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An Investigation on Gender and the Effects on Behavior in Early Childhood Classrooms

About the Author(s)

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Aspen Yordy just graduated with her Master's in the Department of Human Development and Family Science at East Carolina University. It is in this same department that she has been a graduate assistant with Dr. Chia Jung Yeh and grown an appreciation for Dr. Yeh's research regarding early childhood curriculum and inclusive education. Before coming to ECU, Aspen earned her Bachelor's degree in elementary education at Goshen College in Indiana, where she was a fourth grade teacher for Durham Public Schools. Her research interests include early childhood intervention and child life studies.

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Keywords

behavior, gender, early childhood



AN INVESTIGATION ON GENDER AND THE EFFECTS ON BEHAVIOR IN EARLY CHILDHOOD CLASSROOMS

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Abstract

Researchers who have studied children behavior in early childhood classrooms have found that classrooms are the first place where children learn about acceptable behavior and societal norms. Gender and behavior have been studied on children of later ages, i.e.; elementary, middle, high school, and higher education, but little has been researched regarding children of younger ages. Researchers of this study used quantitative methods to examine, how gender and the effects on child behavior in early childhood classrooms. The researchers recruited a total of 105 preschoolers and fourteen classroom teachers from seven different classrooms in the Southwest Central region in the United States, to investigate, if there were any significant difference in preschoolers' behaviors when compared to their genders. Research findings showed that boys demonstrated higher aggressive and hyperactive distractible behaviors than girls, which adds to an emergent body of research on gender and its effects on behavior during early childhood.

Keywords: Behavior; gender; and early childhood

Introduction and Background

Gender differences and behaviors have been discovered and reported in many empirical research studies (Bas, & Yurdabakan, 2012; Costa, Terracciano, & McCrae, 2001; Endendijk et al., 2017, Nivette, Eisner, Malti, & Ribeaud, 2014; Ogelman, 2013; Razmjooe, Harnett, & Shahaajan, 2016). Behavior problems have also been reported as highly stable across childhood throughout development (Smith, Calkins, Keane, Anastopoulos, & Shelton, 2004). Keane and Calkins (2004) reviewed the literature and discovered that many research studies included only boys while they examined the developmental trajectories of behavior problems. Boys involved in aggression early in development continued to demonstrate aggressive behaviors across developmental stages, yet girls did not have such developmental trajectories. It might be necessary to include both boys and girls as participants to explore children's development and further investigate how gender plays a role in behaviors.

Disruptive behaviors might impact later school performance, children's social status, learning, and their relationship with others (Bierman et al., 2013; Crone, Hawken, & Horner, 2015; Lee & Bierman, 2016; Ttofi, Bowes, Farrington, & Lösel, 2014). Therefore, it is important to investigate a variety of children behaviors including aggression, hyperactivity-distractible behaviors, prosocial and asocial, anxious and fearful behaviors, as well as excluded by peers.

One of the most studied behaviors among children has been aggression. Kostelnik, Marjorie and their colleagues defined aggression as any physical or verbal behavior that injures, damages others and/or objects (Kostelnik, Whiren, Soderman, Rupiper, & Gregory, 2015). Research shows that aggressive behaviors might occur in different forms, such as physical, verbal or rational aggression. In early childhood classrooms, many arguments, aggressive, threatens might occurs because of objects, territory or rights. Extensive research from all around the world has shown that boys have higher aggressive behavior than girls (Bas & Yurdabakan,

2012; Endendijk et al., 2017, Nivette et al., 2014; Ogelman, 2013). However, while boys have higher physical aggression, girls have higher relational aggression. Relational aggression is associated with language skills, especially in young children (Ogelman, 2013; Razmjooe et al., 2016). Even though boys may be more present with physical bullying, these relational aggressive behaviors result in girls being reported to have more bullying tendencies (Spilt, Koomen, Thijs, Stoel, & van der Leij, 2010). Keane and Calkins (2004) investigated 105 families and discovered that aggressive behavior accelerates the relationship of social status for boys, while sharing and engaging in sneaky behavior predicts peer relationship status for girls. Overall, several research studies indicated that there were several differences that could be observed between genders in regards to aggressive behaviors in young children.

Children with hyperactivity distractible behaviors might demonstrate more behaviors like careless, squirmy, poor concentration, and restless (Ladd, 2010). Some research studies have discovered that gender bias exists among teachers who rate girls as being significantly more impaired and more in need of services than boys, while boys are significantly more impulsive than girls (Coles, Slavec, Bernstein, & Baroni, 2012). However, no gender difference has been found between inattention (Hasson & Fine, 2012). Furthermore, the difference among boys with and without ADHD is significantly larger than the difference between girls with and without ADHD. This shows that gender is a significant moderating factor in ADHD symptoms (Hasson & Fine, 2012; Singh, Yeh, Verma, & Das, 2015).

In contrast to gender effects on disruptive behaviors, prosocial and asocial behaviors have not been examined frequently (Arbeau, & Coplan, 2007; Shin, 2017). Prosocial behaviors are voluntary actions denoted by children's attempts to help or benefit others, to recognize and concern about others and to being kind and cooperative with their peers and/or agemates (Kostelnik et. al, 2015; Ladd, 2010). One study, examined in 2011 by Baillargeon et al., showed that girls are more likely to begin showing prosocial behaviors between 29 and 41 months of age, while boys are more likely to stop showing such behaviors around this same age. Because boys stop showing prosocial behaviors at such a young age, girls are significantly more prosocial than boys going forward from this time (Newton, Laible, Carlo, Steele, & McGinley, 2014). Furthermore, Rose and Rudolph (2006) reviewed current literature and discovered gender differences in prosocial behavior were based on peers' and teachers' reports. Although some studies indicated that girls are more prosocial compared to boys, these studies focused on kindergarten, elementary, middle and adolescence rather than preschoolers (Kornbluh & Neal, 2016). Additionally, when examining gender and behavioral implications, Kok et. al (2018) indicated that a significant indirect pathway was discovered regarding girls' early caregiving experiences. Correspondingly, children who are not aggressive, excluded, shy, fearful, anxious, hyperactive, or exposed to peer violence exhibit prosocial behaviors more frequently (Gulay, 2011). Therefore, girls might be more likely to demonstrate more prosocial behaviors than boys because of social norms and early caregiving experiences.

Ladd (2010) also highlighted that children with asocial behaviors demonstrated more isolation with peers and prefer solitary play and might like to keep distance with their agemates. When addressing asocial behaviors, gender is not a significant factor. Both boys and girls can show antisocial behavior if they are physically aggressive early in their childhood (McEachern & Snyder, 2012). One component that could protect both boys and girls from asocial behaviors is parental familism, or the strong values of attachment one has to his or her nuclear and extended family. Parental familism is protective against antisocial behaviors in girls aged five to thirteen, and for boys aged five to nine (Morcillo et al., 2011). Additionally, hyperactivity, oppositional

behaviors, and inattention are all predictors of antisocial behavior no matter the gender of the individual (Giannotta & Rydell, 2016; Singh & Squires, 2014). All in all, gender does not seem to play a large role in asocial behavior.

Similarly to asocial behaviors, gender does not seem to make a large difference as to whether an individual will be more likely to be excluded by their peers. While greater social exclusion at age four can predict more behaviors that are aggressive and less cooperation at age six, no gender discrepancies can be seen (Singh, 2015; Stenseng, Belsky, Skalicka, & Wichstrom, 2014). However, boys who are physically aggressive in early childhood are more likely to experience peer rejection later in childhood (McEachern & Snyder, 2012).

Anxious–fearful behavior might be considered as an emotional discomfort and children might demonstrate anxious-fearful behaviors which might showed more caution, silence, as well as worried, fearful attitudes toward their agemates and/or things around them (Ladd, Herald-Brown, & Andrews, 2009). Anxious and fearful behaviors are significantly different between genders. Girls experience more anxiety and more difficulty regulating their negative emotions (Bender, Reinholdt-Dunne, Esbjorn, & Pons, 2012). Girls also report being more fearful than boys (Burnham, Lomax, & Hooper, 2013). Femininity is positively associated with anxiety sensitivity, while masculinity is negatively associated (Stassart, Dardenne, & Etienne, 2014). Due to these large differences between genders, studies have shown the impact of parents on their child rearing. Girls are more anxious if their parents are more anxious, while that is not the case for boys (Graham & Weems, 2015). However, both genders with child anxiety are more affected by their parents in childhood than in adolescence (Verhoeven, Bogels, & van der Bruggen, 2012). The purpose of this study was to investigate gender and the effects on preschoolers' behaviors. Children in this research study were observed by classroom teachers using the Child Behavior Scale (CBS) established by Ladd in 2010. The study sought to answer the following research question: Are there significant differences in preschool teachers' ratings on the Child Behavior Scale when compared by gender?

Methods

Sampling Strategies

This study applied multiple sampling strategies to locate research participants. Purposive, convenience, and cluster sampling strategies were conducted to select children from low-income families and their classroom teachers in the Head Start program in order to examine and answer the research questions and objectives. Purposive sampling was applied to recruit participants based on the specific purpose of investigating gender and the effects on preschoolers' behaviors. In order to meet the research purpose, this study recruited children, ages three- to five-years-old and their classroom teachers. Convenience sampling was also applied to select a Head Start center that was willing to participate in this study and was easily accessible. Once the volunteer Head Start center was determined, a researcher for this study used clustered sampling designs to recruit teachers at this center to voluntarily participate in this study. Finally, parents of children at this Head Start center were recruited. They then provided permission for their children to take part in the study by filling out the supplied consent form from parents.

Research Setting and Participants

This study was conducted in seven classrooms at one federally funded urban Head Start center located in a Southwest Central state in the United States. At the time of the study, the Head Start center housed eight classrooms and had an enrollment of 148 preschoolers, ranging from ages three to five. The ethnic make-up of the center was comprised of 60% Hispanics, 30% African Americans, and 10% Caucasians and mixed races. Some of the Hispanic parents and

preschoolers only spoke Spanish, so at least one teacher in each classroom was able to speak Spanish. However, the dominant classroom language was English, and the Spanish-speaking teacher would assist individual Hispanic preschoolers whose home language was Spanish when necessary.

One hundred and fifteen parents completed the consent form that allowed their children to participate in this study. One of the eight classrooms had only six of 19 parents return the research recruitment packets with signed consent forms, so the return rate of this classroom was 31.58%. Since the return rate for this classroom was lower than the 50% necessary for data analysis, this classroom was excluded from this study. In addition, four preschoolers dropped from the school in the middle of the semester. Therefore, 105 preschoolers aged three- to five-years-old ($N = 105$) from seven classrooms in one Head Start Center from a Southwest Central State in the United States were recruited for this research study. The preschoolers' sample was comprised of 51 girls (48.6%) and 54 boys (51.4%). There were 14 three-year-old children, 50 four-year-old children, and 41 five-year-old children. The age ranges of the children were between three years and seven months (43 Months) to five years and seven months (67 Months). The average age range was four years and six months (56.02 months). The length of enrollment in the Head Start program ranged from two months to 36 months and the average length was 13.5 months.

Fourteen teachers were recruited to assess children's social behaviors through the Child Behavior Scale (CBS) under the supervision of the researcher to make sure that there was no disagreement more than 50% between two classroom teachers. There were two classroom teachers in each classroom. Both the lead teacher and the co-teacher from each classroom were recruited to fill out the Child Behavior Scale for the total of 105 preschoolers. Although lead teachers were the main caregivers in the classroom and had a better understanding of the preschoolers in their classroom, the co-teachers also played an essential role in the classroom. Both teachers in each of the seven classrooms filled out the CBS for their preschool students under the supervision of the researcher.

Based on teachers' demographic survey completed by fourteen-classroom teachers, the average age of lead teachers was 38.71 years old; the ages ranged from 30 to 49 years old, and the average age of assistant teachers was 26.71 years old; the age ranged from 22 toward 35 years old. The average number of years of teaching experience was 11 years for the lead teachers and 1.69 years for the assistant teachers.

Instrument

Ladd developed the Child Behavior Scale (CBS) instrument in 2010, and it was used in this research study to measure aggression, pro-social behavior, asocial behavior, and exclusion by peers, anxious-fearful behavior, and hyperactive-distractible behavior (Ladd, 2010). The CBS instrument is a teacher reported scale using a 3-point Likert rating-scale ranging from doesn't apply (1), applies sometimes (2), and certainly applies (3). Ladd & Profilet (1996) reported the CBS's range of test-retest value as .54 to .83, inter-rater reliability as .81 to .88, and internal consistency as .77 to .96.

The internal consistency (Cronbach's alpha) of the Child Behavior Scale (CBS) in this research study was .88 in the overall scale. There are six subscales in this Child Behavior Scale, including Aggression with Peers, Hyperactive Distractible, Asocial with Peers, Prosocial with Peers, Excluded by Peers, and Anxious-Fearful. The reliability of each CBS subscale in this study as reported by Cronbach's alpha scores are as follows: .86 for Aggressive with Peers (AG), .88 for Hyperactive Distractible (HD), .83 for Asocial with Peers (AS), .83 for Prosocial with

Peers (PS), and .84 for Excluded by Peers (EP). The only subscale that had a Cronbach's alpha score less than .80 was Anxious-Fearful (AF) with a score of .63. Cronbach's alpha between .50 and .60 is considered sufficient for exploratory research (Nunnally, 1967) and above .70 is considered acceptable for a measurement scale (Cho & Kim, 2015). Many studies have used the Child Behavior Scale (CBS) in different school settings and have reported it as an effective teacher-report instrument (Graham & Coplan, 2012; Ladd, 2010; Ladd, Herald-Brown, & Andrews, 2009).

Data Analysis

Statistical Package for the Social Scientists (SPSS) version 24 software was used to conduct descriptive analysis and multivariate analysis of variance (MANOVA). The overall average CBS scores and standard deviation scores for each subscale can be seen in Table 1.

Table 1

Overall Scores of Average CBS Scores in Each Subscale

Subscales	Min	Max	M	SD
Aggressive with Peers (AG)	1.00	2.43	1.22	0.35
Hyperactive Distractible (HD)	1.00	3.00	1.41	0.54
Asocial with Peers (AS)	1.00	2.50	1.18	0.32
Anxious-Fearful (AF)	1.00	2.25	1.20	0.33
Prosocial with Peers (PP)	1.00	3.00	2.25	0.56
Excluded by Peers (EP)	1.00	2.14	1.13	0.26

The average score for each subscale was calculated based on gender. The mean scores and SD are provided in the following tables.

Aggressive with Peers (AG). The first subscale included seven items. Overall boys demonstrated higher mean scores compared to girls in these seven items, which included fighting, bullying, kicking, biting, hitting, being aggressive, taunting, teasing, and arguing. The details of the average scores are displayed in Table 2. Generally, the average aggression scores were higher for boys than for girls; however, girls demonstrated similar average scores as boys in the "argues" item. This finding corresponds with previous studies that boys demonstrate more physical aggressive behaviors like fighting, bullying, and kicking, while girls are more likely to demonstrate more relational aggression associated with language skills, like arguing (Ogelman, 2013; Razmjooe et al., 2016). Although boys' average scores in item 48 (Argues) were still higher than girls, their average scores between boys and girls were almost the same in this study's sample.

Table 2

Frequencies and Percentages of CBS - Aggressive with Peers (AG)

Items	Girl <i>n</i> = 51		Boy <i>n</i> = 54	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
4. Fights	1.14	.05	1.44	.09
16. Bullies	1.12	.05	1.26	.07
23. Kicks, bites, hits	1.06	.03	1.17	.06
35. Aggressive	1.08	.05	1.31	.08
36. Taunts, teases	1.10	.04	1.31	.08
38. Threatens	1.08	.04	1.17	.05
48. Argues	1.37	.07	1.41	.08
Overall AG	1.13	0.28	1.30	0.38

Hyperactive Distractible (HD). Generally, the teachers' ratings indicated that boys displayed more "squirmy, fidgety" behaviors and were more likely to show "poor concentration" compared to girls from this sample. Although Hyperactive Distractible behaviors were not applicable for the majority of the children, boys demonstrated higher mean scores on their Hyperactive Distractible behaviors, including poor concentration, inattention, and squirmy and fidgety behaviors. The details of the mean scores in each item are displayed in Table 3.

Table 3

Frequencies and Percentages of CBS - Hyperactive Distractible (HD)

Items	Girl		Boy	
	<i>n</i> = 51		<i>n</i> = 54	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Restless, doesn't keep still	1.16	.07	1.59	.11
2. Squirmy, fidgety	1.18	.06	1.69	.11
11. Poor concentration	1.22	.07	1.69	.10
17. Inattentive	1.18	.05	1.54	.08
Overall HD	1.18	0.35	1.63	0.61

Asocial with Peers (AS). Asocial with Peers was not an applicable behavior for the majority of the children based on teachers' reports. However, "withdrawn from peer activities" was a behavior rated as "sometimes" and "certainly" for both girls and boys. The details of Asocial with Peers (AS) are displayed in Table 4. Based on Table 4, boys received higher average scores in "withdrawn from peer activities" than girls.

Table 4

Frequencies and Percentages of CBS – Asocial with Peers (AS)

Items	Girl		Boy	
	<i>n</i> = 51		<i>n</i> = 54	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
25. Prefer to play alone	1.12	.05	1.26	.07
31. Likes to play alone	1.12	.05	1.26	.07
32. Keeps peers at distance	1.04	.03	1.20	.06
51. Solitary child	1.10	.05	1.17	.05
55. Avoids peers	1.06	.03	1.11	.04
57. Withdrawn from peer activities	1.22	.06	1.41	.08
Overall AS	1.13	0.28	1.23	0.35

Note: *n* = 105

Anxious - Fearful (AF). There were not many differences in the mean scores of Anxious-Fearful behaviors between girls and boys from this sample. Although Anxious-Fearful behaviors were not applicable for the majority of the children according to the teachers' reports, "cries easily" was a behavior rated as "sometimes" and "certainly" for 27.7% of the children. The details of Anxious-Fearful (AF) are displayed in Table 5.

Table 5

Frequencies and Percentages of CBS – Anxious-Fearful (AF)

Items	Girl		Boy	
	<i>n</i> = 51		<i>n</i> = 54	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
6. Is worried	1.06	.03	1.19	.07
8. Appears miserable, distressed	1.10	.04	1.22	.07
12. Fearful or afraid	1.08	.05	1.24	.07

19.Cries easily	1.29	.08	1.39	.09
Overall AF	1.14	0.28	1.26	0.37

Note: $n = 105$

Prosocial with Peers (PP). Compared to other subscales, Prosocial with Peers demonstrated reverse results. Girls showed higher average scores in these prosocial behaviors, which included helping, recognizing feelings, and more likely to demonstrate collaborative behaviors with other peers. Teachers' ratings indicated that Prosocial with Peers behaviors were applicable for the majority of the children compared to the other social behaviors. "Cooperative with peers" was a behavior rated more often as "sometimes" and "certainly". The details of Prosocial with Peers (PP) are displayed in Table 6.

Table 6

Frequencies and Percentages of CBS – Prosocial with Peer (PP)

Items	Girl $n = 51$		Boy $n = 54$	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
26.Helps	2.39	.12	2.26	.10
28.Recognizes feelings	2.41	.11	2.28	.10
34.Concerned about distress	2.08	.12	1.91	.12
40.Kind toward peers	2.47	.11	2.17	.10
46.Cooperative with peers	2.51	.10	2.32	.09
53.Concern for moral issues	2.12	.12	2.09	.11
56.Offers help	2.31	.12	2.13	.11
Overall PP	2.34	0.57	2.17	0.53

Note: $n = 105$

Excluded by Peers (EP). Generally, teachers' ratings indicated that Excluded by Peers behaviors were not applicable for the majority of the children based on the average scores below. "Excluded from peers' activities" was a behavior rated somewhat frequently as "sometimes" and "certainly". The details of Excluded by Peers (EP) are displayed in Table 7. As can be seen in the mean scores of the summary table below, boys demonstrated slightly more exclusion from peers when compared to girls.

Table 7

Frequencies and Percentages of CBS – Excluded by Peers (EP)

N	Girl $n = 51$		Boy $n = 54$	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
5.Not much liked	1.08	.04	1.13	.05
27.Peers refuse to let child play	1.06	.03	1.17	.05
30.Not chosen as playmate	1.10	.05	1.23	.06
33.Peers avoid this child	1.08	.04	1.17	.06
43.Excluded from peers' activities	1.14	.06	1.23	.06
45.Ignored by peers	1.12	.05	1.09	.04
54.Ridiculed by peers	1.08	.04	1.21	.06
Overall EP	1.09	0.24	1.17	0.28

Note: $n = 105$

A Pearson Correlation was computed to explore the relationship between the six subscales, which included Aggressive with Peers (AG), Hyperactive Distractible (HD), Asocial with Peers (AS), Anxious-Fearful (AF), Prosocial with Peer (PP), and Excluded by Peers (EP).

The results are displayed in Table 8. The subscale correlations were significantly related to each other.

According to the assumptions of Multivariate Analysis of Variance (MANOVA) (Mertler, & Vannatta, 2010), the dependent variables should have a minimal degree of association but should not be highly correlated. Maxwell (2001) suggested that moderate correlations between development variables ($r = .3$ to $r = .7$) are eligible for the MANOVA. Therefore, the subscales were analyzed as a set of dependent variables in a MANOVA analysis to explore the gender effects for the teachers' ratings of child behaviors. Researchers explored the gender differences among groups from the scores in the Child Behavior Scale (CBS).

Table 8

Correlations among Six Subscales of the Child Behavior Scale

Subscales	AG	HD	AS	AF	PP	EP
AG	1.00					
HD	0.62 **	1.00				
AS	0.26 **	0.48 **	1.00			
AF	0.39 **	0.53 **	0.67 **	1.00		
PP	-0.32 **	-0.40 **	-0.22 *	-0.25	1.00	
EP	0.55 **	0.53 **	0.47 **	0.46	-0.36 **	1.00

Note. * $p \leq 0.05$, ** $p \leq 0.01$

Results

There were significant differences between gender and the average scores of the Child Behavior Scale (CBS), Pillai's Trace = 0.17, $F(6, 98) = 0.17$, $p < 0.01$, $\eta^2 = .17$. Child gender differences were significant for aggressive with peers (AG), $F(1, 103) = 5.99$, $p < 0.05$, partial $\eta^2 = .06$ and for hyperactive distractible (HD), $F(1, 103) = 20.77$, $p < 0.01$, partial $\eta^2 = .17$. For the average scores of aggressive with peers (AG) and hyperactive distractible (HD), boys had significantly higher scores than girls. No significant differences were found for asocial with peers (AS), $F(1, 103) = 2.98$, $p = 0.09$, partial $\eta^2 = 0.03$, anxious-fearful (AF), $F(1, 103) = 3.32$, $p = 0.07$, partial $\eta^2 = 0.03$, pro-social with peers (PP), $F(1, 103) = 2.57$, $p = 0.11$, partial $\eta^2 = .024$, and excluded by peers (EP), $F(1, 103) = 2.49$, $p = 0.11$, partial $\eta^2 = .024$. The results of the Analysis of Variance test (ANOVA) are reported in Table 9. Additionally, the mean and standard deviation scores between girls and boys are also presented in Table 9.

Table 9

Means, Standard Deviations, F and p of Child Behavior Scale by Genders

Subscales	Girl $n = 51$		Boy $n = 54$		F	p	η^2
	M	SD	M	SD			
AG	1.13	0.28	1.30	0.38	5.99	0.02 *	0.06
HD	1.18	0.35	1.63	0.61	20.77	0.00 **	0.17
AS	1.13	0.28	1.23	0.35	2.98	0.09	0.03
AF	1.14	0.28	1.26	0.37	3.32	0.07	0.03
PP	2.34	0.57	2.17	0.53	2.57	0.11	0.02
EP	1.09	0.24	1.17	0.28	2.49	0.12	0.02

Note. $n = 105$, * $p \leq 0.05$, ** $p \leq 0.01$

Conclusion and Significance

In conclusion, this research study provides evidence that boys demonstrate more aggression with peers and hyperactive distractible behaviors than girls in the observed preschool classrooms. This adds to an emerging body of research on gender and the effects on children

behaviors. However, no gender differences were found to be significant for children asocial behaviors with peers, anxious-fearful behaviors, prosocial behaviors with peers, and exclusion by peers. The results of this research study can be used as an essential foundation for classroom teachers and parents in their child rearing and classroom management practices.

Other research regarding children behavior in early childhood classrooms corresponds with the aggressive with peers results found in this study. Research supports that young boys have more physical and relational aggression (Domenech-Llaberia et al., 2008; Heyman & Lagare, 2004; Owens & MacMullin, 1995), and some even report boys having increased verbal aggression as well (Owens & MacMullin, 1995). Even at young ages, children associate prosocial behaviors with girls and aggression with boys (Heyman & Lagare, 2004). This aggressive behavior causes children to label physically aggressive boys as bullies, which leads to aggressive boys being rejected by their peers (Lee, 2009). Furthermore, higher levels of physical aggression are associated with impairments in executive functioning and ADHD symptoms (McQuade, Breaux, Miller, & Mathias, 2017). Table 8 shows that aggression with peers and hyperactive distractible behaviors were correlated in this study as well, in addition to showing that many of the behaviors studied in the CBS for this research study were correlated, as well.

Furthermore, some research studies also supported that the hyperactive and distractible behavior results, which were found in this research study and Lavigne, LeBailly, Hopkins, Gouze, and Binns (2009) study reported gender differences and psychopathology among four-year-olds. Although they did not find much gender differences within all other psychiatric disorders, they found that four-year-old boys showed more ADHD and inattentive behaviors than their girl counterparts. Teachers have also regularly reported higher levels of hyperactivity and impulsivity in boys than in girls (Ullebo, Posserud, Heiervang, Obel, & Gillberg, 2012), and studies continue to report higher levels of hyperactive and distractible behaviors for boys than for girls (Bauermeister et al., 2007; Mahone, 2012; Singh & Yeh, 2015). These understandings are cause for concern, as ADHD symptoms are related to higher levels of peer dislike, even though peers tolerate higher levels of ADHD symptoms in boys than girls (Diamantopoulou, Henricsson, & Rydell, 2005).

Although gender differences have been explored in many research studies, it may be necessary to more closely examine how social contexts impact differences in individuals' behaviors. Researchers need to be cognizant on these differences, in addition to being aware of other gender differences including language skills, cultural values in gender roles, and societal gender expectations. Additionally, researchers and educational experts must be aware that gender bias exists for teachers, as research has shown teachers to rate girls as being significantly more impaired and more in need of services than boys (Coles et al., 2012). Parents view might also affect gender differences in terms of behavior because of their own gender bias due to cultural and/or geographical location. For example, some research showed that fathers who adhere to stereotypical gender roles use more physical control for boys and it might lead to increased aggression in boys than in girls (Endendijk et al., 2017; Yeh, 2013). Furthermore, Nivette et al. (2014) discovered that gender differences in aggression are greater among children with parents from high gender inequality backgrounds.

Therefore, this research study shows that gender inequality might increase social behavior problems, as well as impact academic performance from a young age (Lee, Lahey, Owens, & Hinshaw, 2007). This research study serves as an essential starting point to recognize that gender equality continues to be an issue in early childhood classrooms. Due to this, it is

really important to recognize gender differences, and also to be more knowledgeable and appropriate when responding to such behavior differences in preschool classrooms.

Some limitations are presented in the results. This research study included only preschoolers and small sample size. A larger sample size might have provided different result. Researchers collected data from one State only. In addition, only paper questionnaire were used in this research study and to truly reach diverse young children; an online system might be preferable, as it might reduce the time and energy needed for data collection in preschool classrooms. However impact of the limitation was small, as can be seen in the findings of this research study.

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