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# Developing a Dramatic Pretend Play Game Intervention



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Children have a natural inclination to play and imagine themselves as characters. Research has supported theories that connect this pretend play and related theatrical play to the development of children's social and emotional skills, but the author contends we need further, more rigorous research on whether such play directly relates to such positive outcomes. The author developed a cohesive pretend play intervention to conduct such research, using block play and story time as controls to distinguish what may be uniquely useful about pretense. She seeks to provide researchers and practitioners who work with children a model for creating guided-play activities. She also discusses how to train play leaders and handle the issues that arise in the implementation of these pretend play interventions. **Keywords:** interventions, pretend play, sociodramatic play, theatrical play

**P**RETEND PLAY IS A CENTRAL PART of early childhood development. Although defining pretense can be difficult, generally we consider it any kind of nonliteral action done for enjoyment (Weisberg 2015). This definition encompasses the kind of sociodramatic or theatrical play in which very young children engage by embodying characters and pretending to experience their emotions and personalities (Goldstein and Bloom 2011).

Theorists and researchers have long held that pretend play fosters important social, cognitive, and emotional outcomes for children. Recent work has theorized pretend play's connections to counterfactual thinking (Gopnik and Walker 2013), language development (Weisberg et al. 2013), and creativity (Russ and Wallace 2013). However, research that considers such connections has also recently come under criticism for a lack of rigor. These criticisms accuse such studies of failing to control for how experimenter expectations might affect results, for considering children's natural inclinations to play that can only produce correlational findings, and for not focusing closely enough on how chil-

dren's preexisting skills may affect the type of play they engage in and its effects (Lillard et al. 2013; Lillard et al. 2015).

The careful and considered study of play is critical for determining not only its effects on children's development but also for finding the best way to harness children's natural inclinations and desires to produce positive change and outcomes. To study pretend play and its effects in the most rigorous, scientific way possible, strongly tested, well-controlled, and exact interventions must be developed. In this article, I outline a case study of the development of such an intervention, focusing on dramatic pretend play and the development of two active dismantling control play interventions—one, building with plastic, interlocking blocks and the other, reading in a group. I describe how and why particular activities were used and how interventionists were taught to lead such activities. I lay out how these particular interventions were paired to ensure the closest control possible for the elements of dramatic pretend play held to cause gains in social and emotional functioning. I discuss the implementation of the dramatic pretend play intervention, training play group leaders, and other issues that arose in developing it. Finally, I suggest ways for researchers and teachers to identify the elements in play interventions they may need to control for to test rigorously theories about the effects of play and its applications across populations.

### **Why Develop a New Dramatic Pretend Play Game Intervention?**

Pretend play research has focused almost entirely on preschool-aged children, with good reason. Kids of this age are at the height of their imaginative and fantasy orientations (Singer and Singer 1992), and it is during this period—if they are enrolled in preschool—that teachers most encourage play. Later schooling has been noted for its lack of—and even the disappearance of—play (Miller and Almon 2009; Ortlieb 2010). Proponents of pretend play have long proposed that it allows children to engage in focused, complex, and heightened cognitive tasks beyond those they encounter in the everyday world (Vygotsky 1977). Likewise, theorists have argued that engagement in drama and theater serves as a school for emotions, both personal and interpersonal (Levy 1997). They often discuss theater as a way for children to learn about themselves and others in a safe space (Freeman, Sullivan, and Fulton 2010; Lobman 2015), but it has not often been the focus of psychological study.

Many preschool curricula have pretend play built in, or are even based on pretend play (e.g., Bodrova and Leong 2007; Diamond and Lee 2011). However, these curricula focus on the planning of the play or on allowing children free time to engage in play on their own. But some contend that, in addition to having free time to play, children need to engage in guided play (Weisberg, Hirsh-Pasek, and Golinkoff 2013). Guided play allows children the freedom to explore a topic playfully while adults steer the kids' attention and activities toward a goal.

These notions—that pretend play has positive effects, that there exists a need for rigorous testing, that dramatic play produces positive benefits, and that it is critical we guide children through play—were all considered in the development of the intervention I describe in this article.

Effective play interventions, ideally, should harness children's natural inclination to play and pretend, while also guiding them to think about emotions, characters, narrative, and the physical embodiment of various inner states like emotions and thoughts. This is the working hypothesis we posited for our intervention's development: if we use guided, playful engagement in fictional worlds and characters, children will learn more about how our emotions and minds work and thereby increase their social skills and their abilities to handle emotional matters effectively. Children could learn to "stand a head taller than themselves" (Vygotsky 1977) while also being scaffolded by adult guidance. Our additional focus on embodying different inner states and learning about emotions and minds also guided the development of control conditions to discover the activities within the dramatic pretend play that may produce positive changes in social and emotional development. Any play-based intervention must use control conditions that identify this unique contribution of play and enable future applications specifically to address it in setting their goals and hypothesizing their outcomes.

### **Philosophy behind Building the Intervention**

This intervention was built on a philosophy of guided, drama-based, pretend play. As such, I focused on the specific elements within drama-based pretend play—sometimes called drama-based pedagogies (Lee et al. 2015) or sociodramatic play (Smilansky 1968)—that would most likely cause change. I began with elements from interdisciplinary theories of art, education, and psychology that consider child development. Those I considered most critical were those advanc-

ing artistic approaches to drama education (which has its own developmental progression) (Goldstein, Lerner, and Winner 2017), the range of pretend play (McCune 1995; Morrissey 2014), the use of adult guidance (Weisberg et al. 2013) and how to increase children's social and emotional skills (Durlak et al. 2015).

Understanding artistic theory and having experience in drama, theater, and acting for young children provides us a basis for structuring play that ranges from simple, easy-to-understand exercises to complex and integrated engagements with characters and emotions. Teachers have built drama-based curricula over time working in parallel with developmental psychologists, and the two groups have had much to learn from each other (Goldstein, Lerner, and Winner 2017). The best intervention activities ensure that the pretend play grows increasingly difficult, much as an acting class becomes more complex over time (Fox 1987; Spolin 1986, 1999). In our intervention, children began with simple exercises that involved short-term portrayals of basic emotions or broad depictions of characters based on single prompts. They then moved into interaction, improvisation in pairs, and physical movement while interacting with the movements of others. Finally, later in the intervention, children had a chance to build characters who interacted with other fictional characters and created scenes that had plot, progression, and several emotional components.

Similarly, it is important to use a range of pretend play for focused interventions to help children build their play engagement in more imaginative ways over time (Howes and Matheson 1992). In this intervention, children sometimes worked with props and toys that looked like the real thing (e.g. a birthday cake and a chef's hat), but other times they were asked to create objects from their imagination. Children switched from more complex to less complex levels of play in one session, but we also instructed them to use the full range of ways to play. Later, we asked children to adopt multiple pretend roles over the course of a few weeks, switching both within each play session and between sessions—sometimes coming back to activities and roles they may have played previously, sometimes beginning from a blank slate with an entirely new activity and role. They need such range to begin to consider effectively other perspectives, emotions, and emotional control (Howes and Matheson 1992; Lillard, Pinkham, and Smith 2010).

Beyond the children's engagement in differing levels of play, the guided nature of the pretend play was a philosophical key to play interventions. Play leaders can be specifically instructed to guide children to play a variety of roles and to think about how another person feels. Teachers are often (and rightfully)

told to let children build their own play. However, particularly if one wishes to help along a specific outcome of play, the play must be constrained in some way. This type of guidance allows children to scaffold using adult knowledge and expertise and to master concepts beyond those they would absorb playing on their own—that is, not just by imagining creations of their own construction but also by fulfilling roles invented for them with a variety of perspectives (Weisberg, Hirsh-Pasek, and Golinkoff 2013).

Finally, whether they use pretend play or not, successful interventions employ connected and coordinated sets of activities and, importantly, active rather than passive learning (Durlak et al. 2011). This allows the cohesive development of dynamic and organized pretend play interventions. Because I was interested in how pretense could be harnessed for prosocial understanding and behavior, I used existing theories of social-emotional development, particularly empathy, when I thought about the activities to include. Hoffman (2001) proposed five ways in which empathy and emotional knowledge can be taught, each reflected in my development of the intervention. These provided a frame, using developmental theory and educational psychology, for the range and focus of activities I included in the play intervention.

First, permit children to experience a wide range of emotions. (In the course of dramatic pretend play, taking on a variety of pretend roles playing fictional characters allow children to experience a range of emotions) (Fox 1987). Second, direct children to the internal states of others. (Through the characters they play, children experience these in the first person.) Third, provide role-taking and perspective-taking opportunities across contexts. (A dramatic pretend play intervention offers children opportunities to experience multiple roles in multiple contexts). Fourth, give children lots of affection. And fifth, be a role model by behaving in a prosocial manner and verbalizing your empathic feelings. (Less directly, engaging in a dramatic pretend play intervention guided by a teacher offers children a chance to have fun and interact warmly while they see an adult as an emotional role model.)

### *Differences from Other Pretend Play Interventions.*

Although there have been multiple educational interventions—particularly for vocabulary and curricular learning—that focus on drama (Booth 2005; Brown and Pleydell 1999) and multiple interventions that focus on social and emotional learning (Durlak et al. 2011), the goal for this intervention was to investigate the unique combination of guidance, pretend play, dramatic theory, and social-

emotional goals. However, other goals for the general development of play-based interventions are also important. First, the play should be flexible—capable of use by pairs, small groups, and slightly larger groups. This will keep the play from falling apart when some children or teachers are absent. Second, combining academic and artistic traditions allows a wider variety of knowledge to inform play activities. Third, creating an intervention guided by individuals with minimal training and some experience with children but not necessarily with specific dramatic or sociodramatic play training allows most teachers and researchers to use its set of games. Finally, although this intervention's techniques could be used with atypical or developmentally delayed populations, researchers and developers should focus on one group, to increase baseline levels of social and emotional skills within one population. In these ways, an intervention's philosophies could be applied to multiple populations, situations, and trials.

### **Developing Specific Intervention Activities**

I began to develop this group of activities for an intervention by reading books and articles on dramatic play for children (e.g. Bedore and Barkley 2004; Castaldo 1996; Nyberg 1994; Rooyackers 1998). My research assistants at the Social Cognition and Imagination Lab at Pace University and I made lists of games appropriate for four-year-old children and games appropriate for older children that could be simplified for our younger age group. We based the final list on discussions about what we could reasonably expect four children and a group leader to accomplish during the time given, on the games' engagement of emotional and mental states, and the age appropriateness of the activities. Once we chose a set of activities, we ranked each as either easy, medium, or hard based the complexity of the activity and how much freedom we would allow the children to create something on their own. The more the children had to create for themselves or the more variety of characters and props they would have to imagine, the more complex we rated the game. Most simple games required that children only listen to and follow the instructions of a game leader. Most complex games required the development of a character who would interact with other characters using imaginary props with a given of narrative.

Once we created a set of thirty-one games, we established a schedule of twenty-four sessions (three times a week for eight weeks) in which children would begin with mostly easy games and move through medium to hard games

as they progressed during the intervention. Easy games were also repeated often to allow children a natural warm-up for the dramatic pretend play, in the same way that a drama class begins with a physical and simple theatrical warm-up (Poulter 1987). We created the manual for each game for each day with instructions for group leaders about how to introduce the game and how to guide the children. We included suggestions about how to follow the children's lead and how to bring them back on task.

The population of interest can help determine the choice of activities. Here, we were focused on at-risk, but typically developing, four- and five-year-old children. Simple warm-up games included Walk About—in which children walked around in large circle pretending to be various animals, experience different moods, or engage in a number of scenarios while they walked “like a monkey,” or “like you are sad,” or “like you are swimming”—and Pass the Clap, during which children stood in a circle, and “passed” a clap around the circle, making eye contact and clapping at the same time as the child next to them. Fuller, more complex games included Emotion Colors, during which children talked about different emotions as colors, then worked to make these particular colors brighter or dimmer or mixed together. During another such game, Hat Switch, children wore a hat (e.g. chef's hat, cowboy hat, crown, top hat) and then pretended to be a character based on the hat. They then switched hats and took on characters they had just watched other group members portray. During the game Camping, children pretended to set up a tent, discuss and cook the dinner over the campfire, then eat and go to sleep for the night. A full manual and set of games is available from the author.

### **Pairing of Control Interventions**

After we had established a pretend play intervention, we turned our thinking to control conditions. We focused on creating parallel activities that allowed us to specify the cause of any changes resulting from pretend play. This involved distinguishing the elements of dramatic pretend play that improved children's social and emotional skills. Here, I looked to the works of such theorists as Vygotsky (1967) and Piaget (1962) and to newer research by Russ and Wallace (2013) and Lillard and her colleagues (2013). Testing pretend play's effects ideally includes comparisons to other types of activities that share its qualities on both the surface level (e.g. number of children involved) and at a greater depth

(e.g. thinking about emotions). Any experiment attempting to test an intervention with scientific rigor should distinguish what exactly about the pretend play uniquely causes the effects under consideration. Many activities (e.g., playing sports or music) share superficial characteristics with pretend play, such as group interaction (i.e., how much the children socially interacted with each other), guidance (i.e. how much the group leader led the children through activities), and physical movement. It is unlikely that these characteristics, however, are the unique element within play causing change. Any experiment using a pretend play intervention must therefore control for superficial features to specify deeper qualities that may uniquely cause social-emotional change.

From these assumptions, I identified several deeper traits inherent in dramatic pretend play that might be causing these changes in children. They included engagement with narratives and characters, dealing with emotions, and embodiment (i.e. the physical activity involved). Dramatic pretend play is also fun and engaging, and children want to participate. So, control activities must also offer the child comparable engagement. From both these superficial and significant characteristics, I developed two parallel interventions to the dramatic pretend play intervention: guided play with blocks and a guided story time.

### *Block Play*

Block play shares superficial elements with dramatic pretend play such as physical movement (placing blocks), group interaction (while building a structure) and adult guidance (building structures to attain a goal). However, playing with blocks does not inherently involve anthropomorphizing the structures in the block play or discussing characters, emotions, or narrative. In this way, block play serves as a control for the physical characteristics of dramatic pretend play, but not its inner, emotional and mental aspects. When we wrote the manual for the intervention, we deliberately focused on the physical actions and goals of building without developing any narrative or characters.

We based the development of the block play intervention on the types of instructions (or builds) that accompany blocks. We began by looking at the builds included in “open” block sets (that is, sets that did not have a single or thematic end structure). We then created a number of builds, using common objects as guides, as well as our own imagination. We photographed each build in progress to create instructions with the same number of steps that the set’s instructions suggested for standard builds, and we made a schedule and manual that matched our role-play intervention in easy, medium, and hard builds so that

children would begin with mostly easy builds and move on to medium and hard builds as they progressed through the intervention. That is, on a day when the dramatic pretend play intervention involved one easy and two medium games, the paired day for block building would have one easy and two medium builds. We determined the difficulty of builds by the complexity of the final project, the number of steps it involved, and the number of blocks it used. Again, we created a manual for each game for each day with instructions for group leaders on how to introduce the goal of the build and how to guide the children with suggestions for following the children's lead and for bringing them back on task. Easy builds included building a tall tower out of blocks of a single color or a square building that used a pattern of blocks of different colors. More difficult builds included a birthday cake with block candles on top following a specific color pattern; a truck with square wheels, a cab, and a dumping bed on back; and a giraffe with a long rectangular body, long legs, a neck, and a head resting on top. Please contact the author for a full manual and description.

### *Story Time*

To control for some of the more significant, inner elements of the pretend play intervention not covered by the block play control condition (e.g., thinking about emotions, working with narratives), we also created a story time intervention. Reading books and discussing stories with a group leader shares some of the features—in its discussion of characters, its emotions and narrative, and its guidance through the books—of dramatic pretend play. However, in the story time intervention we used, children did not engage in physical movement or the embodiment of any character or mental state. For this reason, the story time serves as a control for the inner mentalization of characters in lieu of physical play and embodiment of characters.

We wanted to use books varied in their level of vocabulary and complexity but all of which used characters and plots. We selected a set of books previously included in an intervention that showed reading books increased mentalizing language (see Peskin and Astington 2004). We categorized the books into easy, medium, and hard based on language, topic, and length. We then created a manual for how to involve the children in reading the books and how to set reading goals for each session. This manual specified the questions to ask while reading and when—as well as how—to bring children back to task and focus on the narratives and plots of the books. We allowed group leaders to choose the books based on the children's interest and asked them not only to keep track of

those read to avoid repeating them too often but also to maintain the general repetitive pattern of the activity in the dramatic pretend play and block-building interventions. Books included Eileen Browne's *Handa's Surprise* (2011), Ezra Jack Keats's *The Snowy Day* (1976), Paul Galdone's retelling of the Indian classic *The Monkey and the Crocodile* (1987), and Kevon Henkes's *Kitten's First Full Moon* (2004). Please contact author for a full list and manual.

Taken together, control conditions should distinguish the hypothesized critical factors in pretend play that cause positive social and emotional growth in children. Only in the pretend play group did we have children embodying and physically acting out emotions, mental states, and characters. Therefore, any change in the children's social and emotional skills at the end of the play intervention period should be attributable to this specific aspect of pretend play. Because the two control conditions included aspects of group interaction, adult leadership and guidance, physical movement, and discussion of narratives, plots, and characters, if the pretend play condition was shown uniquely to improve social and emotional skills (as it was), then we could hypothesize this occurred not because of any other factor but because only in the pretend play condition did children embody and perform the inner states of others and themselves.

### **Implementation of Intervention**

The intervention was planned to contain twenty-four sessions over eight weeks in three visits each week. The schedule exposed the children to the range of skills and activities we believed appropriate for this age group and also fit within the time constraints imposed by the school—that the intervention should occur during the summer session of the program. The goal was to spend enough time with the children to give consistency to the intervention but still allow for the typical daily curriculum. Generally, the longer and more intensive an intervention, the more likely it will be effective (Bierman and Motamedi 2015).

We assigned children randomly to groups of four. The dramatic pretend play intervention and the two control interventions took place simultaneously. Because we did not assign children to intervention groups on the basis of their classroom, we avoided issues of intervention types specific to a classroom (i.e., that change could be attributed to specific teachers or classes instead of to the intervention). Instead we assigned them based on a child's skill level. Each interventionist carried the props necessary for the day, as well as a set of

blocks, books, a notebook, and a video camera on a tripod. Each day children began by coloring (regardless of group), then participated in three intervention activities, and then had a general period of cooling down to provide a transition from engagement in the class itself into and out of the activities of the intervention. Classroom transition periods challenge even experienced teachers (Barbetta, Norona, and Bicard 2005), and our warm-up and cool-down activities allowed group leaders time to set up video cameras and prepare props and other materials.

### **Training of Group Leaders**

The success of the study required strict adherence to the intervention. Even a thorough and well-thought-through manual does not ensure that group leaders will maintain the consistency and integrity of the activities (Fraser and Galinsky 2010). In this study, we hired group leaders from a set of undergraduates in psychology who had no formal training in either drama instruction or childhood education. We did so purposefully to test the intervention in minimal conditions. Often, clinically valid interventions require highly trained leaders, and hiring them is both expensive and time-consuming. These requirements often make it hard to repeat the intervention successfully in any other setting. We specifically created our dramatic pretend play intervention to be led by individuals with minimal training, making ease and familiarity with children more important than any theoretical or practical training. Thus, intervention leaders were blind to the hypothesis of the study and future implementations became easier. My hope was to make this intervention available on a large scale to teachers and eventually even to parents. Much teacher training and drama instructor training centers on a discussion about the purpose of pretense and drama (Courtney 1985) and the effects they have on children. By avoiding those with an educational background in drama, we could also ensure the intervention would not be led by individuals specifically trying to engage the children in explicit practices to increase the outcomes we were measuring—an issue with scientific rigor and validity of previous studies (Lillard et al. 2015).

We trained group leaders to facilitate not just the dramatic role play but also the block play and story time. The group leaders practiced each game in the lab with a few children the researchers knew before the intervention period began. Research assistants also had a chance to role play by pretending to be

participants and looking for areas of misunderstandings or unclear instructions. We thought it critical to engage the group leaders in training but at as minimal a level as possible so that in future applications of the intervention an extensive training period would not be necessary. Streamlining the training was key. Although we could not control for the group leaders' personal enjoyment and their warmth toward the children, by training all group leaders in all of the play activities, we were able to dissociate the personal characteristics of group leaders from the intervention itself.

During the first implementation, we looked for places to improve the intervention both as it is happening and for future applications. After each day, we asked the group leaders for two forms of feedback. First, we had them keep journals about their experiences leading the intervention that addressed the difficulties of keeping the children on task, when the children needed more guidance and when they were able to guide themselves, and which games seemed to engage children more than others. Second we held daily round-table discussions among the principal investigator (i.e. the author) and the entire group of research assistants who ran the interventions. We compared experiences across the groups and in the three types of intervention, sharing ideas about how to bring children back on task or how to address children who were having problems, how to handle teacher interruptions, how to integrate latecomers among the children into the activities, and how to deal with aggression.

Each day, interventionists also recorded the children's participation and enthusiasm for each activity, as well as any general impressions group leaders had of the children's engagement in the activity. We asked for any suggestions leaders had to offer about the activities completed in that day's session. This provided feedback for specific activities and enabled us to generalize the findings for testing the interventions in the future. We rated all days on a scale from 1 (low) to 10 (high). The overall average proved to be 7.87, which indicated that, generally, the children were both enthusiastic and interested in the activities. Coders also looked at all daily diaries from the interventionists. They coded any mention of a specific activity on a Likert Scale from 1 (unable to do) to 4 (activity went smoothly). The highest rated activities (i.e. highest percentage of smoothly ratings) were Superheros (in which children wore capes and pretended to solve a quest), Unbirthday Party (in which children threw a party that did not celebrate a birthday), and Animal Day (in which children took stuffed animals to an imaginary veterinarian's office, zoo, and pet store).

Of note, both the activities on the highest-rated days and the highest-rated

individual activities involved props. These activities also may have been most closely related to the types of pretend and sociodramatic play in which the children typically engaged. It may be most beneficial when we engage children in this kind of play to promote social and emotional skills that we use activities similar to the play they already enjoy and provide them with props.

In contrast, the lowest-rated activities involved no props. The children used just their own bodies and mimed actions. One child often had to build off another in these games without props, basing his or her movements on the movements of the other child without full guidance from the group leader. These activities also fell farthest from traditional classroom pretend play activities—unlike Superheros and Animal Day, there were no activities or prop suggestions similar to these activities already present in the classroom. It may be that props are critical for children to become engaged in the intervention and play enthusiastically and that children need guidance to build effectively off another child's play. Perhaps the props and adult guidance provide a grounding and a structure for the activity so that the children do not need to create the experience entirely.

Adults are more directly involved in the activities of four-year-olds—the age group at which we aimed our initial intervention—than they are in those even a few years older. It may be, therefore, that future iterations of this play intervention should use more adult guidance and more grounding activities with props for younger children. Less adult guidance may be necessary for older children to keep them engaged and on task, because they need fewer props to orient themselves to a particular activity or to retain their enthusiasm for it.

### **Lessons Learned in Implementation and Testing**

Given previous theoretical and empirical work, we proposed in the initial conceptualization of this intervention that dramatic pretend play positively affected prosocial behaviors such as empathy, helping, and altruism. We tested for these possibilities before implementing the intervention schedule and also after it was completed. We also tested all the children involved beforehand concerning their social and emotional abilities and skills including their prosocial behavior, and then randomly assigned them to participate in one of the interventions. We tested all children again after the eight-week intervention on the same abilities and skills. We also filmed all the groups in the intervention to code the children's behavior for prosocial, antisocial, and nonsocial activities. We found, overall,

that engagement in the pretend play intervention was associated with increased emotional control but that there was no change in prosocial behaviors. Specifically, children in the dramatic pretend play group showed lower levels of in-vivo personal distress in response to experimenter's distress at time 2, controlling for time 1 ( $\beta_{01} = -0.947, p = .011$ ), as well as lower levels of self-reported personal distress in response to others' distress at time 2, controlling for time 1, ( $\beta_{01} = -0.091, p = .030$ ) compared to the two control conditions. These effects were robust to covariation of gender, attendance, ethnic background, and participation (Goldstein and Lerner 2017).

There may be several reasons for the changes we found in emotional control but not in the understanding of others or in prosocial behavior. First, the population we tested may have had little emotional control to begin with, and given this, emotional control was the most likely area for improvement. Second, emotional control is the foundation for empathy, compassion, and altruism, and—without high levels of emotional control—these other emotional and social skills could not be affected. Third, the intervention may have allowed children to practice their emotional control and knowledge (and therefore to improve in this area) but did not allow them to think about or practice their empathy and altruism—and therefore these areas were unaffected. Future work with more precise testing and a variety of children from broader and more diverse backgrounds, in terms of socioeconomic status, ethnicity, and race, will help sort these possibilities. For this reason, multiple iterative tests of interventions under varying conditions may help develop broad conclusions about effectiveness.

The population included in the test of this intervention was part of a universal pre-K Head Start program with income requirements for enrollment. The location of the classrooms ranged from one in a public housing project to several in a new building that also lodged private pre-K programs. The students were often difficult to track because they were absent for extended periods of time or left without warning before the end of the intervention period. Consent forms were needed in four languages—Spanish, Cantonese, English, and Mandarin—but we were unable to secure bilingual testers to collect data regarding demographics and parent variables such as trait empathy, the promotion of pretend and dramatic play at home, and the engagement with television and fiction at home from the parents individually. Future tests of this intervention will need to correct these problems.

Critically, although the teachers at the school were not involved in the intervention directly, teachers and teacher aides proved essential to creating an

environment in which the children paid attention and engaged in the intervention. When the teachers had established control and garnered attention to rules in the classroom, the children could engage in the intervention easily and quickly because they were used to paying attention to an adult leader and to following directions. However, in classrooms in which the teacher had little control or authority over the children—or in cases in which they exercised control over the children by threatening them or yelling at them or through other authoritarian means (Walker 2008; Wentzel 2002)—the children may have been less able to engage in the intervention and were more likely to run away from the interventionist or not to complete an activity or to take an activity in another, nonsequential direction. This is one reason we think it critical in pretend play (and really, in all) interventions to distinguish the effects of children's groupings in individual classrooms and with individual teachers from their involvement in the intervention itself (Kirk 2001).

### **Future Directions and Conclusions**

The best interventions employing play use many sources of inspiration. We built this intervention on the experience and expertise of drama teachers, using our knowledge of games for children and the development of social-emotional skills, as well as our previous work testing the effects of pretend play. Generally, it will be easier to execute simple interventions that require minimal training and need only equipment regularly available in most preschool classrooms or that can be readily transported. Many play interventions can be adapted for specific use depending on the training of group leaders. At home pairings of interventions with activities might also prove useful—intervention manuals could be expanded to include more activities for parents and for at home play with children using a minimum number of props and toys. Play interventions used in preschools or in other small-group settings for children can be provided. Individuals expert in teaching children with autism spectrum disorder (ASD) or other atypically developing children can adapt dramatic play exercises for their students, as dramatic play and theatrics have been shown to help children with ASD (see e.g., Corbett et al. 2016; Lerner and Levine 2007).

Drama classes are conducted across socioeconomic lines and in diverse, even international, settings, and interventions can benefit from this framing. Investigating changes based on group leaders trained in dramaturgical methods

with children—particularly individuals trained as teaching artists—would be helpful. However, scientific rigor for testing may require that intervention leaders lack specific knowledge. Because they had never taught drama before, most of our group leaders had no preconceived notions about pretend play and no standardized goals in mind. This helped immensely in our intervention for this group of children, who had little ability to concentrate and pay attention. Group leaders should not be pressured to complete an intervention but rather to focus on getting through the pretend play, whereas someone with much theatrical training or experience teaching art might be more goal oriented and force the children to produce by the end of the session.

Many have noted a worrisome trend among today’s children—they do not engage as much as children once did in complex, imaginative play with well-developed themes, sustained action, and ample make-believe involving multiple characters and narratives over time (Bodrova, Germeroth, and Leong 2013). Interventions using drama, theater, and acting may provide experiences children need to create and learn about themselves and others. Interventions built on both an understanding of pretend play from a developmental and psychological standpoint and from an artistic and play standpoint, well tested and carefully controlled in their creation, help us understand what pretend and dramatic play can do for such children.

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## REFERENCES

- Barbetta, Patricia M., Kathleen Leong Norona, and David F. Bicarid. 2005. “Classroom Behavior Management: A Dozen Common Mistakes and What to Do Instead.” *Preventing School Failure: Alternative Education for Children and Youth* 49:11–19.
- Bedore, Bob. 2004. *101 Improv Games for Children and Adults: Fun and Creativity with Improvisation and Acting*.
- Bierman Karen L., and Mojdeh Motamedi. 2015. “SEL Programs for Preschool Children.” In *Handbook of Social and Emotional Learning: Research and Practice*, edited by Joseph A. Durlak, Celene E. Domitrovich, Roger P. Weissberg, and Thomas P. Gullotta, 135–50.
- Bodrova, Elena, and Deborah J. Leong. 2007. *Tools of the Mind: The Vygotskian Approach*

- to *Early Childhood Education*.
- Bodrova, Elena, Carrie Germeroth, and Deborah J. Leong. 2013. "Play and Self-Regulation: Lessons from Vygotsky." *American Journal of Play* 6:111–23.
- Booth, David. 2005. *Story Drama: Creating Stories through Role Playing, Improvising, and Reading Aloud*.
- Brown, Victoria, and Sarah Pleydell. 1999. *The Dramatic Difference: Drama in the Pre-school and Kindergarten Classroom*.
- Castaldo, Nancy F. 1996. *Rainy Day Play!*
- Corbett, Blythe A., Scott D. Blain, Sara Ioannou, and Maddie Balsler. 2016. "Changes in Anxiety Following a Randomized Control Trial of a Theater-Based Intervention for Youth with Autism Spectrum Disorder." *Autism* 21:333–43.
- Courtney, Richard. 1985. *Rehearsing for Life: Teaching Drama Teachers*.
- Diamond, Adele, and Kathleen Lee. 2011. "Interventions Shown to Aid Executive Function Development in Children 4 to 12 Years Old." *Science* 333:959–64.
- Durlak, Joseph A., Celene E. Domitrovich, Roger P. Weissberg, and Thomas P. Gullotta, eds. 2015. *Handbook of Social and Emotional Learning: Research and Practice*.
- Durlak, Joseph A., Roger P. Weissberg, Allison B. Dymnicki, Rebecca D. Taylor, and Kriston B. Schellinger. 2011. "The Impact of Enhancing Students Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions." *Child Development* 82:405–32.
- Ferrara, Katrina, Kathy Hirsh-Pasek, Nora S. Newcombe, Roberta Michnick Golinkoff, and Wendy Shallcross Lam. 2011. "Block Talk: Spatial Language during Block Play." *Mind, Brain, and Education* 5:143–51.
- Fiske, Edward B. 1999. *Champions of Change: The Impact of the Arts on Learning*.
- Fox, Mem. 1987. *Teaching Drama to Young Children*.
- Fraser, Mark W., and Maeda J. Galinsky. 2010. "Steps in Intervention Research: Designing and Developing Social Programs." *Research on Social Work Practice* 20:459–66.
- Freeman, Gregory D., Kathleen Sullivan, and C. Ray Fulton. 2003. "Effects of Creative Drama on Self-Concept, Social Skills, and Problem Behavior." *The Journal of Educational Research* 96:131–38. doi:10.1080/00220670309598801.
- Goldstein, Thalia R., and Paul Bloom. 2011. "The Mind on Stage: Why Cognitive Scientists Should Study Acting." *Trends in Cognitive Sciences* 15:141–42.
- Goldstein, Thalia R., Matthew D. Lerner, and Ellen Winner. 2017. "The Arts as a Venue for Developmental Science: Realizing a Latent Opportunity." *Child Development* 88:1505–12.
- Gopnik, Alison, and Caren M. Walker. 2013. "Considering Counterfactuals: The Relationship between Causal Learning and Pretend Play." *American Journal of Play* 6:15–28.
- Hoffman, Martin L. 2001. *Empathy and Moral Development: Implications for Caring and Justice*.
- Holcomb, Sabrina. 2007. "State of the Arts." NEA Today. <http://www.nea.org/archive/10630.htm>.
- Howes, Carollee, and Catherine C. Matheson. 1992. "Sequences in the Development

- of Competent Play with Peers: Social and Social Pretend Play.” *Developmental Psychology* 28:961–74.
- Kirk, Roger E. 2001. “Promoting Good Statistical Practices: Some Suggestions.” *Educational and Psychological Measurement* 61:213–18.
- Lee, Bridget Kiger, Erika A. Patall, Stephanie W. Cawthon, and Rebecca R. Steingut. 2015. “The Effect of Drama-Based Pedagogy on PreK–16 Outcomes: A Meta-Analysis of Research from 1985 to 2012.” *Review of Educational Research* 85:3–49.
- Lerner, Matthew D., and Karen Levine. 2007. “The Spotlight Program: An Integrative Approach to Teaching Social Pragmatics Using Dramatic Principles and Techniques.” *The Journal of Developmental Processes* 2:91–102.
- Levy, Jonathan. 1997. “Theater and Moral Education.” *Journal of Aesthetic Education* 31:65–75.
- Lillard, Angeline, Ashley M. Pinkham, and Eric Smith. 2011. “Pretend Play and Cognitive Development.” *The Wiley-Blackwell Handbook of Childhood Cognitive Development*, 2nd ed., edited by Usha Goswami, 285–311.
- Lillard, Angeline S., Matthew D. Lerner, Emily J. Hopkins, Rebecca A. Dore, Eric D. Smith, and Carolyn M. Palmquist. 2013. “The Impact of Pretend Play on Children’s Development: A Review of the Evidence.” *Psychological Bulletin* 139:1–34.
- Lillard, Angeline S., Rebecca A. Dore, Emily J. Hopkins, and Eric D. Smith. 2015. “Challenges to Research on Play: Mending the Methodological Mistakes.” In *The Handbook of the Study of Play*, Vol. 2, edited by James E. Johnson, Scott G. Eberle, Thomas S. Hendricks, and David Kuschner, 445–52.
- Lobman, Carrie. 2015. “Performance, Theater, and Improvisation: Bringing Play and Development into New Arenas.” In *The Handbook of the Study of Play*, Vol. 2, edited by James E. Johnson, Scott G. Eberle, Thomas S. Hendricks, and David Kuschner, 349–63.
- McCune, Lorraine. 1995. “A Normative Study of Representational Play in the Transition to Language.” *Developmental Psychology* 31:198–206. doi: 10.1037/0012-1649.31.2.198.
- Morrissey, Anne-Marie. 2014. “Scaffolding, Analysis and Materials: Contributing Factors in an Unexpected Finding of Advanced Infant/Toddler Pretend Play?” *Journal of Early Childhood Research* 12:195–213. doi:10.1177/1476718X13515428.
- Miller, Edward, and Joan Almon. 2009. “Crisis in the Kindergarten: Why Children Need to Play in School.” *Alliance for Childhood (NJ3a)*. ERIC Number: ED504839.
- Nyberg, Judy. 1994. *Just Pretend! Creating Dramatic Play Centers with Young Children*.
- Omasta, Matt. 2012. “A Survey of School Theater: A Landscape Survey of Theater Education in United States High Schools.” *Teaching Theater* 24:8–29.
- Ortlieb, Evan T. 2010. “The Pursuit of Play within the Curriculum.” *Journal of Instructional Psychology* 37:241–46.
- Parsad, Basmat, and Maura Spiegelman. 2012. “Arts Education in Public Elementary and Secondary Schools: 1999–2000 and 2009–10.” NCES 2012-014. *National Center for Education Statistics*. ERIC Number: ED530715.
- Peskin, Joan, and Janet Wilde Astington. 2004. “The Effects of Adding Metacognitive

- Language to Story Texts.” *Cognitive Development* 19:253–73.
- Piaget, Jean. 1962. *Play, Dreams, and Imitation in Children*.
- Poulter, Christine. 1987. *Playing the Game*.
- Rooyackers, Paul. 1998. *101 Drama Games for Children: Fun and Learning with Acting and Make-Believe*.
- Russ, Sandra W., and Claire E. Wallace. 2013. “Pretend Play and Creative Processes.” *American Journal of Play* 6:136–48.
- Singer, Dorothy G., and Jerome L. Singer. 1992. *The House of Make-Believe: Children’s Play and the Developing Imagination*.
- Smilansky, Sara. 1968. *The Effects of Sociodramatic Play on Disadvantaged Preschool Children*.
- Sparks, Dinah, Jizhi Zhang, Steven Bahr, and John Ralph. 2015. “Public Elementary and Secondary School Arts Education Instructors: Stats in Brief.” NCEES 2015-085. *National Center for Education Statistics*. ERIC Number: ED555294.
- Spolin, Viola. 1986. *Theater Games for the Classroom: A Teacher’s Handbook*.
- . 1999. *Improvisation for the Theater: A Handbook of Teaching and Directing Techniques*.
- Vygotsky, Lev S. 1967. “Play and Its Role in the Mental Development of the Child.” *Soviet Psychology* 5:6–18.
- Walker, Joan M. T. 2008. “Looking at Teacher Practices through the Lens of Parenting Style.” *The Journal of Experimental Education* 76:218–40.
- Weisberg, Deena Skolnick. 2015. “Pretend Play.” *Wiley Interdisciplinary Reviews: Cognitive Science* 6:249–61. doi:10.1002/wcs.1341.
- Weisberg, Deena Skolnick, Kathy Hirsh-Pasek, and Roberta Michnick Golinkoff. 2013. “Guided Play: Where Curricular Goals Meet a Playful Pedagogy.” *Mind, Brain, and Education* 7:104–12.
- Weisberg, Deena Skolnick, Jennifer M. Zosh, Kathy Hirsh-Pasek, and Roberta Michnick Golinkoff. 2013. “Talking It Up: Play, Language Development, and the Role of Adult Support.” *American Journal of Play* 6:39–54.
- Wentzel, Kathryn R. 2002. “Are Effective Teachers Like Good Parents? Teaching Styles and Student Adjustment in Early Adolescence.” *Child Development* 73:287–301.