the recess rules and primed to look for positive behaviors in others. It seems that nominating students who were behaviorally at risk to be peer praisers affected treatment fidelity. To improve treatment fidelity in the future, it is recommended that teachers primarily designate students who are not at risk to be peer praisers. However, as noted before, it is possible that nominating students who were at risk for problem behaviors to be peer praisers contributed to the

drop in ODRs. These students were likely responsible for most of the ODRs. Guiding them to accept the rules, be exemplars of the rules, and talk about the rules to their peers during their free time may have resulted in a natural decrease in ODRs. This is an area worthy of future study.

Another reason for low treatment fidelity may have been that some students did not care to be peer praisers. Over half of the respondents on the social validity survey said that they did want to be a peer praiser. However, 15.2% of upper grade students reported they did not want to be peer praisers, and 30.4% of reported being neutral on this item. Students commonly value recess for the benefits that come from social interaction and physical exercise (Tomporowski et al., 2008). Just as worn out teachers often view recess duty as a less important responsibility that takes away from their prep time (Novak & Strohmer, 1998), peer praisers may have perceived that PPN responsibilities took away from their free time to run, play, and be with their friends. Students may have therefore given minimal PPNs so that they could reap the benefits of recess the way they envisioned. Some student responses on the social validity surveys included, “You don't get to spend time with your friends,” and “It wastes my fun time.” Perhaps if peer praisers were asked to give PPNs, but not for their whole recess period or for a period less than three weeks, more students would want a chance to be peer praisers and therefore treatment fidelity would be improved.

Additionally, burnout should be considered. Even if students were initially thrilled to be peer praisers and very motivated to give PPNs in the way that they were asked, they may have become disenchanted with the idea after a week or two. Though the three-week rotation was created to keep peer praising a novelty rather than an obligation that students drop out of, this may not have been the case. The number of PPNs that were distributed each week fluctuated, but shared a common trend of declining as time progressed in each assigned three-week praise period (i.e., more notes were given in week 1 compared to weeks 2 and 3). This supports the

speculation that peer praisers burned out with their PPN responsibilities after a certain period of time. The decrease in PPNs within each praise period also coincides with the recess aides' common perception that "three weeks is too long for students to be peer praisers."

It may also take some peer praisers more time than expected to recognize praiseworthy behavior, approach and interact with a peer, tell them why they are receiving a PPN, evaluate the most appropriate box or boxes to check on the PPN, correctly and legibly write down the needed information, and then distribute their copy of the PPN. Although peer praisers were allowed to skip to the front of the lunch line so that they could be out on the recess playground in time, some peer praisers may have needed longer than 15 minutes to get their lunch, find a place to sit, eat, clean up, and get out to the playground for their PPN responsibilities. One peer praiser responded on the social validity survey, "People who give out Puma Paws (PPNs) don't get enough time at lunch."

Another reason why there may have been fewer PPNs given than expected may have been because some students moved away or were absent. During this study there was a 13% mobility rate and 42% of students were absent more than 10 days. Taking this into consideration, it can be assumed that there were days that there were fewer peer praisers and potential PPN recipients present than expected.

PPN distribution variance across grade levels. There are also reasons why the distribution of PPNs varied across grade levels: (a) peer praisers in fourth grade tended to give PPNs to other fourth graders rather than fifth and sixth graders, (b) peer praisers in fifth and sixth grade tended to give PPNs to younger siblings of their friends, and (c) peer praisers may have used PPNs as a way to gain popularity among peers. Students might have naturally felt more comfortable giving PPNs to people they know. Considering that students tend to interact more with other students in their same grade during recess (Bleeker et al., 2012), they most likely felt

more comfortable giving PPNs to those in their same grade. As one student commented on the social validity form, “They only give them to their friends.” Fourth graders may have been intimidated to give PPNs to fifth and sixth graders, so they primarily gave PPNs to other fourth graders. Similar to Elwell and Tiberio’s (1994) hypothesis that peer acceptance may be more important than teacher acceptance, acceptance from same-aged peers may be more important than acceptance from students who are older or younger and not viewed as peers.

Because of the schedule at this school, peer praisers in fifth and sixth grade did not have the opportunity to praise their same-age peers, so they may have selectively given PPNs to the younger siblings of their same-age peers. Some students commented, “Big kids just give it to the little kids who they know,” and “I don’t like how they only give them to the little kids.”

Students may have also used PPNs for social gain and attention (Cooper et al., 2007). For example, peer praisers may have focused on giving PPNs strategically to certain individuals with hopes of being noticed and gaining popularity and acceptance. This theory coincides with a comment from one recess aide who said, “The students giving out Puma Paws are giving them to their friends’ little brothers and sisters, or a boy/girl they like. One day I saw a kindergartener or 1st grader get four Puma Paws in less than 20 minutes, just because he was the little brother of a boy that all the girls liked.”

Social Validity

Participants’ positive views of the PPNs were confirmed by several quantitative and qualitative responses on the survey. The majority of students indicated that they liked PPNs. This is consistent with other researchers who have found that students generally like praise notes (Elwell & Tiberio, 1994; Howell et al., 2014; Peterson Nelson et al., 2008). In this study, students particularly noted that PPNs were desirable and that they promoted better behavior during recess.

The majority of recess aides also indicated that they liked PPNs. Recess aides particularly liked that PPNs had positive peer influence, gave students a responsibility, and that students liked them. Regarding what recess aides in the current study liked about PPNs, a recess aide responded, “Students are excited to have a turn handing them out.” All recess aides agreed that students liked receiving PPNs. Howell et al. (2014) speculated that adult participants like praise note interventions because students feel more positive in school when they receive such notes. Another reason for recess aides’ approval could be their observations of improved student behavior, as demonstrated by Caldarella et al. (2011) and Peter-Nelson et al. (2008). For example, one recess aide noticed that PPNs “Increase peer pressure in a positive way.”

Although recess aides generally approved of PPNs, there was a notable difference in agreement between students and recess aides on the quantitative items. Recess aides had less agreement on social validity items than students did. For example, only 37.5% of recess aides agreed that PPNs should be implemented in the following year, while 70.2% of students agreed on this same item. Since students were primarily the people involved in implementing the PPN intervention, recess aides may have been less invested. It is speculated that if recess aides were more involved in the PPN intervention that there might be more buy-in from them. Though recess aides seemed aware of the benefits of the intervention, they thought that it took too much time and was not worth the effort. It is also speculated that if there had been a larger sample of recess aides who were consistently on duty throughout this study to complete the social validity survey, the results might show more support for the intervention.

Limitations and Future Research

There were several limitations to this study. First, the PPN intervention was only implemented at one elementary school. In order to generalize these findings, this study would need to be replicated at other schools. Second, only fourth through sixth graders were peer

praisers. Peer praising responsibilities could potentially be extended to younger grades in future studies with appropriate adaptations. For example, younger students, who may take longer to fill out a PPN, could instead give out praise stickers or prewritten PPNs. Such an approach is similar to the playground intervention studied by Chelvakumar et al. (2010), where children were rewarded with an attractive ink-stamp on an adhesive nametag when they demonstrated safe behaviors. The only difference would be that students would be giving the praise rather than adults. It is possible that in future studies, all students could serve as peer praisers. Third, consistency of participants was also a limitation since the total number of students involved fluctuated as some students moved away or were absent. Fourth, due to scheduling issues, only four of the eight recess aides were consistently on the playground every day. The other four recess aides were teachers and administrators who occasionally had recess duty, and may have been less aware of the intervention and its effects.

As noted by Marchant, et al. (2012), it is not uncommon for teachers and administrators to be assigned recess duty. Also, although the recess aides were aware of the PPN intervention, they were not asked to take an active role in it. Because of their lack of active participation, they seemed to be less invested in monitoring the peer praisers in distributing the PPNs. In future PPN studies, recess aides could possibly help with training students, be provided an updated list of peer praisers, and/or be in charge of awarding peer praisers for being on time and meeting appropriate distribution goals.

The PPNs were only implemented on the playground during lunch recess. The use of a multiple baseline design across settings could help further evaluate the effect of PPNs. Future studies could implement the PPN intervention during morning recess and other settings such as in the cafeteria, hallways, or in the bus line—other settings where high levels of student misbehavior often occurs (see Appendix B). PPNs were only used as a universal intervention,

though they could also be used as a secondary or tertiary interventions (Lewis & Sugai, 1999) as done by Peterson Nelson et al. (2008).

According to the results of this study, the goal of asking students to issue six praise notes during a 15-minute recess was unrealistic. Based on the average PPNs given each week, peer praisers in grades four through six can be reasonably expected to issue two praise notes during a fifteen-minute recess. It would be important to distribute these two PPNs during recess at variable intervals. Just as the recess bell conveniently served as a reminder for peer praisers to focus their attention on a different group of students in this study, in future studies, the recess bell could prompt peer praisers to give their PPNs at variable intervals. This could also allow them to enjoy more free time and prevent possible burnout. Considering that peer praisers should not be expected to distribute as many PPNs, and that there was a common theme of students wanting more opportunities to receive PPNs, more students could be selected to be peer praisers at a given time. Peer praiser responsibilities could also be extended to younger grades with adaptations as noted above.

As suggested by Nelson et al. (2009), praisers should be provided with specific feedback as to who is getting notes and who is not, and if goals are reached. There could be individual awards for peer praisers who issued the most praise in a given time. There could also be group contingency rewards for when peer praisers as a whole reach a certain goal, as was the case in Peterson Nelson et al. (2008) study. Peer praisers could also be rewarded for giving PPNs genuinely or giving them to a different person each time.

In terms of assessing student satisfaction, there was only one social validity item that specifically addressed being a peer praiser: "I would like to be a Puma [peer praiser]." Because not all fourth through sixth grade students were peer praisers, it may have been confusing that this statement was applicable to all upper-grade students. In the future it would be informative to

have a separate social validity survey for all peer praisers to respond to. This social validity survey could address issues such as burnout, giving PPNs to friends, how long it took to give a PPN, training preferences, and whether they would like to be a peer praiser again.

Implications

Students deserve to reap all the potential benefits of a positive recess experience, including improved cognition (Ginsburg, 2007; Sibley & Etnier, 2003; Tomporowski et al., 2008), better engagement, improved executive functioning, and increased response accuracy (Hillman et al., 2008). However, the recess playground is particularly susceptible to problem behavior because of the lack of physical and emotional safety, clear expectations, active supervision, and structure (Colvin & Lowe, 1986).

The PPN intervention is in line with best practices to resolve playground behavior problems so that students can have a positive recess experience. PPNs provide clear expectations because the recess expectations are clearly printed on each PPN. These expectations are secured as students are repeatedly reminded of the rules every time they see a peer praiser with a clipboard giving PPNs or another student modeling positive behavior for their peers. Students receive positive reinforcement when they demonstrate they know the rules. Active supervision is increased because there are more people than just the recess aides who are actively watching the students. In their training, these peer praisers are taught to move around to different areas of the recess playground and proactively scan for good behavior. Overall, the recess environment is positively restructured as peer praisers are encouraged to (a) interact with a variety students, (b) follow a structured schedule during recess, and (c) offer them genuine praise.

The findings of this study were significant and important because they addressed concerns specific to the recess playground setting. The use of PPNs appeared to be an effective and acceptable intervention that improved student behavior, increased peer relations, helped

communicate playground rules, extended supervision responsibilities, and offered a structured activity to peer praisers. PPNs are a simple SWPBS intervention that can support students in having a more positive recess experience and therefore support academic success.

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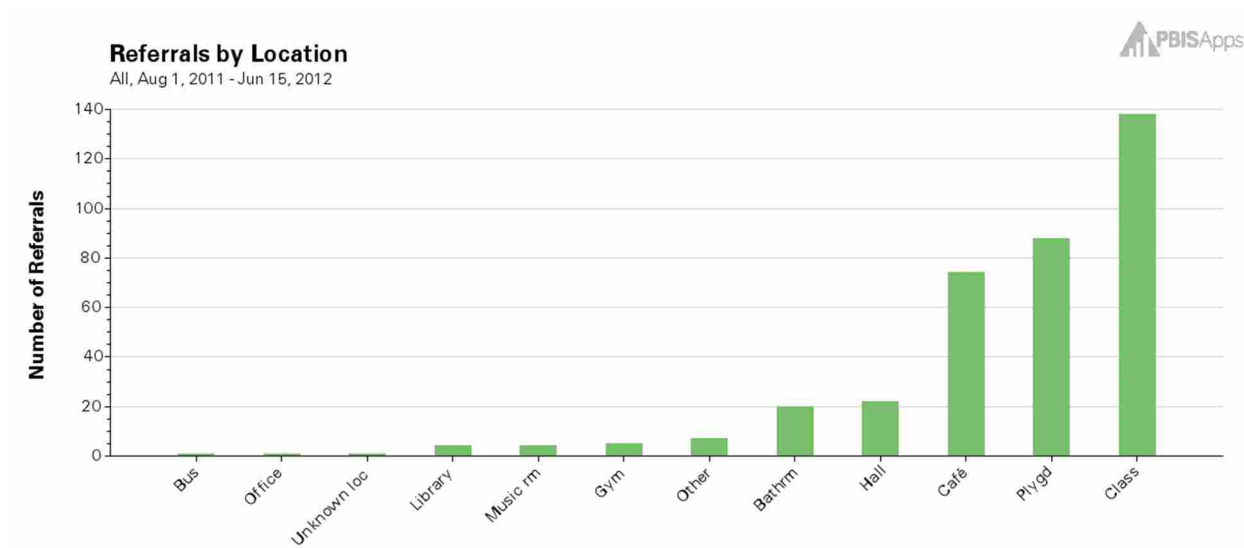
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APPENDIX A: Office Disciplinary Referral Form

Behavior Infraction Card (Form A) Provo Peaks Elementary School	
Student's First and Last Name:	
Date:	Time:
Grade:	
Check the area of infraction	
<input type="checkbox"/> Bathroom	<input type="checkbox"/> Library
<input type="checkbox"/> Bus/Loading Zone	<input type="checkbox"/> Cafeteria
<input type="checkbox"/> Classroom	<input type="checkbox"/> Office
<input type="checkbox"/> Gym	<input type="checkbox"/> Playground
<input type="checkbox"/> Hall	<input type="checkbox"/> Other: _____
Check area of infraction. Write problem behavior(s) in box below (circle the problem behavior(s) on the back).	
<input type="checkbox"/> Be Respectful	
<input type="checkbox"/> Be Responsible	
<input type="checkbox"/> Be Safe	
Possible Motivation:	
Others Involved:	
In-Class Referral? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Person filling out this referral:	
Parent Signature and Date:	
Administrative Decision:	

APPENDIX B: Documentation of High ODRs on Recess Playground



APPENDIX C: Recess Aide Social Validity Survey

Name _____

Title _____

Playground Puma Paws/Praise Notes – Recess Aide Survey

Instructions: **Circle the number showing how much you agree or disagree with each of the following statements, thinking about just the 2012-2013 school year.**

1 Strongly disagree 2 Disagree 3 Neutral Not sure 4 Agree 5 Strongly agree

1. Playground Puma Paws help students improve their playground behavior.	1	2	3	4	5
2. Students like receiving Playground Puma Paws.	1	2	3	4	5
3. Students like to give Playground Puma Paws.	1	2	3	4	5
4. Peer relations are improved by Playground Puma Paws.	1	2	3	4	5
5. Students should be praised for appropriate playground behavior.	1	2	3	4	5
6. Puma Paws are an important way of communicating my playground rules.	1	2	3	4	5
7. Playground Puma Paws help with behavior in the classroom.	1	2	3	4	5
8. Parents like it when their child receives a Playground Puma Paw.	1	2	3	4	5
10. Playground Puma Paws take too much time.	1	2	3	4	5
11. Playground Puma Paws should continue to be used next year.	1	2	3	4	5

Please write additional comments regarding things you particularly *liked* about the Playground Puma Paws below:

Please write additional comments regarding things you particularly *disliked* about the Playground Puma Paws below:

APPENDIX D: Student Social Validity Survey (Grades 3-6)

Student Name _____ Grade _____

Teacher _____

Playground Puma Paws – Student Survey (Grades 3-6 X)

Answer the following by circling the number that tells how you feel about the statement.

1	2	3	4	5
Strongly disagree	Disagree	Neutral Not sure	Agree	Strongly agree

Example:

I am a great kid.	1	2	3	4	5
I like chocolate ice cream.	1	2	3	4	5

1. Playground Puma Paws help me behave better at recess.	1	2	3	4	5
2. I like getting Puma Paws at recess.	1	2	3	4	5
3. Playground Puma Paws help me get along better with my peers.	1	2	3	4	5
4. Students should get Puma Paws for doing good things at recess.	1	2	3	4	5
5. It is important to know the playground rules.	1	2	3	4	5
6. I got enough Playground Puma Paws this year.	1	2	3	4	5
7. Puma Paws help me talk to my parent(s) about friends.	1	2	3	4	5
8. I enjoy bringing Puma Paws home to my parent(s).	1	2	3	4	5
9. I try to get Playground Puma Paws at recess.	1	2	3	4	5
10. Playground Puma Paws help me know the playground rules	1	2	3	4	5
11. I want to have Playground Puma Paws again next year.	1	2	3	4	5
12. I would like to be a Puma (peer praiser).	1	2	3	4	5

What do you *like* about the Playground Puma Paws?What do you *dislike* about the Playground Puma Paws?

APPENDIX E: Student Social Validity Survey (Grades K-2)

Student Name _____ Grade _____

Teacher _____

Playground Puma Paws – Student Survey (K-2 grades)

Answer the following by circling the number that tells how you feel about the question or statement.



Example:

I am a great kid.					
I like chocolate ice cream.					

1. Playground Puma Paws help me behave better at recess.					
2. I like getting Puma Paws at recess.					
3. Playground Puma Paws help me get along better with my peers.					
4. Students should get Puma Paws for doing good things at recess.					
5. It is important to know the playground rules.					
6. I got enough Playground Puma Paws this year.					
7. Puma Paws help me talk to my parent(s) about friends.					
8. I enjoy bringing Puma Paws home to my parent(s).					
9. I try to get Playground Puma Paws at recess.					
10. Playground Puma Paws help me know the playground rules.					
11. I want to have Playground Puma Paws again next year.					

What did you *like* about the Playground Puma Paws?

What did you *dislike* about the Playground Puma Paws?

APPENDIX F: Parent Consent Form for Child to be a Peer Praisers



To the Parents of _____,

Congratulations! Your child has been selected to be a Puma for his/her grade level! Being a Puma is a wonderful opportunity to praise others for safe, responsible, and respectful behaviors by issuing peer praise notes called "Paws." **On _____, from 12:00--1:00** a special training meeting will be held for your child! **Parents are welcome to come show their support.** At this training meeting we will discuss the purpose of Puma Paws and the role of the parents and students. We will model and practice the process of issuing Puma Paws. Please return the bottom of this paper to indicate if you will be attending this important training with your child and if you give your permission for your child to participate. If you have any questions please call _____.

Thank you for your support.

 -Name _____

Please indicate the following with a check, then sign, date, and return to the front office by Friday.

I give permission for my child to be a Puma at Provo Peaks Elementary.

I do not give permission for my child to be a Puma at Provo Peaks Elementary

Parent Signature _____ Date _____

APPENDIX G: Key PowerPoint Slides Discussed at PPN Training

Why are you here today?

Provo Peaks School Wide Expectations Summary

School Wide Expectations for Non-Classroom Settings	Be Respectful	Be Responsible	Be Safe
Halls	<ul style="list-style-type: none"> •Quiet voice •Keep hall clean 	<ul style="list-style-type: none"> •Keep walking and stay with the class 	<ul style="list-style-type: none"> •Walk in straight lines on the right •Eyes and body forward •Hands, feet, and objects to self
Bathroom	<ul style="list-style-type: none"> •Respect the privacy of others •Quiet voice 	<ul style="list-style-type: none"> •Leave it clean •Go/ Flush/ Wash •Report problems to the teacher 	<ul style="list-style-type: none"> •One squirt, two towels
Playground	<ul style="list-style-type: none"> •Follow directions the first time •Be kind and friendly 	<ul style="list-style-type: none"> •Return equipment •Use equipment appropriately •Play by the game rules 	<ul style="list-style-type: none"> •Keep yourself and others safe while having fun
Lunchroom	<ul style="list-style-type: none"> •Use a polite voice •Help others if necessary •Leave quietly 	<ul style="list-style-type: none"> •Clean up my area (table and floor) before I leave 	<ul style="list-style-type: none"> •Sit, eat, clean up
Assembly	<ul style="list-style-type: none"> •Sitting on my pockets •Pay attention •Show appreciation appropriately 	<ul style="list-style-type: none"> •Raise my hand to gain speaker's attention 	<ul style="list-style-type: none"> •Hands, feet, and objects to self •Stay with class
Computer Lab	<ul style="list-style-type: none"> •Follow directions the first time •Keep hands on my own laptop 	<ul style="list-style-type: none"> •Stay only in programs I am assigned to be in •Use programs only for the purpose assigned to me 	<ul style="list-style-type: none"> •Line up to get my laptop in an orderly fashion •Walk holding laptop with both hands
Office	<ul style="list-style-type: none"> •Wait your turn •Use quiet voice 	<ul style="list-style-type: none"> •Stand or sit quietly •Sit on the chair properly 	<ul style="list-style-type: none"> •Hands, feet, and objects to self
Library	<ul style="list-style-type: none"> •Use a quiet voice •Go to the end of the line when lining up 	<ul style="list-style-type: none"> •Handle books with care 	<ul style="list-style-type: none"> •Walk •Push chair in
Possible Classroom Expectations	<ul style="list-style-type: none"> •Raise my hand to gain teacher's attention •Keep appropriate communication. 	<ul style="list-style-type: none"> •Follow directions the first time •Stay on task and finish work 	<ul style="list-style-type: none"> •Hands, feet, and objects to self •Stay in my assigned area




Puma Expectations

Be Responsible
 Be Safe
 Be Respectful

Playground Rules

-  1. Be kind and friendly
-  2. Use equipment appropriately
-  3. Play by the game rules
-  4. Keep yourself and others safe while having fun
-  5. Return equipment








Expectativas de los Pumas

Ser Responsable
 Ser Respetuoso
 Tener Cuidado

Reglas del Area de Juegos

-  1. Ser bondadoso y amable
-  2. Usar el equipo apropiadamente
-  3. Jugar con las reglas del juego
-  4. Cuidarse y cuidar a otros mientras están divirtiendose
-  5. Devolver el equipo




Who is a Playground/Hall Puma?

Leader

Acts responsible and sets an example.

Catcher

Catches people doing good things and tells them.

Helper

Helps others do better.
Train others

For How Long?

How?

1. Pick up bag from Mr. G's office
(hang it on the equipment cart)

2. Ask the person's name

- Write their first and last name
- Use good handwriting
- Ask the to spell it if you don't know

Recess Puma Coin	
Student <u>Pablo Smith</u>	Location: _____
BE RESPONSIBLE	
<input type="checkbox"/> Return equipment.	
<input type="checkbox"/> Use equipment appropriately.	
<input checked="" type="checkbox"/> Play by the game rules.	
BE RESPECTFUL	
<input type="checkbox"/> Follow directions the first time.	
<input type="checkbox"/> Be kind and friendly.	
BE SAFE	
<input type="checkbox"/> Keep your self and others safe. while having fun.	
Praiser: <u>John Perez</u>	Date <u>10-26-12</u>
<small>White Copy: Student Yellow Copy: Office Pink Copy: Teacher</small>	

3. Tell the person what rule they were keeping

4. Put a check mark in the box next to the rule on the praise note

5. Write the date and the name of the person's teacher

6. Give the white copy to the person, put the yellow and pink copies on the back of the clipboard

7. Put your clipboards to Mr. G. 6th back pack too.

What if...

What should I do if a friend or someone asks for a note?

Can I give more than one praise note to someone?

Can I write a praise note to another monitor?

Process

5th & 6th			4th		
TIME	TARGET:	GOAL:	TIME	TARGET:	GOAL:
12:20-12:25	2nd	2 paws	12:30-12:45	Personal Lunch	
12:25-12:30	1st	2 paws	12:45-12:50	5th	2 paws
12:30-12:35	3rd	2 paws	12:50-12:55	6th	2 paws
12:35-12:50	Personal Lunch		12:55-1:00	4th	2 paws


Be on Time!



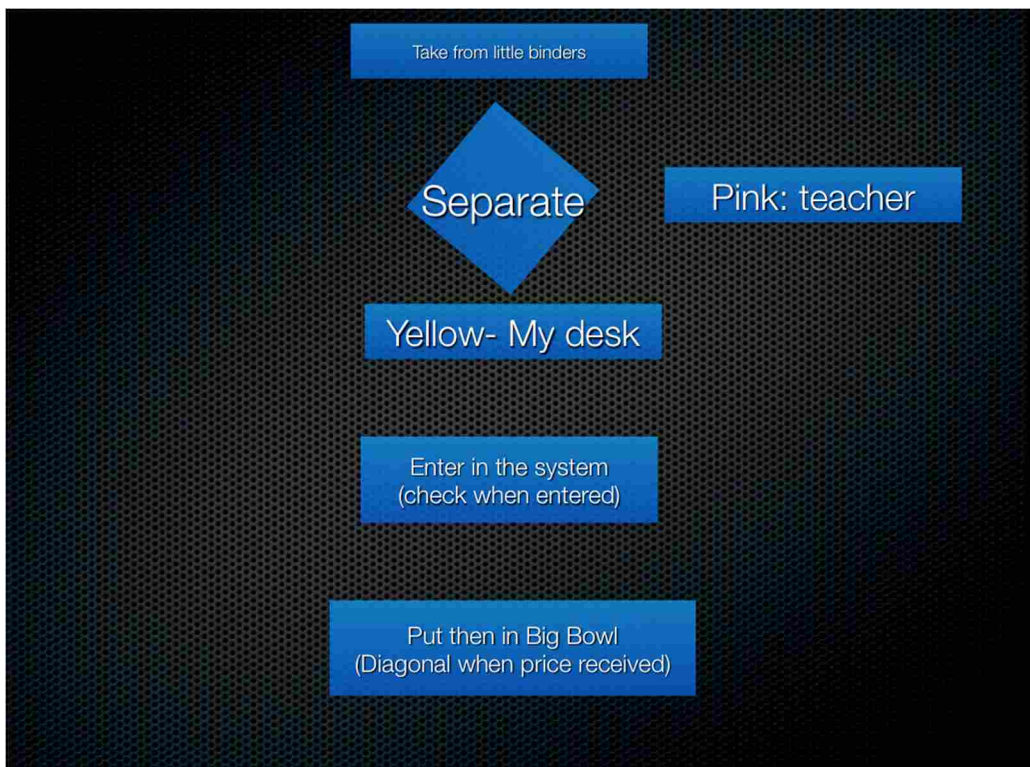
Staff role

Provo Peaks School Wide Expectations Summary

Positive Consequences	Negative Consequences Hierarchy
Teacher Praise	1. Reminder: "[NAME], You need to _____, Now"
In Class Praise Note (from teacher)	2. Classroom Behavior Plan Consequence
	3. Behavior Infraction Card (Guardian Contact Required)
Phone Call to Guardian	4. If major behavior, S.R.C. referral for Social Skills instruction (3 S.R.C. referrals may result in out-of-school suspension)
	* Immediate S.R.C. referral for major problem behaviors



Possible Mystery Motivator Options (Given on Fridays after lunch)
Wii Game-Time
Pizza Party
\$5 Bill
Field Trip
Gift Certificate
Lunch with the Principal
Prize drawing



APPENDIX H: Recess Aides' Social Validity Comments by Theme

Question 13: What did you like about PPNs?***People like PPNs.***

I feel the idea is a good one!

I have noticed some students are excited to have a turn handing them out.

Students have a responsibility.

Having students pass out puma's so we could watch the playground more and focus on the children.

Extends the expectations to the school body.

It gives kids some responsibility. They have something they need to get done.

Positive peer influence.

Increases peer pressure in a positive way.

Builds trusting relationships between peers.

I liked the first while when the puma students were excited about the positive influence they could have.

Question 14: What did you dislike about PPNs?***Peer Praisers hand out PPNs to friends or younger kids who haven't earned a PPN.***

What I see a lot is that the students giving out Puma Paws are giving them to their friend's little brother and sister or a boy they like or younger siblings. Not for the good job they are doing. One day this winter I seen a K or 1st grader get 4 puma paws in less than 20 minutes. Just because the boy was a little brother of a boy all the girls liked.

Some students gave to their friends- even if they weren't following playground rules.

Students tend to give them to their own friends.

Peer Praisers feel important because of their responsibilities.

It increases self-confidence for the students giving the puma paws

They love the responsibility and pizza at first.

3 weeks is too long to be a peer praiser.

I often hear some of them complaining about how they don't want to do it and do it fast to get it over with.

Kids were trying to hurry and pass out Puma's so they could be done. They got tired of doing it.

3 weeks seems to be a little long.

After the first week of handing them out the pumas were tired of doing this. They come out and hurriedly handout their allotment and keep asking to go inside.

Maybe they could work one week, off one week, work the next... and so on.

I think the time limit to do it was too long.. ex 3 weeks. The kids hated it and would come to lunch and try to get away without doing pumas.

I would also go outside to get kids who hadn't eaten yet because they were still doing Pumas, they were taking some kids too long. I think some kids were just quickly trying to get done so they could eat and play.

Some students lose interest and don't want to do the program after a while.

APPENDIX I: Students' Social Validity Comments by Theme

Question 13: What did you like about PPNs?***Being Rewarded/Recognized***

You can get the chance to be rewarded for your behavior

They give the puma paws to students that are behaving.

What I like about Puma Paws is that I know when I do good when they give me one.

Give you pizza parties.

It tells exactly what I did.

I like that they give out puma paws to the good students.

People get recognized for doing good things.

They give you pumas. And kids get happy for getting them.

I like getting puma paws for being good that's how you know you are doing right things.

That I like about the playground puma paws is that we can get puma paws when we do good.

You get to go out earlier and don't have to learn.

I can get the money my mom gives me the sheet.

You get puma paws

I get prize.

I can get money

I get rewards

You get little prizes for doing good things with Puma Paws and you know you are following the playground rules.

You get prizes

Because you get a lot of puma paws

Prizes

To get prizes

Get treats

I will get 25 cents if I get a puma paw I get 25 cents.

My mom surprises when I get one.

When Mr. Judd pulls out my name I can go to the office to get a prize.

Every Puma Paws I get my mom owes me 1 dollar

My mom gives me 20 bucks if I get one.

That it is funny that when I get a puma I can go home.

You sometimes get prizes.

They tell you that you were doing good.

They help me learn more about the playground

Gets me stuff

I like the prize

The vice principal calls out kids from class to give them out at lunch recess.

Its fun trying to earn Puma Paws. And plus its also good because we can get prizes.

Promotes Better Behavior

I like it because I like seeing how kids get excited and they behave better.

They make you do good things

It is almost always the kids giving the puma paws out at recess.

They help you with your behavior

They show that kids are doing good things

It lets you to behave.

It helps me behave in class

Helps me with friends

Being good

I know that I am a good person.

What I like about Puma Paws is they help me behave.

The good thing that I did

The puma paws also show you that you have good behavior.

They think that you're good.

They help you behave

They make me happy and nicer

They help students be nice and follow the rules

Being a Peer Praiser/Puma

I like being a puma and training the pumas.

To be a praiser

Leadership- I like giving them to younger kids

I like when the playground puma paws give you puma paws. I was a playground puma paws last year.

They give you puma paws.

That they don't give them to people who ask. Take it seriously.

The older kids can bring them to us.

Make them feel good

happy

happy

happy

Because it makes me feel good

It makes me feel happy when I get one for being good.

They make students feel good.

That makes me feel like I'm doing good.

I do not know. I like them because they make me feel good

They make me feel good

I like puma paws because I like to play tag and it's good.

They are cool/like them

They are cool.

I really like Puma Paws

I like bringing them home to my parents :)

They are helpful.

They have good designs!

everything about them is perfect. they're the bomb!

Everything.

They're cool.

They're cool.

Indifferent/don't care

I don't really pay attention to those things.

nothing

nothing here

nothing

I don't know get one

Question 14: What did you dislike about PPNs?

Nothing

Nothing

Nothing

Nothing.

Nothing

I like everything

I dislike nothing about Puma Paws

Nothing.

Nothing

nothing

nothing

I learn that Puma Paws are great

nothing

nothing

nothing

nothing

Nothing at all!!!

Nothing at all!!!

nothing

nothing

nothing

nothing

Nothing.

Nothing.

Nothing

Nothing

Nothing

Nothing, I like everything about it.

Nothing

I don't dislike Puma Paws

Nothing

Nothing

Nothing

Not everyone gets them

Sometimes I don't get them.

I dislike that they don't give Puma Paws to everyone.

I don't like how they only give them to the little kids.

People only give them to their friends.

They sometimes don't give them to people who deserve them.

I dislike when you do something good and they don't give you a puma paw. Even though I did good things to other people.

Some people give puma paws only to their friends.

That kids ask for pumas and they give it to them without doing nothing or making effort to get the paws.

I dislike when people give kids puma paws for no reason.

That sometimes they don't give it to kids...

How people give them to people when they didn't do anything good. It's a waste of time.

You don't get prizes sometimes.

My friend Brianne is bossy and tell the puma people to give her puma paws.

Big kids just give it to the little kids who they know.

I don't like the big kids.

It's hard to get Puma Paws

it is hard to earn them

it is hard to get them

I don't get enough

It is hard.

When I do not get one.

They don't give that much.

They're hard to get them.

They are hard to get

Sacrifice time

That you don't get to spend time with your friends.

People that give out Puma Paws don't get enough time at lunch.

Wasting fun time.

No guarantee of prizes/makes them sad

sad

It is only a chance to get a prize from the office

I never get chosen for the prizes :(

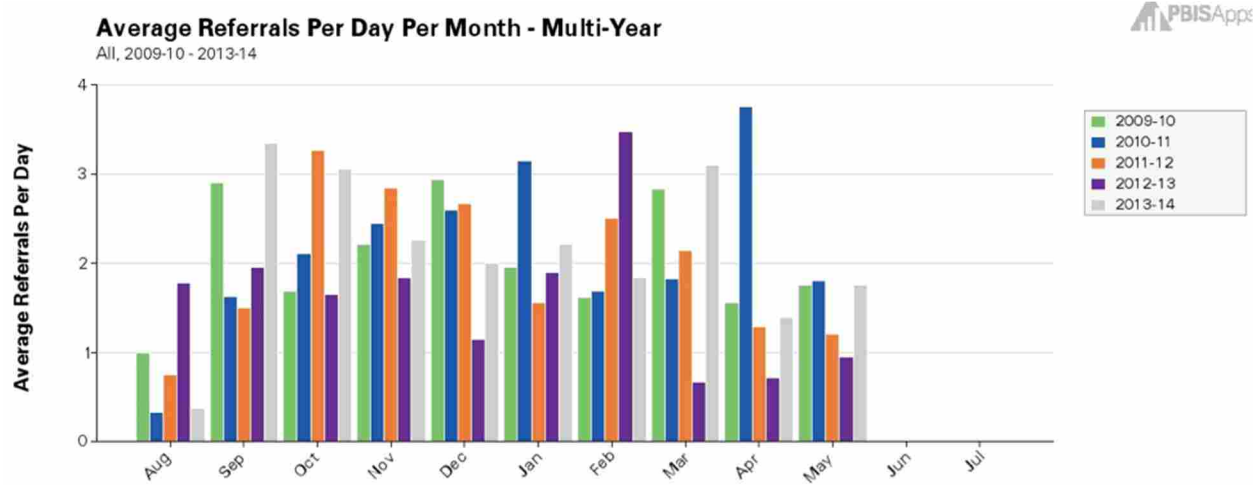
I don't know not getting one.

They are Vague

They don't really tell you what you were doing they just mark off one of the categories.

What are you supposed to do with a slip of paper? Make a paper airplane?

APPENDIX J: 2012-2013 ODR Data Compared to Other Years



* Study was done during the 2012-2013 academic year