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The Relationship Between Prosocial Behavior and Teacher Perceptions in Preschoolers

BY

Allie Endsley

**UNDERGRADUATE THESIS**

Submitted in partial fulfillment of the requirement for obtaining

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4/26/19  
Date

THESIS ADVISOR

4/26/19  
Date

HONORS COORDINATOR

4/26/19  
Date

DEPARTMENT CHAIR

The Relationship Between Prosocial Behavior and Teacher Perceptions in Preschoolers

Allie Endsley

Eastern Illinois University

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## **Chapter I**

### **Introduction**

It is well known that humans are extreme social beings and need social interaction to excel in many aspects of life, such as academic and career success as well as developing fulfilling relationships. With increased exposure to social interaction, humans typically develop competent and engaging social skills. For young children, preschool provides an opportunity for social interaction while extreme physical, social, and emotional changes occur. Preschool children are just beginning to be exposed to the social expectations of society in a more formal setting and may experience interactions with age-equivalent peers for the first time. Because of this, children grow in their relationships with others, their own self-understanding, and their ability to regulate emotions (Copple & Bredekamp, 2009).

Little research exists regarding social skill development and teacher perceptions in the preschool age range, but abundant research regarding older, school-age students is available. It is important for teachers to possess knowledge concerning social development and prosocial behavior in preschool children in order to discriminate typical and atypical behavior. Typical preschool children exhibit emerging social skills by independently playing in groups and involving their classmates in their play routines (McLaughlin, 1998). As a preschool child develops and gains language skills, this also strengthens their social skills. McLaughlin (1998) suggests that preschoolers can improve their conversational abilities by exchanging multiple utterances with their conversational partner, which suggests increased opportunities for children to exhibit social skill development. As emotional competence develops during this age, preschool children also gain an understanding of different emotions and the ability to express those emotions (Copple & Bredekamp, 2009). This can have both a positive and negative impact on their relationships at school and at home. A positive impact of emotional competence

development is that a preschooler can comfort and sympathize with a peer that is feeling tired, sad, or hurt. However, as these skills are only emerging during this time, a child may not yet possess the ability to accurately express their emotions. As a result, a child could experience decreased opportunities for social interactions, which could ultimately hinder their ability to develop friendships.

Prosocial behaviors typically emerge during preschool as well. These types of behaviors are described as any behavior that includes helping, comforting, defending, and sympathizing that benefits not only the receiver, but also the giver (Kostelnik, Soderman, & Whiren, 1993). Prosocial skills are typically evident in the preschool classroom and it is important that teachers understand these types of behaviors in order to make accurate judgements about their students' development. It has been found that teachers often make misperceptions regarding their student's abilities, which results in decreased academic growth for that student (Ready & Chu, 2015; Baker, Tichovolsky, Kupersmidt, Voegler-Lee, & Arnold, 2015). Evidence regarding the relationship between prosocial behavior and teacher perceptions in preschoolers is needed to further understand prevention and intervention programming that aid social and language development, as well as academic success.



## Chapter II

### Review of the Literature

#### Social Skill Development in Preschool

Children's social development emerges and refines as they are able to verbally and nonverbally communicate desires to others. Increased social skills also allows for the opportunity to control others' behavior (McLaughlin, 1998). Social skills slowly evolve from being able to express varying emotions to showing empathy for someone else's feelings. Also, as toddlers possess the ability to engage in parallel play, preschool children build on their parallel play skills and begin to play independently in groups and include other classmates in their play routines (McLaughlin, 1998). Children also acquire more complex conversational skills in preschool, such as exchanging utterances with their conversational partner and improving the flow of topics during a conversation (McLaughlin, 1998). All of these skills assist in preschool children's social development.

Kostelnik et al. (1993) suggests that the development of social skills acts as a basis for the emergence of other types of learning. Therefore, it is important that teachers and educators recognize social development difficulties in the classroom as well as provide environments for social learning to progress. In preschool, children truly begin to recognize their inner self and begin to "come into their own as social beings" (Copple & Bredekamp, 2009, p. 120). As children grow older, their time consists of determining their place in a friend group and establishing and maintaining their relationships with peers (Kostelnik et al., 1993).

**Language.** Language is a key foundational ability that assists in the development of social skills during preschool. McLaughlin (1998) suggests by the time children enter preschool, improvement in their language skills results in significant growth in their conversational skills as

well as their ability to exchange multiple utterances and improve the flow of topics during conversations. They are also beginning to learn how to share toys with another peer, which forces children to use language such as, “here you go” or “it’s my turn now”. Preschoolers’ conversation abilities improve dramatically from the toddler age because their cognitive development allows them to use recall and imagination skills during conversations to talk about a variety of topics, instead of solely being restricted to the “here-and-now” (McLaughlin, 1998). Increased ability to use complex language becomes evident in friendship development and conflict. During conflicts, children may use their increased level of language skills to purposely hurt their peer’s feelings (Copple & Bredekamp, 2009). For example, if two children are in an argument, one may say “I don’t like you” or “you’re not my friend anymore”. Conversely, preschool children can also use their language in a positive way to establish, build, and maintain friendships. They may ask someone to play with them or use comforting words when they see their friend crying. They may also use polite social phrases like, “please” or “thank you” when given a snack by the teacher. The preschool environment offers a variety of opportunities for children to use their language in both positive and negative ways.

**Emotional competence.** Another important aspect of preschool social development is the development of emotional competence. In preschool, children develop an increased understanding of various emotions, such as sadness, anger, or fear, and increase their ability to express these emotions (Copple & Bredekamp, 2009). A growing understanding of emotional competence can be seen throughout periods of conflict resolution or negative power relationships. Children’s ability to regulate and express their emotions can have a strong impact on their social skills and the friendships they are building. For example, if one friend becomes angry at another peer, they may exhibit negative power relationships by verbally threatening

them or telling that peer they are no longer allowed in the play group. On the other hand, some preschool children exhibit positive social competence skills when they comfort others and verbally express how they are feeling. As they improve upon this skill, a gradual internalization and development of a conscience is seen as children refrain from doing something because they know that it will result in a negative consequence (Copple & Bredekamp, 2009).

Nevertheless, some children may not have the capabilities to accurately express their emotions to another peer or teacher. Seefeldt and Barbour (1998) found that children's emotions are displayed largely on the surface, therefore it is often easy for a teacher or another peer to detect when something is upsetting the child. However, if children have feelings of anger or sadness towards someone else, they may not possess the ability to verbally express what is wrong. The inability to regulate and express emotions can have a negative impact on a child's developing relationships because it may drive peers away and lessen their desire to be the child's friend.

It is also important to note that children of this age begin to realize other people have emotions as well (Seefeldt & Barbour, 1998). Preschool children start to associate behaviors with emotions of others, and they also begin to respond to emotional behaviors. Dunfield and Kuhlmeier (2013) found that responding to emotional distress is an early emerging social skill for children. In preschool, this may occur when a child recognizes that their friend is sad and responds by giving them a hug. Children may not always respond to the distress of others with verbal reassurance and instead are more likely to reassure with physical acts (Dunfield & Kuhlmeier, 2013). For this reason, it is important to analyze children's social language when they are participating in a social interaction to determine what language is appropriate and expected for this age group.

**Building friendships.** An important aspect of the preschool environment is that children are beginning to learn how to develop and maintain friendships with others. The development of close relationships with same-aged peers is foundational for the emergence of other social skills. Friendships in preschool offer an environment where children can practice and experiment with new social roles, such as “a leader, follower, risk-taker, or comforter” (Kostelnik et al., 1993, p. 185).

Oftentimes, young children have a superficial view of the meaning of friendship because in the early stages of friendship, children are mostly concerned with their own emotions and not the emotions of others (Kostelnik et al., 1993). As their understanding of friendship grows, children become more aware and begin to seek out pleasing behaviors from others (Kostelnik et al., 1993). These levels of development encourage the growth of social skills as well because children are learning how to behave and cooperate with one another. Also, preschool children who find it easy to establish friendships are likely to be “more self-regulated and to have a better understanding of others’ thoughts and feelings” (Copple & Bredekamp, 2009, p. 121). Preschool teachers may also encourage children to exhibit positive social behaviors, such as turn taking or sharing (Kostelnik et al., 1993), which will influence the growth and improvement of their social skills later in life.

Even though it may be relatively easy for a child to develop close friendships in preschool, these friendships are still relatively fluid, meaning that children may call someone a friend one day and the next day choose someone else as their friend. This may occur because as children grow older, their concept of friendship changes (Kostelnik et al., 1993). For example, some preschool children may consider a friend to be someone who sits next to them at lunch. However, as children become older and grow more aware of friendship skills, they may hold

stricter requirements when allowing someone to be their friend. As preschool children begin to spend more time with their friends than with other classmates, conflicts often arise over possessions, turn-taking in play routines, or differences of opinion (Copple & Bredekamp, 2009). Arguments within friendships also serve as a basis for increased social development, as conflicts expose children to different kinds of emotion that they may never have felt before in the classroom environment. These emotions include anger, aggression, sadness, or frustration. For example, one child may strongly believe that blue is the best color, while another child believes the best color is green. Children of this age may not recognize that it is okay for others to have differing opinions. However, through conflict, a preschool child can explore appropriate and inappropriate social behavior.

### **Measures of Social Competency**

**Prosocial Behavior.** Arguably, one of the most important developmental skills for preschool children is prosocial ability. Prosocial skills and behavior can be defined as “acts of kindness such as helping, sharing, sympathizing, rescuing, defending, cooperating, and comforting that benefit all persons, the givers as well as the receivers” (Kostelnik et al., 1993, p. 189). When children enter preschool, there is an increase in the frequency of prosocial skills because “children’s cognitive development allows them to better understand others’ feelings” (Copple & Bredekamp, 2009, p. 122). Also, in preschool, children spend a majority of their time engaging in play-based interactions, thereby exposing them to an increased amount and variety of social situations. This provides multiple opportunities to explore and experience using language and behavior to influence others. Some common prosocial behaviors that preschool children are likely to exhibit include initiating conversations, assisting a peer with homework, or sharing items with peers (as cited in Lane, Gast, Ledford, & Shepley, 2017).

**Physical, Relational, and Verbal Aggression.** As mentioned before, the development of friendships in preschool children causes an increased risk and occurrence of conflicts. These conflicts can arise over possession of toys, differences of opinion, and turn-taking in play routines. Different types of aggression such as relational aggression and physical aggression are commonly seen during conflicts. Relational aggression is described as excluding or being mean to another peer (Copple & Bredekamp, 2009). This type of aggression in preschool includes a child excluding peers from a friend group or withdrawing friendship (Espelage & Swearer, 2004). Relational aggression can also be seen through rumor spreading, ignoring, or prohibiting access to other children (Fanger, Frankel, & Hazen, 2012; Hawkins, Pepler, & Craig, 2001).

In addition to relational aggression, physical aggression may also be present. This is the act of physically hitting, shoving, pinching, or kicking another peer (Fanger et al., 2012; Hawkins et al., 2001). Physical aggression may be more common than other types of aggression at this time in a child's life because some preschoolers do not have the language abilities to express how they are feeling. Instead, they will express their emotions physically. It is important to understand and recognize the occurrence of these types of aggression in preschool children because aggressive acts provide an increased risk of individuals developing "social, emotional, behavioral, and academic problems" (Espelage & Swearer, 2004, p. 26). Relational and physical aggression may have a negative impact on various aspects of the children's lives, such as maintaining their relationships with peers and adults. Aggression can cause a decrease in social opportunities for children, especially if they are a victim of these types of aggressive behaviors.

As preschool children develop more complex social abilities, it is important to accurately measure and monitor social skill progression, as social development is a basis for other types of learning to emerge (Kostelnik et al., 1993). Teachers and other educational personnel should

work to recognize social growth in their students and provide an environment that encourages social development. It is also important to understand how well teachers perceive their students' social abilities to minimize the frequency of teacher misperceptions at the preschool age.

### **Teacher Perceptions**

Teacher perceptions are useful to explore because teachers are expected to identify concerns and red flags related to their students' development and make the appropriate referrals and recommendations. The role of teachers in the identification process is vital because teachers have the greatest opportunity to observe their students in naturalistic social interaction in the classroom. However, there has been little research on teacher perceptual accuracy in the preschool age range because a majority of the research has focused on the upper grades (Ready & Chu, 2015; Baker et al., 2015). Frequent teacher misperceptions of social skill behavior may be due to the fact that adults typically expect to see the occurrence of helpful behaviors in children at the age of three (Copple & Bredekamp, 2009). In preschool, teachers may be expecting more out of their students than the students are able to give, especially if some children are delayed. It is important to explore whether teachers are accurate informants of their student's abilities and what types of behaviors teachers are likely to misestimate.

Teacher perceptions of academic ability have been explored in older populations, and it has been found that misconceptions can have a negative impact on a student's future academic success. For example, Baker et al. (2015) found that students who were underestimated by their teachers in the fall semester reported poorer academic growth in the following spring semester. This suggests that the teacher misperceptions had a negative impact on the growth of the student. Also, Ready and Chu (2015) found children whose initial literacy abilities were underestimated by their teachers exhibited lower rates of literacy development throughout their time in

kindergarten. On the other hand, Ready and Chu (2015) found that when teachers overestimate children's initial literacy abilities, they gained increased literacy skills during kindergarten. This shows the comparison of students' success when either overestimated or underestimated by their teacher.

As mentioned previously, most research has focuses on older school-age children rather than the preschool age range. Also, a majority of the research focuses on teachers' academic judgements instead of behavioral perceptions when rating their students. These studies suggested teachers are not accurate informants of their student's academic abilities. For example, in their study of 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> grade students, Hinnant, O'Brien, and Ghazarian (2009) found that teachers may overestimate the academic abilities of children they enjoy and find more manageable in the classroom. Also, Bennett, Gottesman, Rock, and Cerullo (1993) studied a large group of kindergarten through second grade students. Their results indicated that teachers were significantly influenced by their students' behavior as students were stated as being poorer academically when they were perceived as displaying bad behavior.

### **Influences on Teacher Perceptions**

Many factors can influence the way a teacher perceives students in the classroom. For example, Hinnant et al. (2009) found certain characteristics of a child, such as gender and social skill development, are related to teacher expectations for students' academic abilities throughout the early school years. Other factors that have proven to influence teacher perceptions are age and inattentive behavior (Baker et al., 2015). These characteristics can all be observed and perceived by teachers in the classroom throughout the school day and may cause the teachers to unconsciously create perceptions of their students' abilities.



**Gender.** It is important to explore the characteristics that cause a teacher to misperceive their students because the teacher may be unaware that their perceptions are inaccurate. For example, research suggests gender is a consistent factor that influences teacher perceptions. Bennett et al. (1993) found that male students in first and second grade were consistently perceived as behaving worse than females. This caused teachers to perceive boys' academic skills as being inferior to females'. Also, Hinnant et al. (2009) found that female students in 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> grade, were always more likely to be overestimated by their teachers when rating reading ability.

**Student Behavior.** Behavior has also proven to be a consistent factor that influences teacher perceptions (Bennett et al., 1993). Teachers may misperceive a student's academic abilities based on past behavior experiences, which proves to be an issue for students because they are being judged on negative behaviors displayed in the past instead of their true academic abilities in the present. It is suggested that teachers may have difficulties separating students' true academic abilities from their perceived bad behavior (Ready & Chu, 2015).

**Ethnicity.** Ethnicity and cultural differences have proven to be other influential factors in teacher perceptions. Ready and Chu (2015) found that teachers underestimated the literacy abilities for children that did not primarily speak English. They also found that Native American and African American kindergarteners gained fewer skills when compared to other ethnicities that teachers typically overestimate. Some teachers may not believe or understand that their perceptions of young students can have a drastic impact on those students' academic achievements in the future. It is important to emphasize the role that teachers have in their students' lives and prove that accurate teacher perceptions can assist young children in developing the skills and knowledge they need to succeed.

**Current Study**

Teacher perceptions of prosocial behavior offer beneficial information to assist in understanding the dynamic role teachers play in the development of their students. The purpose of this study is to examine the frequency of prosocial behavior in preschool children as well as the accuracy of teacher perceptions of prosocialness.

Three research questions are being investigated:

1. Are teachers accurate informants of their preschool students' prosocial abilities?
2. What categories of prosocial behaviors are teachers more likely to misestimate?
3. Does gender impact teacher perceptions of prosocial behavior?

We hypothesize that teachers are not accurate informants of their student's prosocial behavior based on previous literature in older populations. We also hypothesize that teachers are likely to misinterpret the occurrence of prosocial behavior because they may not be familiar with these specific behaviors. Regarding gender, we hypothesize that the gender of the student participants will influence the teachers' ability to accurately rate their student's prosocial abilities. Research suggests that teacher misperceptions can cause decreased academic growth (Baker et al., 2015; Ready & Chu, 2015) in students. Therefore, increased awareness and attention is needed in the area of teacher perceptions to ensure that students are given opportunities to reach their full potential in the classroom.

### Chapter III

#### Methodology

##### Participants

Child participants included 44 (27 boys, 17 girls) preschool-aged children (3;0 to 5;11). All participants attended two different public preschools located in East Central Illinois. Preschool students were chosen due to convenient location and willingness to participate in the study. All participants were typically developing in their language abilities at the time of the study, as determined by administration of *the Peabody Picture Vocabulary Test – Fourth Edition* (PPVT-4) and the *Clinical Evaluation of Language Fundamentals - Preschool* (CELF-P) standardized language assessments. The teachers included in this study were four Caucasian females that all held an early childhood education degree and worked at one of the two facilities.

##### Measures

**Coding measures.** Previously obtained audio recordings, taken for sixty-minutes during activities with the least amount of adult interaction as possible, were transcribed verbatim. Verbal interactions were then previously coded into different categories by trained graduate and undergraduate students for prosocial interactions, aggressive interactions, and victimization. Each transcript was again independently coded by a trained graduate student to increase reliability. Only the prosocial categories were utilized in this study and included, “prosocial general,” “prosocial comforting,” “prosocial reporting,” “prosocial confronting,” “prosocial recipient,” and “prosocial total.” Definitions and examples of these categories are included in Table 1.1

Table 1.1

Prosocial Categories

Prosocial Category	Definition and Example
Prosocial General	Inclusion (e.g., inviting peers to play). Sharing toys or materials, initiating conversations (e.g., greeting other children, introducing themselves), identifying other children who are demonstrating appropriate behavior, giving compliments and encouragement.
Prosocial Comforting	Providing comfort to a distressed peer. This can be either physical comfort (e.g., hug, place hand on back) or verbal comfort (e.g., asking, “are you okay?” or “do you need help?”).
Prosocial Reporting	Notifying a teacher of peer distress for the purpose of helping the peer.
Prosocial Confronting	Telling another peer to stop being mean.
Prosocial Recipient	Children are considered prosocial recipients when any of the above described prosocial behaviors are experienced.

**Teacher reports.** Teachers completed portions of the Social Skills Improvement System, Preschool Social Behavior Scale-Teacher Form, and Preschool Peer Victimization Measure-Teacher Form- Revised through an online assessment in Qualtrics (described below). Teachers were given one-month window between February and March to complete the reports, which occurred at the same time as the audio recordings of child interactions. The online assessment was distributed during the spring semester of the school year, meaning that the teachers had known the students for approximately 6 months prior to completing the reports. Each of the three measures described below included 12-16 questions for the teachers to complete. For the current

study, researchers selected 2-4 questions from each of the three measurements to analyze how the teachers perceived prosocial behaviors in their students.

**Social Skills Improvement System– Teacher Rating form (SSIS; Gresham & Elliott, 2008).** The SSIS contains seven social skills subscales, but only the Empathy (5 items) and Assertion subscales (6 items) were administered to reduce the amount of time that teacher participants had to spend completing the rating scales (Mulvey & Jenkins, 2018). All items are rated on a four-point rating scale ranging from Never to Almost Always, and includes such items as “is nice to others when they are feeling bad,” (Empathy) and “stands up for herself/himself when they are treated unfairly” (Assertion). Extensive evidence of reliability and validity is reported in the SSIS manual (Gresham & Elliott, 2008). Evidence of reliability includes test-retest reliability, interrater reliability, factor structure, and internal consistency alpha coefficients. The manual also reports evidence of validity through correlations with similar measures.

**Preschool Social Behavior Scale-Teacher Form (PSBS; Crick et al., 1997).** The PSBS includes 25 items that measure six subscales: Relational Aggression, Overt/Physical Aggression, Prosocial Behavior, Depressed Affect, Child’s acceptance with same sex peers, and Child’s acceptance with opposite sex peers. Only the Relational Aggression, Physical Aggression, and Prosocial Behavior subscales were used in the current study (Mulvey & Jenkins, 2018). Each item is rated on a five-point Likert scale ranging from 1 (Never or almost never true) to 5 (always or almost always true). 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). Crick and colleagues (1997) report alpha coefficients of .96, .94, and .88 for relational

aggression, physical aggression, and prosocial behavior, respectively. They also report evidence of validity through moderate correlations with peer nominated aggression ratings.

**Preschool Peer Victimization Measure- Teacher Form- Revised (PPVM-T; Crick et al., 1999).** The PPVM-T includes nine items that assess victimization and receipt of prosocial behavior. Only the victimization items were used in the current study, which assess physical behaviors (e.g., “The child gets hit, kicked or pinched by peers.”) and relational behaviors (e.g., “The child gets cheered up by playmates when he/she is sad or upset about something.”). All items are rated on a five-point Likert scale ranging from 1 (Never or almost never true) to 5 (always or almost always true). Crick and colleagues (1999) report alpha coefficients of .77 for relational victimization and .85 for physical victimization. They also report factor structure and evidence of validity with similar measures. In the current study, the alpha coefficient was .83 for the total scale.

### **Procedure**

The Qualtrics teacher survey results were entered into an Excel spreadsheet and answers were converted to a numerical value. One of the three surveys was based on a four-point Likert scale ranging from “never” to “almost always”. The remaining two surveys were based on a five-point Likert scale ranging from “never or almost never true” to “always or almost always true”. Questions with an answer of “never” or “never or almost never true” were assigned a numerical value of 1. Numerical values were assigned to the survey answer results in order to further analyze the relationship between teacher perceptions and the frequency of prosocial behavior in their students. Ratings/scores for each question were totaled for use in statistical analysis.

As mentioned above, researchers chose 2-4 questions from the SSIS, the PSBS, and the PPVM-T that all related to the specific prosocial behavior categories that were coded for in the

audio recordings. This was completed in order to examine the relationship between the actual occurrence of prosocial behaviors and the teachers’ perceptions of those behaviors. Organized by prosocial category, the questions utilized are listed in tables 1.2-1.6.

*Table 1.2*

*Prosocial General*

Survey Utilized	Questions
<ol style="list-style-type: none"> <li>1. PSBS</li> <li>2. PSBS</li> <li>3. PSBS</li> <li>4. SSIS</li> </ol>	<ol style="list-style-type: none"> <li>1. “This child is good at sharing and taking turns.”</li> <li>2. “This child is helpful to peers.”</li> <li>3. “This child is kind to peers.”</li> <li>4. “Asks for help from adults.”</li> </ol>

*Table 1.3*

*Prosocial Comforting*

Survey Utilized	Questions
<ol style="list-style-type: none"> <li>1. SSIS</li> <li>2. SSIS</li> <li>3. PSBS</li> </ol>	<ol style="list-style-type: none"> <li>1. “Tries to comfort others.”</li> <li>2. “Shows kindness to others when they are upset.”</li> <li>3. “This child is helpful to peers.”</li> </ol>

*Table 1.4*

*Prosocial Reporting*

Survey Utilized	Questions
<ol style="list-style-type: none"> <li>1. SSIS</li> <li>2. SSIS</li> </ol>	<ol style="list-style-type: none"> <li>1. “Questions rules that may be unfair.”</li> <li>2. “Says when there is a problem.”</li> </ol>

Table 1.5

*Prosocial Confronting*

Survey Utilized	Questions
<ol style="list-style-type: none"> <li>1. SSIS</li> <li>2. SSIS</li> </ol>	<ol style="list-style-type: none"> <li>1. “Stands up for herself/himself when treated unfairly.”</li> <li>2. “Stands up for others who are treated unfairly.”</li> </ol>

Table 1.6

*Prosocial Recipient*

Survey Utilized	Questions
<ol style="list-style-type: none"> <li>1. PPVM-T</li> <li>2. PPVM-T</li> <li>3. PPVM-T</li> <li>4. PPVM-T</li> </ol>	<ol style="list-style-type: none"> <li>1. “This child gets invited to join a group of playmates when he/she is playing alone.”</li> <li>2. “This child gets help from peers when he/she needs it.”</li> <li>3. “This child gets cheered up by playmates when he/she is sad or upset about something.”</li> <li>4. “This child gets nice things done for him/her by peers.”</li> </ol>

**Data Analysis**

**Prosocial Behavior and Teacher Perceptions.** A correlational analysis was completed to determine the relationship between the overall prosocial score (obtained from transcript analysis) for each participant and their corresponding teacher survey results. Researchers examined the presence of prosocial behavior in participants and whether the teachers perceived those students as being prosocial. This correlational analysis would provide information regarding the accuracy of teacher perceptions on prosocial behavior.

**Gender.** As mentioned before, gender can have an influence on the way teachers perceive their students (Bennett et al., 1993; Hinnant et al., 2009). A second correlational



analysis was completed on the male and female participants and their corresponding teacher rating. This analysis was done in order to determine if gender has an effect on teacher's perception of prosocialness and provide further evidence regarding the relationship between gender and teacher perceptions.

## Chapter IV

### Results

The purpose of this study was to examine the frequency of prosocial behavior in preschool children as well as the accuracy of teacher perceptions of prosocialness. Research questions addressed included:

1. Are teachers accurate informants of their preschool students' prosocial abilities?
2. What categories of prosocial behaviors are teachers more likely to misestimate?
3. Does gender impact teacher perceptions of prosocial behavior?

#### Descriptive Statistics

Descriptive statistics for researcher-observed prosocial behavior and teacher-rated prosocial behavior are displayed in Table 1.3. Researcher-observed prosocial total data was generated through audio recordings of participants for one hour during a time of the day with increased opportunities for social interaction between peers (e.g., center time, group play). All other categories of data (e.g., prosocial general total, prosocial comforting total, prosocial reporting total, prosocial confronting total, and prosocial recipient total) were scored based on teacher survey results. Researcher-observed prosocial behavior ranged in frequency from 0 to 5, teacher-rated prosocial behavior for prosocial general category ranged in score from 6 to 20, prosocial comforting category ranged in score from 3 to 7, prosocial reporting category ranged in score from 2 to 7, prosocial confronting category ranged in score from 2 to 7, and prosocial recipient category ranged in score from 4 to 17. Means and standard deviations are listed in Table 1.7.

Table 1.7

*Descriptive Statistics*

	<b>N (sample size)</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Researcher Observed Prosocial Total</b>	44	0.00	5.00	1.0682	1.31887
<b>Teacher Rated Prosocial General Total</b>	44	6.00	20.00	13.2273	2.87623
<b>Teacher Rated Prosocial Comforting Total</b>	44	3.00	7.00	5.2727	1.04244
<b>Teacher Rated Prosocial Reporting Total</b>	44	2.00	7.00	4.8636	1.09100
<b>Teacher Rated Prosocial Confronting Total</b>	44	2.00	7.00	5.1591	1.23784
<b>Teacher Rated Prosocial Recipient Total</b>	44	4.00	17.00	12.6136	2.64325

**Correlational Analysis**

Correlational analysis was completed using researcher-observed prosocial totals and each of the teacher-rated categories, which is illustrated in Table 1.4. Correlational analysis revealed the researcher-observed prosocial totals were positively correlated with teacher-rated prosocial general ( $r(42) = .36, p > .05$ , two-tailed), prosocial confronting, ( $r(42) = .32, p > .05$ , two-tailed), and prosocial recipient, ( $r(42) = .38, p > .05$ , two-tailed). Researcher-observed prosocial totals were not associated with teacher-rated prosocial comforting or teacher-rated prosocial reporting.

Table 1.8

*Correlational analysis between researcher-observed prosocial behavior and teacher-rated prosocial behavior*

	Researcher- Observed Prosocial Total	Teacher- Rated Prosocial General	Teacher- Rated Prosocial Comforting	Teacher- Rated Prosocial Reporting	Teacher- Rated Prosocial Confronting	Teacher- Rated Prosocial Recipient
Researcher- Observed Prosocial Total	-					
Teacher- Rated Prosocial General	.364*	-				
Teacher- Rated Prosocial Comforting	.291	.421**	-			
Teacher- Rated Prosocial Reporting	.249	.158	.442**	-		
Teacher- Rated Prosocial Confronting	.321*	.238	.741**	.671**	-	
Teacher- Rated Prosocial Recipient	.381*	.575**	.394**	.449**	.396**	-

\*p≤.05

\*\*p≤.01

Additionally, a correlational analysis was completed using the teacher-rated prosocial categories and gender of the participants. No significant correlations were found between gender and teacher-rated prosocial general, teacher-rated prosocial comforting, teacher-rated prosocial reporting, teacher-rated prosocial confronting, and teacher-rated prosocial recipient. Gender was not related to teacher ratings in this study.

## Chapter V

### Discussion

The purpose of the current study was to examine the relationship between the frequency of prosocial behaviors in preschool children compared to the accuracy of teacher ratings of prosocial behavior. Research questions that guided the methodology in this study included investigating whether teachers are accurate informants of their preschool students' prosocial abilities, which categories of behavior teachers are likely to misestimate, and whether gender impacts teacher perceptions of prosocial abilities.

#### **Are Teachers Accurate Informants of Their Students' Prosocial Abilities?**

**Correlational analysis.** Results of the correlational analysis between researcher-observed prosocial behavior and teacher-rated prosocial behavior revealed distinct relationships. Specifically, researcher-observed prosocial behavior was positively correlated with teacher-rated prosocial general, teacher-rated prosocial confronting, and teacher-rated prosocial recipient categories. Prosocial general behavior includes sharing, sympathizing, initiating conversations with peers, and giving compliments. Prosocial confronting behavior involves telling another peer to stop being mean and finally, prosocial recipient behavior is observed when any prosocial behavior is experienced by an individual. In other words, teachers accurately and consistently perceived and rated general prosocial skills, prosocial behaviors for confronting, and receipt of prosocial interactions from peers when compared to observed data for the same categories.

A possible explanation for the positive correlation could stem from the types of behaviors teachers are modeling in the classroom, as well as the language they are using around their students. In the classroom, preschool teachers frequently address interaction expectations with their students during large-group activities, which relate in similarity to the rated behaviors for

the prosocial general category in our study. Instruction likely includes being kind, including others, and sharing their belongings with their peers. Preschool teachers also spend a large amount of their time in the classroom navigating disagreements between their students and encouraging students to “use their words” to communicate differences. Justice, McGinty, Zucker, Cabell, and Piasta (2013) found when language used by the teacher included complex syntax, their students were more likely to imitate their language and increase their use of complex syntax. In other words, the types of language teachers are modeling have a higher chance of being imitated by the students. This evidence supports our theory that teachers in this study likely model general prosocial confronting/receipt behaviors and are therefore, more familiar and knowledgeable about how preschool children display these behaviors in the classroom.

In addition, positive correlations could have been influenced by the nature of questions utilized in the surveys. A few of the questions included when analyzing teachers’ perceptions of prosocial general abilities were, “this child is kind to peers” and “this child is helpful to peers”, which may have caused confusion due to the broad nature of the questions. Teachers were asked to rate these behaviors even if they have never observed them and therefore may have subconsciously rated the student participants based on their willingness to help and assist the teacher instead of other peers in the classroom. In other words, a student who is more likely to assist the teacher during classroom activities or display kindness towards the teacher may have received a higher rating. When completing the survey, teacher participants may have based their rating on the assumption that a student who is likely to be kind and helpful to teachers will also be kind and helpful to peers. This theory is strengthened by evidence stating that teachers have a lack of knowledge regarding social competence and allow their perceptions of social skills to

interfere with their ability to accurately rate their students. For example, Hinnant et al. (2009) suggests students are more likely to be overestimated if their teachers find them more manageable and well-behaved in the classroom. Teachers may assume their students have typically developing social skills based on teacher-child interactions but have little knowledge regarding the importance of peer-to-peer interactions and how those are observed in the classroom.

On the other hand, the correlational analysis revealed no correlation between researcher-observed prosocial behavior and teacher-rated prosocial comforting and teacher-rated prosocial reporting. Teachers' limited knowledge and understanding of developmentally-appropriate social skills could be the reason for this occurrence (Baker et al., 2015), leading to inaccurate observation and rating of particular skills. Surprisingly, research suggests teacher characteristics, instead of child characteristics, play a large role in the accuracy of teacher ratings of preschool students (Baker et al., 2015). Kilday, Kinzie, Mashburn, and Whittaker (2012) suggest teacher characteristics, such as unfamiliarity with skills and lack of experience, may lead to misperceptions of their students' abilities as well as overgeneralizations. In our study, teachers may not have rated their students as displaying prosocial comforting or prosocial reporting behaviors because they do not have a clear understanding of which behaviors or language to observe in preschool children that meet this criteria.

**Descriptive statistics.** Further evidence supporting that teachers are not accurate informants of their students' prosocial abilities was revealed through descriptive statistics. Researcher observations via audio recordings indicated the maximum amount of times a student participant displayed prosocial behaviors during the sixty-minute timeframe was five, which suggests student participants were not displaying a high amount of prosocial behaviors during

researcher observations. However, after comparing the researcher-observed prosocial totals with the teacher perceptions, results indicated the teacher participants were rating their students as displaying much higher levels of prosocial behaviors in two specific categories: prosocial general and prosocial recipient. These results imply that teachers are perceiving their students as displaying more prosocial behavior than what is truly occurring, or teachers are basing their ratings on assumptions rather than objective observations of behavior. This means teachers may allow the previous perceptions they have of their students to interfere with their ability to accurately rate their prosocial abilities. Our finding is consistent with previous research that suggests teachers are not accurate informants of their students' abilities and teachers are instead often influenced by many outside factors, such as age and behavior (Hinnant et al., 2009; Bennet et al., 1993).

Because teachers are expected to make referrals and recommendations for their students if any behaviors or characteristics are observed that indicate delayed or disordered development, these specific results have serious implications. In other words, if teachers allow the perceptions they have of their students to interfere with objective observations, teachers may miss an opportunity to refer that student for specific services. In their study of prekindergarten teacher ratings, Furnari, Whittaker, Kinzie, and DeCoster (2017) found that teachers can draw upon their experiences and classroom observations to rate their students; however, the teacher bias that is displayed throughout the ratings poses an issue in using those ratings as measures of students' abilities. This study was consistent with our results as this evidence suggests teacher bias may contaminate the accuracy of the observations, leading to misperceptions about the students' true abilities. This can be a serious issue in the classroom because children may be deprived of the appropriate services and assistance. Teachers need to have an objective, rather than subjective,



view of their students' abilities in order to provide the best possible learning environment. When teacher misperceptions are present in the classroom, student success and achievement can be hindered (Baker et al., 2015).

### **What Types of Prosocial Behavior are Teachers More Likely to Misestimate?**

As mentioned before, researcher observation concluded the maximum amount a student participant displayed prosocial behavior during the sixty-minute timeframe was five. However, after completing a correlational analysis between the audio recordings and the teacher surveys, the results revealed the teachers were rating and perceiving their students as displaying much higher levels of prosocial behavior. Many students were rated as displaying specific prosocial skills often and/or almost always. The discrepancy between the researcher-observed prosocial behavior and the teacher-rated prosocial behavior was observed specifically in the prosocial general and prosocial recipient categories as the scores that were given by the teachers for these two categories were significantly higher than the researcher observations. This suggests teachers are more likely to misestimate the prosocial general behaviors as well as the prosocial recipient behaviors when asked to rate their students.

There could be many explanations for the significant discrepancy between the researcher-observed prosocial behavior and the teacher ratings. The first explanation could be related to the type of language and behaviors that teachers model in the classroom. As mentioned before, teachers may be more familiar with prosocial general behavior, such as, sharing, including, and giving compliments and encouragement, because they are constantly modeling these behaviors in the classroom. Teachers often compliment their students after receiving a good grade or encouraging their students to always do their best. They also continuously encourage their students to include each other in their play groups and share toys and objects. Teachers provide

comfort and emotional support to students in distress and assist in navigating through arguments and disagreements between peers. Because they provide this continuous model for their students, teachers may perceive their students as imitating and displaying higher levels of this behavior when they are not. In other words, teachers expect their students to imitate certain behaviors because they are modeling them on a daily basis. This theory is consistent with findings from Methe and Hintze (2003) as they found teacher modeling was strongly related to on-task reading behavior in their students. In other words, when teachers modeled the behaviors they wanted their students to display, such as on-task reading behavior, the students were more likely to imitate that behavior.

Further evidence was revealed in a study conducted by Fuhs, Farran, and Nesbitt (2013) when they evaluated the emotional climate, cognitive learning environment, and quality of teacher instruction in an early childhood classroom. They found that the more time teachers spent approving their students' behavior as opposed to disapproving, the more gains were observed in student cognitive self-regulation. Also, more positive emotional tone produced by the teachers was positively correlated with higher levels of student cognitive self-regulation. Both studies emphasize the importance of teacher language and how students can experience positive gains from the types of language teachers are using. This study further defends our theory in which teachers expect their students to display higher levels of prosocial behavior because they are providing models many times throughout the school day. However, the researcher-observed prosocial behavior data revealed the students are not imitating the teacher models as readily as expected when interacting with their peers and are therefore displaying lower levels of prosocial behavior. This means that teachers are not perceiving their students

based on their true abilities and instead, may be allowing their previous perceptions as well as their own personal behaviors to interfere with their ability to accurately rate their students.

Another explanation for the discrepancy between researcher-observed and teacher-rated prosocial behavior is based on student behavior. Research suggests past student behavior can have an influence on teacher perceptions (Bennett et al., 1993). This evidence is consistent with our findings because teachers may be allowing the previous behavior and academic perceptions they have developed of their students throughout the school year to interfere with their ability to accurately rate prosocial general and prosocial recipient behaviors in their students. Our results suggest teachers based their ratings on past student behavior, which poses an issue because this means teachers likely possess a lack of knowledge regarding specific prosocial abilities and are not able to accurately rate their students based on objective observations. This is important to consider, as research suggests students are underestimated academically when they are perceived as poorly behaved and are overestimated academically when they are perceived as well-behaved (Bennett et al., 1993).

Specifically, prosocial general and prosocial recipient behaviors, which were the two categories that teachers were more likely to misestimate, are more generally defined categories. As mentioned before, the broad nature of some of the survey questions included for these categories may have caused confusion and inaccuracies when completing the surveys because teachers may have little familiarity with specific prosocial general behaviors. For example, Pinar and Sucuoglu (2013) found teachers had no knowledge or experience in teaching specific social skills to their students. Therefore, due to their lack of familiarity, teachers made an overgeneralization for their students' prosocial general abilities based on previous behavior perceptions. The inaccurate ratings teachers are giving to their students have proven to be an

issue because students are receiving ratings based on past behavior instead of their current abilities even if minimal amounts of observable behavior was present.

Also, research suggests sixty minutes is an adequate amount of time to both observe and measure students' true abilities (Baker et al., 2015; Methe & Hintze, 2003). In fact, when evaluating student behavior in response to teacher modeling, Methe and Hintze (2003) observed all student participants for a total of fourteen minutes and successfully found correlations between teacher modeling and student behavior. Based on this evidence, we can confidently conclude our sixty-minute window was an adequate amount of time to observe the student participants' true abilities. Because we were able to gain a comprehensive view of the students' prosocial abilities during this time frame, we can also conclude the teachers allowed outside factors or previous perceptions to interfere with their ability to accurately rate prosocial general and prosocial recipient behaviors in their students as there was a large discrepancy between researcher-observed and teacher-rated prosocial abilities.

The misperceptions revealed through our study introduce an important problem into the classroom. As mentioned before, teachers are expected to make referrals and recommendations if they feel their students would benefit from services within the academic environment. However, if teachers are misperceiving their students' true abilities, they may miss opportunities to provide additional learning and support opportunities for them. Ultimately, this could negatively affect the student in their future academic success as Baker et al. (2015) suggests, teacher misperceptions can hinder the academic growth of students in the future.

### **Does gender impact teacher perceptions of prosocial abilities?**

Our results indicated gender did not impact teacher perceptions of prosocial abilities. This finding was not consistent with previous literature, as Bennet et al. (1993) found teachers

often overestimate the abilities of female students in the classroom when compared to male students. Also, research has suggested that first and second grade male students were consistently perceived as behaving worse when compared to female students (Bennet et al., 1993). There is additional evidence supporting teachers perceiving male students as displaying more active and assertive behaviors, while female students display more quiet and passive behaviors (Pardhan & Pelletier, 2016).

However, our finding that gender did not impact teacher perceptions was in line with a study conducted by Baker et al. (2015). Their study of teacher perceptions of preschoolers' academic skills suggested "neither child gender nor race/ethnicity was associated with differential teacher perceptions of pre-academic skill" (Baker et al., 2015, p. 816). The results of our study also suggested gender did not play a role in influencing teacher perceptions of prosocial behavior. This could be due to the amount of time teachers have been exposed to their students' behavior. The teacher participants were given a one-month window between February and March of the academic year to complete the teacher surveys, which means the teachers have been exposed to their students' behavior for roughly six months prior to completing the surveys. Due to familiar exposure and opportunities for interaction, the teachers may simply be accustomed to the different types of interactional styles that both male and female students display and accepting of those gender-based differences, if they exist. Also, as mentioned by Baker et al. (2015), male and female stereotypes are possibly becoming less prevalent in the classroom. Teachers are not judging or stereotyping male or female students as often as they were twenty years prior, which would ensure that gender does not influence the accuracy of teacher perceptions.

The number of male and female student participants could also act as an explanation for our findings. In our study, there were 27 male and 17 female students participating. Previous research suggests that males are consistently underestimated in their academic and behavioral abilities when compared to females (Bennett et al., 1993; Hinnant et al., 2009). However, due to the higher amount of male student participants in our study, we can suggest that teachers in our study may be more familiar with and accepting of the academic and behavioral abilities of their male students based purely on increased exposure to male students by number. Further research is needed to understand the gender-specific stigma as it relates to behavior and expectations in the preschool classroom.

### **Limitations and Future Research**

Future research regarding teacher perceptions of social skill abilities in young children is vital. To better understand developmental concerns related to social skills, as well as teacher perceptions and ability to accurately identify children demonstrating concern, additional research with a larger, more diverse participant pool is necessary. The current study was limited by sample size. We had a relatively small sample size of 44 student and teacher participants combined, which limits ability to draw strong conclusions compared to larger populations. Also, all student participants as well as teacher participants identified as Caucasian. Future research should include a more diverse sample in order to acquire a more comprehensive picture of the relationship between prosocial behavior and teacher perceptions.

In addition, our study included teacher perceptions by only one measure: teacher surveys. Looking ahead to future research, it would be beneficial to include teacher interviews and standardized student assessments to gain a better understanding of influences upon teacher perceptions in preschool students. Lastly, while one hour is typically found to be an adequate

amount of time for observations of behavior, further investigation into the appropriate amount of time to observe and measure students' abilities should be considered.

Overall, the results of this study indicated a strong need for further teacher instruction on different types of prosocial behavior and how to recognize them, as teachers displayed drastic misperceptions regarding their students' prosocial abilities compared to observed data. In order for teachers to begin to accurately rate their students, they need to understand and acknowledge the outside factors that could be influencing their perceptions, such as student behavior as research suggests teacher misperception can have a negative impact on a student's academic success in the future (Baker et al., 2015; Ready & Chu, 2015). It is extremely important that teachers are making objective ratings of social skill development in young children in order to provide the best possible learning environment for their students.

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