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Predictors of Bullying Role Behavior in Preschool

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Eastern Illinois University

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Kristen Kocher

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Predictors of Bullying Role Behavior in Preschool

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Predictors of Bullying Role Behavior in Preschool

Bullying among preschool children has received little attention in the literature (Vlachou, Andreou, Botsoglou, & Didaskalou, 2011). As a result, there is a lack of evidence regarding early predictors of aggressive and prosocial behavior; therefore, the goal of this study was to examine social and language correlates of aggressive, victim, and prosocial behavior in preschool.

Bullying is repetitive and intentional behavior that harms others in a physical or social manner (Olweus, 1993). Bullying tends to increase during elementary school and peak in middle school (Nansel et al., 2001; Unnever & Cornell, 2003), but there is evidence that predictors of bullying behavior emerge as early as preschool (ages 3-5; Vlachou et al., 2011) and even the age of two years (Beane, 2005). Preliminary research also suggests that preschool children can demonstrate prosocial behavior that is indicative of defending (i.e., prosocial behavior is intended to support victims). Researchers and education professionals should identify early signs of aggressive, victim, and prosocial behavior so that early intervention programs can be used to target children who demonstrate early signs of these bullying roles.

According to Vlachou et al. (2011), the type of bullying role behavior a child exhibits (i.e., aggressive, victim, or prosocial behavior) is largely impacted by their level of social competency. Aggressive and prosocial behavior among preschool children may look different compared to older children and adolescents. For example, many preschoolers engage in occasional pushing, teasing, or other social conflicts (Raikes et al., 2013); however, if the behavior persists and becomes extreme, the child’s aggression may be considered bullying. The point at which aggression in preschool becomes
bullying is not clear, and additional research is needed to clarify. However, it is well-accepted that the discrepancy between younger children and adolescent behavior is due to their social, language, and cognitive development and abilities. To help understand aggression, victim, and prosocial behavior among preschoolers, the current research study focused specifically on how social and language skills are related to aggressive, prosocial, and victim behavior in preschool-aged children. Research on aggressive, victim, and prosocial bullying roles in preschool is summarized next.

Preschool Bullying Roles

Olweus' (1993) definition of bullying is the act of intentional and continual aggression toward peers along with a power imbalance between the victim and bully. This definition of bullying may not appropriately describe the "pre-bullying" behavior observed in preschool because a degree of aggression is developmentally appropriate for preschool children (David, Murphy, Naylor, & Stonecipher, 2004; Raikes et al., 2013). Preschool children may display similar behavior when compared to older children; however, the behavior may look and be defined differently. In addition, some research suggests that in younger populations bullying may not always be intentional, but it is systematic (Camodeca et al., 2015).

Aggressive behavior. Children who engage in high levels of aggression during preschool are at risk of engaging in a pattern of increasingly frequent and intense aggressiveness throughout childhood (National Institute of Child Health and Human Development Early Child Care Research Network, 2004). Extreme levels of somewhat typical behavior (i.e., some physical aggression vs. reoccurring extreme physical aggression) could result in the child becoming a bully or victim (Olweus, 2001).
Research suggests that bullying behavior can occur as early as two years of age (Beane, 2005), and early aggressive or bully-like behavior can include verbal, physical, and relational forms of aggressive behavior (Freeman, 2014). Developmental studies have shown that the rate in which children engage in aggressive behavior increases and peaks during the second and third year of life (Suurland et al., 2016).

Preschool bullying is most commonly characterized as physical aggression, though verbal forms of bullying are also common (Monks et al., 2003; 2011). Preschoolers often use aggressive behavior to attempt to resolve problems (Vlachou et al., 2011). According to Vlachou et al. (2011), among the preschool population, there can be two categories of bullying that include aggressive behavior, such as relational (indirect) and physical (direct) bullying.

*Indirect aggression in preschool.* Verbal types of aggressive behavior include someone who laughs at someone else and displays unkind acts (i.e., verbal teasing or taunting; Romain, 1997). Verbally aggressive behavior included rumor spreading, pestering, bragging, insulting, gossiping, and ridiculing others (Romain, 1997). Relational bullying is more discrete, and is typically observed in children that have greater social competency. Children who engage in relational aggression cause harm to others' peer and social relationships by spreading a rumor or gossiping about others, which is more indirect (Vlachou et al., 2011). This type of behavior is described as a socially advanced type of aggression that is usually observed in girls rather than boys (Crick & Grotpeter, 1996). Both types of indirect aggression (verbal and relational) are observed in preschool.
Direct aggression in preschool. Physical bullying includes direct aggressive behavior towards others, which would include hitting, kicking, or pushing. These types of aggressive behavior largely impact social competency and experiences. All of these behaviors could manifest into pre-bulling behavior if they persist over time.

Physical bullying or aggression, such as taking out anger on a person directly rather than indirectly, is a typical bullying behavior for preschool children and boys specifically (Crick & Grotpeter, 1996). Children who use aggressive and less proactive techniques tend to be very similar in developmental patterns, involving social emotional and linguistic development, compared to their peers (Salmivalli et al., 1996). Children who experience less control over their emotions and social experiences will likely engage in one of the many types of bullying (i.e., physical, verbal, or relational).

Considering that preschool children may not fully understand all the components of being a “bully,” it is difficult to measure how many preschool children participate in this role. According to Monks and Smith, younger children do not yet understand the characteristics of bullying such as repetition, imbalance of power, and intention (2006). Among older children and adolescents, less than 20% participate in typical bully roles such as a bully or victim (Salmivalli et al., 1996), making the study of various bullying roles imperative.

Characteristics of aggressive children. Although research has not thoroughly examined common characteristics in preschool bullies, there has been extensive research on the characteristics of older children and adolescents who take part in bullying roles. According to Olweus (1993), bullies are considered stronger than victims and display minimal empathy when interacting with others in social situations. Bullies feel the need
to strive to be superior to victims and classmates, and tend to be aggressive, impulsive, and possess a dominating personality. When comparing bullies to their peers, bullies commonly report feeling more unhappy, angry, or depressed (Vlachou et al., 2011).

Coutinho and Koinis-Mitchell conducted a 16-year study to investigate experiences of children that were bullied in childhood (2013). Each of the 1,500 participants, age 9-16 years, were asked if they had participated in any bullying roles within the last three months of the previous interview. The researchers reported that there was a significant number of individuals who had reported bullying experiences into adulthood and reflected similar bullying behavior patterns onto others. However, the participants who were identified as assistants and outsiders were not as directly impacted by these experiences in comparison to the standard bully and victim situation. Further research should be conducted to determine how these experiences influence individuals directly. They should also determine if these behavior tendencies are passed onto children as future predictors of assistant and outsider behavior among small children (Coutinho & Koinis-Mitchell, 2013). Information about how bullying tendencies emerge will assist in identifying various bullying behavior in young children. All of these roles have developmental characteristics that can act as a predictor within peer groups as well.

**Victims**

Recent studies suggest that victims (i.e., the recipient of peer aggression) may have physical or social characteristics that make them an easy target (Vlachou et al., 2011). For example, the victim may wear glasses, be over or underweight, have low self-esteem and low confidence, and have the tendency to blame themselves when they are being bullied (Vlachou et al., 2011). Victims also tend to be anxious and sensitive. Both
relational and physical victims display behavior that are more likely to make them seem vulnerable or different to their peers. These findings about typical victim behavior support the anxious characteristic of victims (Troy & Sroufe, 1987). Preschool children who are victims will likely exhibit low peer status and may have difficulties with peer relationships (Crick et al., 1999). Many children who are bullied will continue to be bullied through much of their childhood into their adolescent years. This can cause children to have a skewed perception of themselves and can cause them to have low self-esteem and increased sensitivity (Vlachou et al., 2011). Preschool children who have few friends, low self-confidence, and low self-esteem are potentially at higher risk to be bullied. Other peers may see them as an easy target (Vlachou et al., 2011).

Current research also shows that genetics and familial factors can be involved (Vlachou, Botsoglou, and Andreou, 2013). Genetics can play a role in how children interact, specifically with behavior such as aggression. Predetermined genetics from the parents of the child can play an important role in predicting outcomes of bullying behavior that are displayed by the children. Current research has not only discovered that genes and familial characteristics are a predictor for bullying, but also for victimization. Children who are victimized may be bullied because of genetic factors inherited from their parents, such as having to wear glasses. Children will begin to notice similarities or dissimilarities between themselves and others who look different (i.e., glasses vs. no glasses) at a young age, which is how the bullying initially takes place (Vlachou et al., 2011).
**Prosocial Behavior**

Among older children, only 20% of youth are involved in bullying directly as a bully or victim (Salmivalli et al., 1996). Students not directly involved are called bystanders and consist of several roles, including assistants, reinforcers, outsiders, and defenders. Defenders engage in prosocial behavior by trying to actively intervene in bullying situations (Salmivalli et al., 1996). Bystanders also make up approximately 17.3% of bullying or victimization situations. For example, a bystander take on the role as a defender by protecting a victim. A bystander could also take on the role as an assistant in which they would support a bully. In preschool, children may not defend in the same way as older youth, but some preschool children engage in more prosocial behavior which may be a precursor, or early indicator, of later defending behavior. The terms “prosocial children” or “prosocial behavior” will be used to refer to defender-like behavior among preschool children.

Examples of prosocial behavior in older students include attempting to protect the victim from the aggressive behavior by putting a stop to it, reporting it to an adult, or becoming friends with the victim. Since prosocial behavior have not been examined among preschool children extensively, we must draw information about defenders from the research on older children and adolescents (Monks et al., 2002). Children who defend others likely have high empathy, are well liked by their peers, and have a strong support network (Camodeca et al., 2014; Monks et al., 2002). Therefore, prosocial behavior may be a better way to identify and define what is typically seen from preschool-aged children. There is a lack of evidence within the research as to what precursors may lead
to defender like behavior and roles, thus further research should be conducted to assess what exactly defending looks like and how many people participate in this role.

Research does indicate, however, that language and social skills are important to developing prosocial behavior. Children who have developed social and linguistic skills appropriately will be less likely to display bullying behavior or actions and more likely to present prosocial behavior (Vlachou et al., 2011). Further, children are more likely to understand language and social skills rather than to have a full understanding of emotional competency (Belacchi & Farina, 2010). Emotional competency is defined as understanding ones' perspectives, desires, and emotions.

**Gender Differences**

Findings suggest that boys and girls will begin to display aggressive behavior within the preschool years, and the behavior will remain relatively stable throughout childhood (Suurland et al., 2016). Current research in combination with past research indicates significant gender differences in bullying behavior. Behavior vary by gender not only in adolescents, but also in children as young as 3 years of age. Research suggests that girls are more likely to participate in relational aggression whereas boys are more likely to display physical aggression (Ostrov et al., 2004). In terms of prosocial behavior, girls are more likely to be cooperative, polite, and reasonable to solve problems, and boys tend to be more demanding, direct, and less empathetic (Ostrov & Keating, 2004). Other research concluded the same results that boys were likely to be more aggressive, assertive, and controlling while girls were likely to be more dependent and compliant (Turner, 1991). Girls and boys are even more likely to display these behaviors with same sex peers. Recent research suggests that boys and girls display verbal aggression equally.
However, it is difficult to determine the degree of victimization and prosocial behavior that occur among girls and boys, due to that victimization and prosocial behavior can both be presented directly or indirectly (Crick et al., 1999).

**Developmental Characteristics of Typical Language and Social Skills**

There is considerable variability in children's language and social skill development; however, developmental research has established specific age ranges in which children should reach language and social development milestones. Social and language development begins in infancy and grows substantially within the first five years of life. The critical age for these skills to develop is 3 to 5 years of age. According to Bulotsky-Shearer et al., adequate social skill development may be an especially important skill for younger children who display problem behavior to acquire, given that these children have more difficulty engaging and interacting positively with peers (2012). Appropriate development of language and social skills will ensure more socially acceptable behavior; however, a delay in language skills, including receptive, expressive, and pragmatic language abilities, could cause maladaptive behavior, such as bullying behavior (American Speech-Language-Hearing Association, 2015).

Poor language development can lead to pre-bullying behavior in children that are likely to develop into aggressive behavior during the adolescent years. Research suggests that physical aggression is associated to academic problems, and in earlier research this correlation is also made between physical aggression and language difficulties in preschool children. Socioeconomic status (SES) and gender differences are also associated with language development outcomes (Bulotsky-Shearer et al., 2012). Studies
have shown that SES can also impact children in terms of bullying or victimization. Poor language abilities have been highly correlated with victimization (Perren, 2009).

Language skills are exceptionally important for social development. Effective communication with other individuals can enhance social competency and prosocial behavior. Receptive language is the primary process of understanding a language and serves as the foundation from which children learn how to express themselves appropriately. Pragmatics are essentially a form of social skills and include using language within appropriate contexts, such as turn taking or adapting your communication based on your conversational partner (American Speech-Language-Hearing Association, 2015). Strong pragmatic skills could enhance the likelihood of optimal social interactions with others and be linked to prosocial development.

Language development. Typical language development during the early preschool years consist of using 2 to 3 words to communicate or to make a request. The child’s speech may not be completely intelligible, but is easily understood by those who are familiar with the child’s current form of language. Children of this age are also able to express experiences that they may have had at home or school. Other people are able to understand what the child is saying as their speech and sentence structure becomes more complex (American Speech-Language-Hearing Association, 2015). Other language skills that preschool children will acquire include morphology, syntax, semantics, and pragmatics. Syntax and morphology skills refer to the structure of words and sentences, while semantic skills include word meaning and vocabulary. Pragmatic skills are how words and sentences are used in context. (American Speech-Language-Hearing Association, 2015).
Children around the age of four will be able to talk about events that occur at home or school. Children in the same age range are also able to describe a story or discuss what happened during their day (e.g., "I went to school, and then we had a snack"). Other people should be able to understand most of what the child is saying. Their speech should be much clearer than the previous year. More advanced language skills will develop as the children interact with adults or primary caregivers (Conti-Ramsden & Durkin, 2012). Preschool children are able to answer simple WH questions (i.e., who, what, where) and can reciprocate by asking "when", "why", and "how" types of questions. It is common for children this age to ask many "Why?" questions (Conti-Ramsden & Durkin, 2012). Communicative interactions also begin to include advanced use of, pronouns, plurals, and multisyllabic words in utterances of increasing length (American Speech-Language-Hearing Association, 2015).

Toward the end of the preschool years and into kindergarten, children will have typically made substantial progress in developing language skills. Children reaching the end of the preschool years should be able to say nearly all of the phonemic sounds with few mistakes. These children also begin to gain academic skills, such as naming numbers and letters, while advancing in language development. Preschool children are also able to initiate and maintain conversation using sentences with a more complex structure. Interestingly, children this age have learned how to adjust their sentence complexity when talking to younger children, as well as adjust their tone when they are inside or outside (American Speech-Language-Hearing Association, 2015).

Previous research suggests a number of factors may influence children's behavior and language development. Preschool children with delayed language skills and
development have shown increased behavioral problems (Stevenson, 1997). Another research study found that children from low income families are at increased risk for poor language skills (Huaging & Kaiser, 2004). Observations concluded that children with language delays exhibited more problem behavior. With low language ability and poor social skills, these children are at a greater risk for victimization (Huaging & Kaiser, 2004). Typical language skills may not be completely mastered in preschool children, but age-appropriate language can be helpful when challenged with social situations. Appropriate language skills can help decrease frustration during social interactions by using language to solve issues, this will also increase their adaptation during the preschool years.

Social development. According to Camodeca et al., (2015), social competence is a critical protective factor for a child and their adjustment to certain situations, which will help them engage and interact appropriately. Social competence will also help them become more socially accepted by their peers (Denham et al., 2003). Appropriate social interactions require the knowledge of social expectations and language skills to maintain relationships among peers and adults. As young children, developing social skills appropriately is something that requires both language and prosocial competency. When children are entering preschool, and experiencing a group setting for the first time, it is important that they are able to engage and learn with their peers (Lima, Rodger, & Brown, 2010).

Empathy and assertion seem to be important social skills in relation to bullying role behavior, at least among elementary and middle school children (Jenkins, Demaray, Secord, & Summers, 2014; Jenkins & Nickerson, in press). Empathy is a key component
of childhood social skill development. Empathy would be best defined as reflecting concern for the welfare of other children (Burford et al., 1996). Studies have suggested that empathic behavior in preschool children can play a critical role in decreasing or inhibiting aggressive actions towards other children (Feshbach, 1987). All of these behaviors require ample social skill development to be able to handle challenges that face preschoolers.

Assertion is another key component in social skill development. Assertiveness in young children is critical in the typical bully/victim dyad. If children lack assertiveness, they are more likely to be targeted and at risk for further victimization. In recent studies, assertion has been rated by preschool teachers as a social skill deficit for preschool aged children. With assertion as a deficit area for young children, this could lead to increased bullying role behavior. An example of assertion would be questioning demands or making requests of other children (Lane et al., 2004). Children that display strong social skills including both empathy and assertion are less likely to be bullied or targeted by other children (Fox, 1998).

Based on teacher perception ratings, current research shows that preschoolers are likely to display prosocial behavior or prosocial skills (Iannotti, 1985). These skills consist of sharing, helping, and sympathy, rather than empathy. Children will display sharing by giving a peer a wanted item (e.g., toys) in turn for friendship or peer acceptance. Preschool children are aware when a peer is upset or in distress over a wanted item therefore they have learned that sharing can mediate this problem (Iannotti, 1985). Young children recognize when their peers are in need and are able to respond or help without a request.
As children develop they are able to better understand social concepts and how to interact in socially appropriate ways by solving problems and resolving conflicts. At the beginning of preschool, children are able to understand differences in social situations and what they mean. (American Speech-Language-Hearing Association, 2015).

Heydenberk and Heydenberk (2007) examined how children in kindergarten and first grade acquire the ability to solve social-emotional problems or conflicts with peers. They found that children follow a three-step process including being able to recognize that there is a problem, addressing the problem, and attempting to resolve the problem (Heydenberk & Heydenberk, 2007). Recognizing the problem is influenced by the child's ability to notice any type of antecedent behavior before the problem arises. Once the problem is present, the child can then mediate it by using previously acquired social skills. Social skills are of utmost importance when resolving problems and attaining and maintaining friendships with their peers. During the developmental years, children are able to gradually establish a foundation to gain social competency. Further research should address the developmental process within preschool-aged children to identify when social skills begin to emerge. Research should also consider what prosocial advantages are linked to coping and social-emotional skills.

**Association of Language, Social Skills, and Aggressive Behavior**

Typical behavior exhibited by children vary greatly depending on the developmental stage of the child. For example, it is developmentally typical for children to display aggressive behavior such as biting, kicking, or hitting from the age of 1 to 3 (Girard et al., 2014; Monks et al., 2005); however, it is atypical and less acceptable for preschool and elementary school children to display this same behavior. Similarly,
making one word requests and crying to get attention is normal for 1 and 2 year olds, but is not a socially appropriate behavior for a preschool child. As children grow, expectations for behavioral conduct and language use increase. Relatedly, challenges in one area of development (e.g., language) have been linked with difficulties in other areas of development (e.g., externalizing or aggressive behavior) (Girard et al., 2014).

The associations between physical aggression and poor language development have been linked with not only maladaptive outcomes, but also long lasting effects of aggressive behavior beyond the preschool age. There are three possible causes as to why poor language ability can lead to aggressive behavior (Girard et al., 2014). The first cause would be that some children do not have the language ability to effectively explain their feelings and emotions. This leads to acts of aggression due to frustration in effectively communicating in social situations (Girard et al., 2014). Further research has also shown that there are other causes of poor language ability, such as inattention to verbal stimuli and other environmental factors (e.g., parenting styles, externalizing problems, or maladaptive behavior) that will lead to aggressive behavior. When a child lacks verbal stimuli, he or she may have difficulty learning how to express feelings or emotions appropriately, leading to aggression in place of appropriate communication in social situations (Girard et al., 2014). The next hypothesis for developing aggressive behavior would include the style of parenting the child has been exposed to as well as the existence or emergence of externalizing problems. Harsh punishments and rare parent-child social interactions have been closely associated with children presenting aggressive behavior (Girard et al., 2014). Because the parent is a role model for the child, harsh punishments lead to more aggressive tendencies in the child’s behavior patterns, therefore appropriate
punishments should be provided to enhance positive experiences. Many positive and appropriate parent-child interactions are crucial for the child to learn how to interact with others in social situations (Girard et al., 2014). Family based interactions play a huge role in early development for children, and could help establish foundational skills to build social and language competency.

**Association of Language, Social Skills, and Victimization**

Current research addresses the ways in which children with speech and language problems experience bullying, and what types of roles the children partake in. Children who experience language and social difficulties are more likely to be victimized by bullies than children who have developed social and language skills within the same time frame as their peers. Victimization is highly correlated with communication difficulties (Hughes, Schuele, & Kelly, 2014). Speech and language difficulties associated with increased victimization include stuttering, phonemic difficulties, and lack of appropriate social skills for conversational situations. Other research (Nippold et al, 2012) has recognized the importance of considering children who experience bullying because of peer rejection. Peer rejection occurs when the children are unable to express themselves using appropriate speech and social skill techniques. The combination of speech and language and social skill deficits can lead to a child being targeted by bullies.

Research by Monks et al., (2005) proposed that children who experience victimization in a bullying situation have social processing distortions. This means that these particular individuals have a skewed and deviant perception of what social situations would typically consist of and how to handle them. Being victimized is also closely related not only to misconceptions of social situations, but also to aggressive
behavior. Processing deficits as well as poor social performance in social cognition tasks are highly prevalent in victims, rather than in bullies (Olweus, 1993).

Further, children who are victimized by peers are not just randomly selected to be victims. Bully/victim situations occur because of conflicts among relationships, self-esteem difficulties, and power imbalance (Olweus, 1993). These situations seem to continue due to the fact that when peers are identified as a victim, it lowers the child's self-esteem even further and the cycle continues again.

**Association of Language, Social Skills, and Prosocial Behavior**

Language and social skills are both strongly related to prosocial behavior as well. Prosocial behavior is identified as individuals who help another and show empathy or concern for one another (Vlachou et al., 2011). Children with prosocial tendencies tend to have adequately developed language and social skills. Children who have developed social skills are more likely to be able to regulate themselves. Self-regulation could help alleviate problem behavior that occur over time, such as aggression. Children with good self-regulation are able to gain friendships and also decrease the likelihood of being bullied. People with these particular set of skills are also able to make friendships more easily (Flook et al., 2015).

Children are able to gain social competency through social experiences. Flook et al. (2015) gave preschool children the opportunity to interact with peers during a sharing experiment. The results indicate that children within the preschool age range can participate in prosocial behavior (i.e., sharing), however they must have exposure. Social competency can play a large role in predicting bullying or non-bullying behavior with young children.
The Current Study

Current bullying research primarily focuses on bullying among school-age children and adolescents and lacks extensive evidence of preschool-aged bullying. The current study focused exclusively on bullying roles among preschool children (i.e., aggressor, victim, prosocial) and how language and social skills are related to aggression, victimization, and prosocial behavior.

There are various reasons why preschool children are experiencing bullying. Children may be experiencing aggression or victimization due to a lack of social or language skills that are required to interact with other individuals more appropriately. Prosocial behavior is likely to occur when the child is able to use social and language skills appropriately when solving problems and conflicts. Using social and language skills appropriately will result in being less involved in bullying and possibly being a bystander or a defender. There are four research questions that were considered within this study that helped determine what contributes to aggressive behavior and what may influence social factors.

Research Question 1: What are the gender differences in the main study variables including aggressive behavior, victimization, and prosocial behavior? This researcher hypothesizes that boys will be more likely than girls to show aggressive behavior, because they are less likely to have social skills (Girard et al., 2014; Monks et al., 2005).

Research Question 2: What is the association of language and social skills to aggressive behavior? The researcher hypothesizes that delayed or below average language and social skills would be related to more aggressive behavior (Girard et al., 2014; Monks et al., 2005).
Research Question 3: What is the association of language and social skills to victimization? It is hypothesized that those who have more difficulty with language and lack social skills will experience greater victimization (Hughes, Schuele, & Kelly 2014; Monks et al., 2005; Nippold et al., 2012). It is crucial to examine the association of language and social skills to those who are targeted victims, as they may not acquire prosocial skills (Flook et al., 2015).

Research Question 4: What is the association of language and social skills with prosocial behavior? It is hypothesized that greater prosocial behavior will be related to more advanced language and social skills (Flook et al., 2015). Children with more advanced language skills will be able to understand prosocial behavior including when and how to use prosocial behavior. If the children use language skills effectively there could potentially be a high correlation between language skills and prosocial behavior.

Methods

Participants

Fifty-four preschool children (30 boys and 24 girls), were recruited from a university-based preschool and a state and privately funded preschool. Children’s ages ranged from 3 years 0 months to 5 years 3 months. Seventeen children were enrolled at a university preschool program that was open to members of the community, and 37 children attended a preschool that housed a state and privately funded preschool program.

A total of 4 classroom teachers completed ratings of the children’s social skills and peer interactions. Two of the classroom teachers completed ratings at Kids Kingdom, while the other two teachers completed ratings at the university preschool program. All four classes followed a structured preschool program. The 37 children enrolled at Kids Kingdom are divided into two classes. Classroom teacher one rated 21
children and classroom teacher two rated 17 children. All 38 children see both teachers each day. Children in classroom one would switch to classroom two in the afternoon, while children in classroom two would switch to classroom one in the afternoon. The other two teachers who completed ratings at the university preschool program had classes three and four. The teacher for classroom three rated 9 children, and the teacher for classroom four rated 8 children. Each of the preschool teachers were Caucasian women. Two teachers had bachelor's degrees in Early Childhood Education and two teachers had advanced degrees in Family Consumer Sciences and taught in the university preschool program while also supervising college students completing practicum hours at the center.

**Procedures**

The data for the current study were collected as a part of a larger research study investigating language and social skills among preschool children by using teacher rating scales, standardized assessments, and video and audio recording. The current study only used teacher ratings and standardized language assessment results. The larger data collection included audio and video recordings of peer interactions in the classroom. Eastern Illinois University Institutional Review Board (IRB) approval was obtained prior to the beginning of the study. Consent was collected from teacher participants who completed ratings for their students and parental consent was collected for all child participants. A Communication Disorder and Science (CDS) professor and students at Eastern Illinois University conducted the individually-administered standardized language assessments with the preschool students. These assessments took approximately 30 minutes per child, but breaks were given when necessary. In each
classroom, the standardized language assessments were given in one or two days. Teachers completed their ratings of the children’s performance during this 1-month period as well.

Measures

Social skills improvement system–teacher rating form (SSIS; Gresham & Elliott, 2008). The SSIS measures perceptions of social skills, problem behavior, and academic competence. Only the empathy and assertion questions were given for this study because they are key social skills among older children in relation to aggression and prosocial behavior (Jenkins et al., 2014; Jenkins & Nickerson, in press). Questions were rated on a 4-point rating scale ranging from 1 (Never), 2 (Seldom), 3 (Often), and 4 (Almost Always). Evidence of reliability of the Social Skills Improvement System was reported in the manual (Gresham & Elliott, 2008). Test-retest reliability between the teacher, parent, and student forms were conducted to examine how they correlate with one another. Each form, age group, and subscale report internal consistency coefficient alpha reliabilities. The median for the Teacher form subscale reliabilities range from .80 - .90 (Gresham & Elliott, 2008). Results indicate that the test-retest reliability measure was stable and consistent across forms and range from .80 - .71. The results also indicate that the reliability coefficients for the Social Skills and Problem Behavior scales are .81 and .77. This indicates that this measure exhibits strong reliability (Gresham & Elliott, 2008). Reliability is demonstrated by showing that the internal consistency reliability is quite strong for the SSIS. The correlations provide adequate support for the criterion measure of the SSIS. The correlation between both forms show a moderate to high reliability coefficient (Gresham & Elliott, 2008).
Preschool Social Behavior Scale- Teacher Form (PSBS Crick et al., 1997).
The PSBS- Teacher Form includes 25 items that measure social behavior of preschool children, and includes items that assess Relational Aggression, Overt/Physical Aggression, and Prosocial skills (See Appendix A). Each of the items were rated with a Likert rating scale ranging from 1-5 (1 = Never or almost never true, 2 = not often, 3 = some times, 4 = often, 5 = always or almost always true); (Crick et al., 1997). Examples of items rated include, “When mad at a peer, this child keeps that peer from being in the play group” (Relational), “This child hurts other children by pinching them” (Physical), and “The child says or does nice things for other kids” (Prosocial). Cronbach’s alpha coefficients were .96, .94, and .88 for Relational Aggression, Overt/Physical Aggression, and Prosocial skills, respectively (Crick et al., 1997). The combined relational and overt/physical aggression subscale scores were combined to create a total aggression score.

Preschool peer victimization measure- teacher form-revised (PPVM-T-R; Crick et al., 1999). The PPVM-T-R includes 9 items that assess physical, overt, and relational victimization (See Appendix B). Items are rated on a scale ranging from 1-5 (1 = Never or almost never true, 2 = not often, 3 = some times, 4 = often, 5 = always or almost always true). In the current study, the alpha coefficient was .83 for the total scale. The score used in the analyses was a total score of all items. Internal consistency was demonstrated with Cronbach’s alpha of .77 for relational aggression, and .85 for physical aggression (Crick et al., 1999).

Peabody Picture Vocabulary Test- Fourth Edition (PPVT-IV; Dunn & Dunn, 2007). The PPVT was used to measure an individual’s receptive vocabulary ability.
Children are told to point to an item named by the examiner, such as “point to digging,” from a field of 4 pictures. The PPVT-IV assesses knowledge of nouns, verbs, and attributes. The PPVT-IV manual reports that there were strong indicators of reliability and validity. Alternate form reliability was assessed by measuring the administration of two different test forms to the same group of subjects (Dunn & Dunn, 2007) and coefficients ranged from .87-.93. According to the PPVT-IV manual they also conducted the split half method and obtained a reliability coefficient averaging .94 or .95 (Dunn & Dunn, 2007). Validity of this measure was demonstrated through examining the correlations of the PPVT-IV with other measures of achievement abilities and oral language. Some of these measures include the Expressive Vocabulary Test- 2nd Edition (EVT-2), Comprehensive Assessment of Spoken Language (CASL), Clinical Evaluation of Language Fundamentals (CELF), and the Peabody Picture Vocabulary Test- 3rd Edition (PPVT-III) Each of the measures are based on special education categories (i.e., gifted, mild, learning disability, etc.), and are administered using standard procedures. Each of these measures confirm clinical utility and validity of the PPVT-IV.

Data Analysis Plan

There were a series of analyses conducted to answer the posed research questions above. To answer the first research question, 1) What are the gender differences in the main study variables including; aggressive behavior, victimization, and prosocial behavior?, an ANOVA was conducted to determine the gender differences in levels of aggression, victimization, and prosocial behavior. To answer the second research question, 2) What is the association of language and social skills to aggressive behavior?, a regression analysis was conducted to determine if there is an association of language and social skills to aggressive behavior. The independent variables were language skills.
(i.e., total score from PPVT-IV), empathy and assertion. The dependent variable was the aggression score from the PSBS. To answer the third research question, 3) What is the association of language and social skills to victimization?, the same process occurred, except the aggressive behavior was replaced by victim experiences collected using the PPVM-T-R score. To answer the fourth question, 4) What is the association of language and social skills with prosocial behavior?, a similar regression analysis was conducted following the same procedures to examine the association of social and language skills with prosocial behavior.

**Results**

**Descriptive statistics.** Intercorrelations, means, standard deviations, and ranges were conducted among all variables in the study (see Table 1). There was a significant correlation between Assertion and Language Skills. Empathy was significantly associated with both Language Skills and Assertion. Aggression was negatively correlated with Language Skills and Assertion, and there was a significant negative correlation with Empathy. Victimization was negatively associated with both Language Skills and Assertion, but was strongly and negatively associated with Empathy. Victimization was also strongly and positively correlated with Aggression. Prosocial Behavior was strongly and positively correlated with Language Skills, Assertion, and Empathy, but there was a negative significant correlation with Aggression and Victimization.

**Gender differences.** An ANOVA was conducted to address the first research question, “What are the gender differences in the main study variables including; aggressive behavior, victimization, and prosocial behavior?” variables. Table 1 presents
means and standard deviations of the main study variables by gender as well as ANOVA results testing for gender differences in the means of the main study variables. There were no significant differences between gender and aggressive behavior $F(1, 54) = .174, p = .678$, gender and victimization $F(1, 54) = 1.41, p = .241$, and gender and prosocial behavior $F(1, 54) = .513, p = .477$.

**Regression analyses.** To answer the second research question, "What is the association of language and social skills to aggressive behavior?" a regression was conducted. The regression for Aggression was not significant $F(3, 54) = 2.354, p = .083$. The three independent variables (Language Skills, Empathy, and Assertion) only predicted 12.2% of the variance and did not predict Aggression.

To answer the third research question, "What is the association of language and social skills to victimization?" another regression was conducted. The regression for Victimization was significant, $F(3, 54) = 3.056, p = .037$. Language Skills, Empathy, and Assertion accounted for 15.2% of the variance. Empathy emerged as the only significant index predictor ($\beta = -.494, p = .021$) where less empathy was associated with high victimization scores. Teachers who rated children with lower empathy levels were associated with higher victimization scores.

To answer the fourth research question, "What is the association of language and social skills with prosocial behavior?" a third regression was conducted. The regression for Prosocial Behavior was significant $F(3, 54) = 48.74, p = .000$. Language Skills, Empathy, and Assertion accounted for 74.1% of the variance. Language Skills, Assertion, and Empathy were all significant individual predictors. The Language Skill score had a significant positive relation with Prosocial behavior ($\beta = .221, p = .009$).
where Language Skills increased, Prosocial behavior increased. Assertion had a significant negative relation with Prosocial behavior ($\beta = -0.299, p = 0.009$), indicating lower levels of assertion yielded an increase in prosocial behavior. Empathy had a significant relationship with prosocial behavior ($\beta = 0.945, p = 0.000$). Higher levels of empathy yielded higher levels of prosocial behavior.

**Discussion**

This study was conducted to examine how social and language skills are related to aggressive, prosocial, and victim behavior in preschool-aged children. There is a lack of research regarding early predictors of aggressive and prosocial behavior in preschool aged children, therefore further research in this area would be beneficial. Further research would be beneficial to help identify children that are at risk for developing aggressive behavior later in childhood. The goal of this study was to add information and help bridge the gap in this area of research by analyzing social and language correlates of aggressive, victim, and prosocial behavior in preschool.

Results from this study indicate that there were no significant gender differences when examining the main study variables including, aggressive behavior, victimization, and prosocial behavior. These findings suggest that social and language skill predictors among girls and boys in this study are relatively stable. In other studies, research suggests that girls are more likely to participate in relational aggression whereas boys are more likely to display physical aggression (Ostrov et al., 2004). Considering the prosocial behavior variable in children ages 2-6, research suggests that girls are more likely to be cooperative, polite, and reasonable to solve problems, while boys tend to be more demanding, direct, and less empathetic (Ostrov & Keating, 2004). The current study's
findings might be different than other research studies due to the small sample size, using teacher reports of social behavior, and standardized language assessments only. Obtaining a demographically and geographically diverse sample, incorporating parent reports of social behavior, and using different language assessment methods could modify the outcome of the study. Using a large and more diverse sample of participants would be beneficial in order to create an appropriate norm for behavior within the preschool population. Having an appropriate norm would provide useful information for other researchers to use. Additional surveys from parents could help determine which behaviors are more prevalent among the preschool participants. Parent perceptions would also be valuable information considering they spend more time with their children in comparison to teachers. Another consideration would be to include various language assessments to create reliable and accurate measures of behavior across raters.

Counter to the predictions, the current study found that the association of language and social skills to aggressive behavior was not significant. Girard et al. found that poor language skills are related to aggressive behavior in children ages 2-6 (2014). However, in the current study with preschool children, language and social skills were not related to aggressive behavior. These differences in findings could be explained by the way in which language was measured. The language assessment used in the current study (the PPVT) measures receptive language ability (i.e., how well children understand what is said to them), but other studies have assessed expressive language abilities (i.e., how well children convey their thoughts, needs, or wants). It may be that the ability to express needs or wants may be related to aggression more so than the ability to understand what is said. The results of the current study could also be attributed the
limited variance in aggression scores in the sample since there were few students with high levels of aggression. Given the small teacher-to-student ratio in preschool classrooms, students may simply not engage in much physical aggression; therefore, the teachers are not seeing and reporting physical aggression. Also, the results may not be significantly different due to the restricted developmental stages of the participants in the preschool classroom (ages 3-5). Research suggests that bullying behavior are occurring as early as two years of age (Beane, 2005), and developmental studies have also shown that the rate in which children engage in aggressive behavior increases and peaks during the second and third year of life (Suurland et al., 2016).

The current study found that there was a significant relationship between language and social skills to victimization. This suggests that language and social skills can impact the degree of victimization. The regression analysis indicated that empathy was a significant predictor based on teacher ratings. Children rated with lower levels of empathy resulted in higher levels of victimizing behavior onto others. These findings suggest that although language ability may indicate bullying behavior, empathy is a more powerful predictor overall. This finding is consistent with the hypothesis of this study as well as previous research. Research studies suggest that victimization is highly correlated with communication difficulties (Hughes, Schuele, & Kelly, 2014; Schwartz et al., 1998). Children who were rated with higher levels of victimization behavior and communication difficulties could often experience peer rejection. Peer rejection will also increase the chances that the student is bullied or victimized by others.

The association of language and social skills to prosocial behavior was significant. Higher ratings of language and social skills were significant predictors of
prosocial behavior in preschool children. In an older study, language and social skills have also been strongly related to prosocial behavior (Lane et al., 2004). Assertion was also considered a significant predictor of prosocial behavior. Children who were rated with higher levels of assertiveness showed greater levels of prosocial behavior.

Assertiveness may be an important skill for individuals engaging in prosocial behavior because defending one’s peers requires the ability to stand up for, or assert yourself, in social situations. If children lack assertiveness, it is likely that they will be at risk for further victimization and less likely to display prosocial behavior. Another significant predictor of prosocial behavior was empathy. Children who have higher ratings of empathy were more likely to display prosocial tendencies, similar to findings with older children. The current findings suggest that that greater prosocial behavior will be related to more proficient language and social skills. Recent research conducted by Flook et al., (2015) suggests that acquiring more advanced language skills results in children being more likely to understand prosocial behavior (i.e., sharing, helping, empathy etc.).

**Limitations and Future Research**

This study has limitations that should be considered. This study only used teacher reports and standardized assessments to gather information of language and social skills in preschool. It would be more beneficial to gather multiple sources of information and data to get a more comprehensive view of the students’ behavior. Future studies should survey other individuals (i.e., parents), and use technologies to get additional data. Parent surveys would provide a more comprehensive view of the child’s behavior by including behavior ratings from home, in addition to school ratings. Using audio and video recordings could provide a more consistent and reliable measure of the student
behavior across raters. The ratio of teachers to students in each of the four classrooms should also be considered. At the EIU preschool the teacher to student ratio was 1 to 1, whereas teacher to student ratio at Kids kingdom are 1 to 21 and 1 to 17. Another limitation of this study was not using video and audio recordings of the behavior. A fourth limitation was the relatively small sample of preschool children (N = 54) and preschool teachers (N = 4), primarily from a rural area. Future research studies should seek a more geographically and demographically diverse sample to help ensure an adequate representation of the students and teachers who participated in the study.

Overall Summary

Overall, the purpose of this study was to analyze how social and language skills are related to aggressive, prosocial, and victim behavior in preschool-aged children. This was done by collecting more data from a preschool sample that focuses on language and social skills, empathy, and assertion and how these may be predictors of preschool bullying role behavior. Findings from this study suggest that there were no significant gender differences when examining aggressive, victimization, or prosocial behavior. The association of language and social skills to aggressive behavior was not significant, while the association of language and social skills to victimization was significant. From this study, we can gather that language and social skills can influence bullying role behavior. This information will be useful to bridge the gap in research and helpful for future research when examining bullying roles in preschool aged children.
References


Table 1.

*Intercorrelations, means, standard deviations, and range of all study variables*

<table>
<thead>
<tr>
<th></th>
<th>PPVT</th>
<th>Assertion</th>
<th>Empathy</th>
<th>Aggression</th>
<th>Victimization</th>
<th>Prosocial Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPVT</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assertion</td>
<td>.397**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Empathy</td>
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<td>.764**</td>
<td>--</td>
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<tr>
<td>Aggression</td>
<td>-.186</td>
<td>-.170</td>
<td>.328*</td>
<td>--</td>
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<td></td>
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<tr>
<td>Victimization</td>
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<td>-.094</td>
<td>-.299*</td>
<td>.794**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Prosocial Behavior</td>
<td>.542**</td>
<td>.511**</td>
<td>.819**</td>
<td>-.370**</td>
<td>-.439**</td>
<td>--</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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</thead>
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<td>PPVT</td>
<td>106.43</td>
<td>14.4</td>
<td>76</td>
<td>138</td>
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<td>Assertion</td>
<td>13.29</td>
<td>2.53</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>Empathy</td>
<td>14.93</td>
<td>2.67</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Aggression</td>
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<td>12</td>
<td>35</td>
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<tr>
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<td>10.36</td>
<td>3.15</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Prosocial Behavior</td>
<td>14.84</td>
<td>3.48</td>
<td>4</td>
<td>20</td>
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</table>

Note: *p > .05, **p > .01, ***p > .001.
Table 2.

Standardized and unstandardized regression coefficients, standard error, and p values

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<thead>
<tr>
<th></th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>p</th>
<th>R²</th>
<th>Adj R²</th>
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<td></td>
<td></td>
<td></td>
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<td>-.017</td>
<td>.046</td>
<td>.712</td>
<td>.122</td>
<td>.070</td>
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<td>Assertion</td>
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<td>.357</td>
<td>.352</td>
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<td></td>
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<td>-.445</td>
<td>-.739</td>
<td>.352</td>
<td>.041</td>
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<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
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<td>.019</td>
<td>.009</td>
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<td>.726</td>
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<tr>
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<td>.009</td>
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<tr>
<td>Empathy</td>
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<td>1.234</td>
<td>.150</td>
<td>.000</td>
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<td></td>
</tr>
<tr>
<td><strong>Victimization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PPVT</td>
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<td>.312</td>
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<td>.103</td>
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<td>.090</td>
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</table>
### Preschool Social Behavior Scale – Teacher

<table>
<thead>
<tr>
<th>Child’s Name __________________________</th>
<th>Child’s sex: Male or Female?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never or almost true</td>
</tr>
<tr>
<td>1. This child is good at sharing and taking turns</td>
<td>1</td>
</tr>
<tr>
<td>2. This child kicks or hits others.</td>
<td>1</td>
</tr>
<tr>
<td>3. This child is helpful to peers.</td>
<td>1</td>
</tr>
<tr>
<td>4. This child tells a peer that he/she won’t play with that peer or be that peer’s friend unless he/she does what this child asks.</td>
<td>1</td>
</tr>
<tr>
<td>5. This child verbally threatens to hit or beat up other children.</td>
<td>1</td>
</tr>
<tr>
<td>6. This child is kind to peers.</td>
<td>1</td>
</tr>
<tr>
<td>7. This child pushes or shoves other children.</td>
<td>1</td>
</tr>
<tr>
<td>8. This child tells others not to play with or be a peer’s friend.</td>
<td>1</td>
</tr>
<tr>
<td>9. This child doesn’t have much fun.</td>
<td>1</td>
</tr>
<tr>
<td>10. This child says or does nice things for other kids.</td>
<td>1</td>
</tr>
<tr>
<td>11. When mad at a peer, this child keeps that peer from being in the play group.</td>
<td>1</td>
</tr>
<tr>
<td>12. This child verbally threatens to physically harm another peer in order to get what they want.</td>
<td>1</td>
</tr>
<tr>
<td>13. This child tries to embarrass peers by making fun of them in front of other children.</td>
<td>1</td>
</tr>
<tr>
<td>14. This child ruins other peer’s things (e.g. art projects, toys) when he/she is upset.</td>
<td>1</td>
</tr>
<tr>
<td>15. This child tells a peer they won’t be invited to their birthday party unless he/she does what the child wants.</td>
<td>1</td>
</tr>
<tr>
<td>16. This child looks sad.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>17.</strong> This child throws things at others when he/she doesn’t get his/her own way.</td>
<td>1</td>
</tr>
<tr>
<td><strong>18.</strong> This child smiles at other kids.</td>
<td>1</td>
</tr>
<tr>
<td><strong>19.</strong> This child walks away or turns his/her back when he/she is mad at another peer.</td>
<td>1</td>
</tr>
<tr>
<td><strong>20.</strong> This child verbally threatens to push a peer off a toy (e.g. tricycle, play horse) or ruin what the peer is working on (e.g. building blocks) unless that peer shares.</td>
<td>1</td>
</tr>
<tr>
<td><strong>21.</strong> This child tries to get others to dislike a peer (e.g. by whispering mean things about the peer behind the peer’s back).</td>
<td>1</td>
</tr>
<tr>
<td><strong>22.</strong> This child verbally threatens to keep a peer out of the play group if the peer doesn’t do what the child says.</td>
<td>1</td>
</tr>
<tr>
<td><strong>23.</strong> This child hurts other children by pinching them.</td>
<td>1</td>
</tr>
<tr>
<td><strong>24.</strong> This child is well liked by peers of the same sex.</td>
<td>1</td>
</tr>
<tr>
<td><strong>25.</strong> This child is well liked by peers of the opposite sex.</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix B
PPVM-TF-R

**Directions:** Teachers, for this last section we would like you to answer questions about things that may happen to children.

<table>
<thead>
<tr>
<th></th>
<th>Never or almost never true</th>
<th>Not often</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always or almost always true</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. This child gets hit, kicked, or pinched by peers. 1 2 3 4 5
2. This child gets invited to join a group of playmates when he/she is playing alone. 1 2 3 4 5
3. This child gets ignored by playmates when they are mad at him/her. 1 2 3 4 5
4. This child gets pushed or shoved by peers. 1 2 3 4 5
5. This child gets help from peers when he/she needs it. 1 2 3 4 5
6. This child gets left out of the group when someone is mad at them or wants to get back at them. 1 2 3 4 5
7a. This child gets things thrown at him/her when others are angry with him/her. 1 2 3 4 5
8. This child gets cheered up by playmates when he/she is sad or upset about something. 1 2 3 4 5
9. This child gets told “you aren’t my friend/buddy” if they do not comply with a playmates request. 1 2 3 4 5
10a. This child gets nice things done for him/her by peers. 1 2 3 4 5
11a. This child gets toys or objects taken away by peers when they are mad at him/her. 1 2 3 4 5
12a. This child gets told “you can’t play” by peers when they are angry at him/her.