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Measuring the Friendships of Young Children With Disabilities: A Review of the Literature

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Abstract

The purpose of this article is to describe what has been learned over the past 35+ years of research on the friendships of young children with disabilities. An extensive literature review was conducted to critically examine the purposes that guided the friendship studies, the methods used to measure friendships, and the major findings of these studies. A total of eight studies were identified. The results of this review revealed that across all studies, researchers relied on the identification of children's existing friendships to address their main research questions. However, researchers did not always operationally define the construct of friendship they were measuring, and the methods they used to identify friendships varied widely across all studies. Gaps in the literature and implications for future research are discussed.

Keywords

friendship, social development, social competence, assessment, inclusion, literature review

Friendships are commonly described as a milestone in the early years of a child's development. Some researchers believe that stable friendships can be observed as early as toddlerhood (Howes, 1996), while others have indicated that friendships are the most stable following a child's third year (Parker, Rubin, Earth, Wojslawowicz, & Buskirk, 2006). Also during their third year, it is believed that children can be reliable reporters of their friendships when in a stable peer group (Howes, 2009).

Positive features of young children's friendships include mutual reciprocity in action and feelings, enjoyment in spending time with each other, affection, enhanced social skills and interactions, play, and emotional support (Bukowski, Newcomb, & Hartup, 1996; Howes, 1996). Young children tend to form friendships with peers based on shared similarities. For example, Sebanc, Kearns, Hernandez, and Galvin (2007) found that several personal characteristics and features of children's friendships could determine whether young children (i.e., preschoolers, kindergarteners, and first graders) would have a best friend. In terms of gender, girls were more likely to be involved in a best friendship than boys. Considering age, older children were more likely to be involved in a best friendship than their younger peers, and teachers characterized these relationships as featuring high-quality, prosocial behaviors (e.g., companionship, support).

Given the strong link between social-emotional development and other developmental domains (Bowman, Donovan, & Burns, 2000; Denham & Brown, 2010), supporting young children's peer relationships, specifically friendships, is important. Research has shown that a lack of friendships may not only create deficits in children's early learning achievement but also contribute to children's increased feelings of anxiety, depression, and social withdrawal (Berndt, 2004). Asher and Paquette (2003) noted that children as young as 5 years old have a basic understanding of what loneliness means (e.g., having no one to play with, being excluded from a group) and that the consequences of not being involved in a close friendship could exacerbate internalized feelings of loneliness for young children (Asher, Parkhurst, Hymel, & Williams, 1990). The existence of classroom friendships has also been identified as a protective feature for children who are victimized by peers. In elementary classrooms, for a child who is victimized, having a friend who will readily come to his or her defense against a bully has been found to deter instances of bullying (Doll, Song, Champion, & Jones, 2011).

Unfortunately some subgroups of children, such as those with developmental delays, behavior problems, or disabilities, are at significant risk for developing poor peer relationships when compared with typically developing children

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(Kemple, 2004). The absence of friendships experienced by children with special needs may put this subgroup of children at increased risk for social difficulties, especially during times of transition (e.g., moving from preschool to kindergarten). Therefore, the purpose of this literature review was to investigate the research on the friendships of young children with disabilities. Two questions guided this review: (a) What are researchers' main purposes and methods for assessing the friendships of young children with disabilities? and (b) What are the major findings from these studies?

Method

Electronic Literature Search

For the purpose of this review, two online databases were independently searched (i.e., ERIC and PsycINFO). A parameter was set to find all pertinent literature between 1975 (the passage of Public Law 94-142) and 2011, and additional limits were set to identify articles that were published in peer-reviewed journals and were written in English. In addition, for all searches in the PsycINFO database, limits were set to only identify research involving human participants within the preschool (2–5 years) or school (6–12 years) age range.

Keywords were selected from each databases' thesaurus, and the "explode" function was used to increase search capacity. The explode function enables a search for a specific keyword and all of the keyword's narrower terms. The keyword "friendship" was used in combination with other keywords that described the population of interest (e.g., disabilities, developmental delays) and the context of interest (e.g., special education, early intervention, early childhood education). This electronic literature search identified 133 articles.

Criteria for Inclusion

The following criteria were used to determine the inclusion of articles: (a) Child participants had to be between 3 and 6 years old, or in the case of group research, the mean age of all participants had to be between 3 and 6 years old; (b) each study had to involve at least one child, 3 to 6 years old, who had an identified disability, developmental delay, or was being referred for special education services; (c) the friendships of young children had to be measured in the study or be mentioned as a theme found in the data from a qualitative study; (d) studies must have been conducted in an early care and education setting in the United States; and (e) studies had to be published in peer-reviewed journals. Given the number of articles found during the literature search, the authors used a three-step process to identify articles to be included in this review.

Review Process

To begin, the first author reviewed the titles of all articles identified by the search. She eliminated an article if the title had words that were incongruent with the criteria for inclusion (e.g., it included the word "adolescents"). The first author kept any article with the word "friend(s)" or "relation(ships)" in the title, provided that there was no evidence of a mismatch with the inclusion criteria. Following this step, 71 articles were eliminated and 62 remained. For the second step, the first author read each abstract for evidence of the article's fit with the inclusion criteria. This led to the elimination of 38 articles. The final step was to read the 24 remaining articles, refer to the inclusion criteria, and determine whether the article should be reviewed. This step led to the identification of five articles.

Review process reliability. After training, an early childhood special education graduate student also followed the three-step review process to eliminate articles that were incongruent with the inclusion criteria. The first author and graduate student discussed all disagreements and reached consensus on an article's inclusion or elimination prior to moving on to the next step in the review process. Reliability for each step was 98%, 87%, and 100%, respectively. After reliability was conducted, the authors decided that an additional hand search of the literature was warranted given the small number of articles that were identified by the electronic search and three-step review process.

Hand Search

The first author reviewed the reference lists of the five identified articles for any study that might meet the inclusion criteria. Next, she reviewed the references from two book chapters about the friendships of young children with disabilities (i.e., Buysse, Goldman, West, & Hollingsworth, 2008; Goldman & Buysse, 2007). Last, the first author identified three early childhood journals (i.e., *Early Childhood Research Quarterly, Journal of Early Intervention, Topics in Early Childhood Special Education*) and reviewed the table of contents for issues published between 2008 and 2013. Based on this hand search, three additional articles met the criteria for inclusion. Ultimately, eight articles were identified for this review.

This review begins with an overview of the early childhood special education research on the friendships of young children with disabilities. Subsequent sections address the two questions that guided the review. The last section focuses on limitations of this review, gaps that exist in the literature regarding the friendships of young children with disabilities, and suggestions for future research.

Overview of the Literature

Eight studies, published between 1984 and 2009, met the criteria for inclusion in the review (see Table 1). Across all studies, 940 children were involved and they ranged in age from 1.7 to 6.4 years old. Of the participating children, 65% ($n = 612$) were identified as having a disability or developmental delay, receiving early intervention services, or in the process of being referred for special education services. There were 462 adult participants (i.e., parents, teachers, and teacher assistants) in the reviewed studies. Of these adults, 107 were teachers, 353 were parents, and 2 were teaching assistants. This review includes two studies (Buysse, Goldman, & Skinner, 2002, 2003) that had the same teacher and child participants; participants in these studies were counted only once in the final participant totals.

Main Purposes of Friendship Studies and Methods Used to Identify Friendships

Purposes. In general, all eight studies set forth to describe the multiple variables, dynamics, and characteristics of friendships that included young children with disabilities. The existence and quantity of friendships that children with disabilities had was a question of interest in three studies (Buysse, 1993; Buysse et al., 2002; Strain, 1984). Many of the studies focused on the characteristics of dyadic friendships that involved children with disabilities (Buysse, 1993; Buysse et al., 2002, 2003; Dietrich, 2005; Hollingsworth & Buysse, 2009; Strain, 1984), the characteristics of typically developing children who had developed friendships with children who had disabilities (Buysse, 1993), and the characteristics of children with disabilities who were involved in friendships (Buysse, 1993; Buysse et al., 2002; Guralnick, Connor, & Hammond, 1995). Two studies (Hollingsworth & Buysse, 2009; Strain, 1984) examined children's mixed-ability friendships (i.e., consisting of a child with and without a disability), while six studies (Buysse, 1993; Buysse et al., 2002, 2003, Dietrich, 2005; Guralnick et al., 1995; Odom et al., 2006) examined any friendship that included a child with a disability, regardless of the identified friend's ability status.

Buysse (1993), Buysse et al. (2003), and Hollingsworth and Buysse (2009) explored strategies parents and teachers used to promote, manage, and help maintain friendships for children with disabilities. Five studies included an examination of the impact of early care and education environments on the formation of friendships for children with disabilities (Buysse, 1993; Buysse et al., 2002, 2003; Dietrich, 2005, Guralnick et al., 1995). In addition, two research teams studied the meaning and importance of friendships that involved children with disabilities from parental, teacher, or child perspectives (Dietrich, 2005; Hollingsworth & Buysse, 2009). Also, while Odom et al. (2006) did not ask research questions explicit to friendships, the researchers asked teachers and parents to describe the presence of friendships for each child participant who had a disability. In combination with other data, they used the information about friendships to determine the child's acceptance among classroom peers. An overview of all friendship studies and their main purposes can be found in Table 2.

In conclusion, all eight studies focused on the friendships of young children with disabilities and variables that might influence the presence of friendships for these children. To better understand the findings, a closer examination of the methods used to assess the presence of friendships is warranted.

Methods. While a variety of methods were used to assess the presence of friendships across the studies, the most frequently used method was a combination of teacher- and parent-report (Buysse, 1993; Hollingsworth & Buysse, 2009; Odom et al., 2006). Buysse (1993) and Odom et al. (2006) had parents and teachers individually identify the existence of friendships for children with disabilities. Hollingsworth and Buysse (2009) took a different approach and first asked teachers to identify one typically developing child who was a friend of a child with a disability. Next, these researchers asked both sets of parents to confirm whether the two children were actual friends. Only dyadic, mixed-ability friendships identified by teachers and confirmed by parents were included in their study.

Two of the reviewed studies relied solely on teacher-report (Buysse et al., 2002, 2003) to identify the presence of friendships for children with disabilities. The same researchers conducted these studies using the *Playmates and Friends Questionnaire for Teachers* (Goldman, Buysse, & Carr, 1997), whereby teachers identified the presence of children's friendships.

Dietrich (2005) used a combination of teacher-report and observational methods to identify the presence of friendships for children with disabilities. She began the assessment process by observing the interactions that young children with disabilities had with classroom peers. From those observations, Dietrich created a list of dyads she felt matched her definition of friendship. Following the observations, teachers were asked to create their own list of classroom friendship pairs, without knowledge of Dietrich's list. Finally, the two lists were compared for agreement. Pairs of children identified by teachers and the researcher were determined to be friends.

Two of the eight studies used only parent-report (Guralnick et al., 1995) or child-report (Strain, 1984) to identify the presence of friendships for young children with disabilities. Guralnick et al. (1995) used a questionnaire to interview parents of children with disabilities enrolled in

Table 1. Description of Reviewed Studies.

Authors and date	Purpose	Child participants' mean age (range)		Teachers or assistants	Parents	Methods and reporters	Definition of friendship
		CWD	TDC				
Buysse (1993)	Examine friendships among preschoolers with disabilities in community child care settings.	58 children 4.2 years (2.2–5.5)	NA	48 teachers	58 parents	*Early Childhood Friendship Survey* (Buysse, 1991) Parents and teachers	Characterized by a mutual interest in spending time or playing together.
Buysse, Goldman, and Skinner (2002)	Examine setting effects (inclusive, specialized early childhood vs. inclusive child care) on the formation of friendships for children with and without disabilities.	120 children 47.5 months (19–77)	213 children 44.8 months (21–65)	25 general early childhood teachers 20 early childhood special education teachers	NA	*Playmates and Friends Questionnaire for Teachers* (Goldman, Buysse, & Carr, 1997) Teachers	NA
Buysse, Goldman, and Skinner (2003)	Examine strategies used by teachers to support friendships of children with disabilities in early childhood settings.	Same as Buysse et al. (2002)					NA
Dietrich (2005)	Learn more about the friendships of preschool-aged children with and without disabilities in inclusive settings; how children, parents, and teachers describe friendships; and what the friendships mean to children, parents, and teachers.	8 children (4–5 years)	35 children (4–5 years)	2 teachers 2 teacher assistants	9 parents	Direct observation Child, parent, and teacher interviews	A dyadic relationship between peers, characterized by repeated interest in spending time or playing together and enjoying time with each other.
Guralnick, Connor, and Hammond (1995)	Learn maternal perspectives of their children's peer relationships and friendships for children with disabilities educated in integrated and specialized early care and education programs.	262 children (48–71 months)	NA	NA	262 parents	Interviews Mothers	A minimum of 33% of a focal child's total positive social interactions must have occurred with a specific companion and that specific companion also must direct at least 33% of his or her positive social interactions to the focal child.
Hollingsworth and Buysse (2009)	Examine mixed-ability friendships (friendships between children with and without disabilities).	12 children 58 months	12 children 58 months	12 teachers	24 parents	Semi-structured interviews Parents and teachers	Children who liked to spend time together and enjoyed each other's company. These relationships should be mutual with each child considering the other to be a friend.
Odom et al. (2006)	Examine the acceptance or rejection of children with disabilities in inclusive preschool settings.	80 children 3.9 years (3–5)	NA	NA	NA	*Teacher and Parent Friendship Questionnaire* (Buysse, 1993)	The child wanting to be friends with another child and the other child also wanting to be friends.
Strain (1984)	Assess the presence of friendships between children with and without disabilities in inclusive preschools and to compare the interactions of two types of friendship dyads: (a) dyads of two children without disabilities, and (b) dyads of one child with and one child without a disability.	72 children (3.2–4.8 years)	68 children (3.2–4.8 years)	NA	NA	Teachers Observation *Sociometric Acceptance Scale* (Bruininks, Rynders, & Gross, 1974) Children	NA

Note. CWD = children with disabilities; TDC = typically developing children; NA = not applicable.

Table 2. Main Purposes of Friendship Studies.

Authors and date	Type of friendship studied		Existence of friendship	Characteristics of . . .			Strategies to support friendships	Setting effects on friendship	Importance of friendships	How friendships relate to peer acceptance
	M-A	Any		Dyad	CWD	TDC				
Buysse (1993)		X	X	X	X	X	X	X		
Buysse, Goldman, and Skinner (2002)		X	X	X	X			X		
Buysse, Goldman, and Skinner (2003)		X		X			X	X		
Dietrich (2005)		X		X				X	X	
Guralnick, Connor, and Hammond (1995)		X			X			X		
Hollingsworth and Buysse (2009)	X			X			X		X	
Odom et al. (2006)		X								X
Strain (1984)	X		X	X						

Note. M-A = mixed-ability friendship (e.g., one child with and one child without a disability); Any = any friendship (e.g., friendships between two children with disabilities or a mixed-ability friendship); Dyad = dyadic relationship; CWD = children with disabilities; TDC = typically developing children.

integrated (i.e., the majority of children were typically developing) and specialized (i.e., only children with disabilities) early childhood programs to gain their perspectives about their children's school-based friendships and peer relationships. Strain (1984) was the only researcher to gather children's perspectives in determining the presence of friendships among typically developing preschoolers and preschoolers with disabilities. To do this, he used a sociometric acceptance scale task. Only typically developing preschoolers participated in the task of identifying classroom peers as friends. In summary, the use of diverse methods to identify the presence of friendships for young children with disabilities allowed for an understanding about the existence, nature, and characteristics of children's friendships from multiple perspectives.

Major Findings

The existence of friendships. Three of the eight studies (Buysse, 1993; Buysse et al., 2002; Guralnick et al., 1995) found that the majority of children with disabilities were involved in at least one mutual friendship. While Buysse et al. (2002) and Guralnick et al. (1995) did not offer a definition for this type of friendship, Buysse (1993) identified a mutual friendship as "characterized by a mutual interest in spending time or playing together" (p. 383). Along with Buysse, researchers defined reciprocal friendships in four other studies. A list of reciprocal friendship definitions can be found in Table 1.

Seventy-nine percent of children with disabilities in Buysse's (1993) study were reported to have at least one mutual friend based on parental report. Likewise, 55% of these same children were reported to be a part of a mutual friendship from their teacher's perspective. Odom and colleagues (2006) also studied the number of friendships identified for children with disabilities enrolled in inclusive preschools. These researchers distinguished between the friends reported for accepted children with disabilities versus the number of friends reported for children with disabilities who were rejected by their classroom peers. In this study, accepted children with disabilities were reported to have, on average, 2.12 friends (i.e., based on parent-report) and 1.1 friends (i.e., based on teacher-report). Children with disabilities who were rejected by classroom peers were reported to have, on average, 1.29 friends (i.e., based on parent-report) and 0.7 friends (i.e., based on teacher-report). In contrast to these findings, over 20 years earlier, Strain (1984) found that only 21% of his participants with disabilities were identified by typically developing, classmates as being a friend. Clearly, friendships do exist for young children with disabilities; however, variability exists in terms of the number of identified friendships. With this in mind, examining the nature of young children's friendships and the characteristics of children with and without disabilities who are involved in those friendships can provide insights into why such differences might be present.

Nature of friendships. Friendships for children with disabilities were reported to include many of the same qualities found in the friendships of typically developing children. For example, friendship dyads were observed to possess positive affection, enjoyment, laughing, and the skill of sharing with one another (Buysse, 1993; Hollingsworth & Buysse, 2009). Children who were identified as being friends were reported to seek close proximity to each other (e.g., sitting by each other; Hollingsworth & Buysse, 2009)

across many parts of the school day (e.g., during daily routines, teacher-directed activities, small-group activities, and child-chosen activities; Dietrich, 2005). In addition, some friendships were reported to be stable over time. On average, parents reported that their children's friendships had been ongoing for 1.7 years and teachers reported the longevity of children's friendships as being about a year less than that reported by parents (Buysse, 1993). Not surprising, some parents of children with disabilities reported that their children's friendships were marked by conflict and instability (Hollingsworth & Buysse, 2009), which is a feature also found in typically developing children's friendships. The only researcher to follow young children's friendships across the school year found that two of the six friendship pairs identified in the fall did not exist by late spring (Dietrich, 2005). In this study, there was no mention of whether the preschoolers who had experienced friendship dissolution were able to form new classroom friendships during that time period.

Characteristics of friends. Similar to the literature on the friendships between typically developing children, friendships that included children with disabilities shared many of the same characteristics. For example, friends of children with disabilities were usually close in age (Buysse, 1993; Dietrich, 2005; Guralnick et al., 1995; Hollingsworth & Buysse, 2009) and the same gender (Buysse, 1993; Dietrich, 2005; Guralnick et al., 1995; Hollingsworth & Buysse, 2009; Strain, 1984). There were also parent- and teacher-reports about similarities or complementary behaviors present in the children involved in a friendship, behaviors that contributed to the formation of friendships (Buysse, 1993; Hollingsworth & Buysse, 2009). For example, friends of children with disabilities reportedly enjoyed being in a "mothering" role (Buysse, 1993; Hollingsworth & Buysse, 2009). Likewise, some parents of children with disabilities indicated that their children enjoyed being held and embraced (Buysse, 1993). These two examples highlight how young children's friendships could be based on the way two children's behaviors complement one another. It is interesting to note that Strain (1984) discovered, through behavioral observations, that typically developing peers engaged in more affection and helping behaviors toward their friends with disabilities versus their friends without disabilities. These behaviors tended to be seen most often during dramatic play when a peer would assign the child with a disability the role of a younger sibling.

Other examples of complementary behaviors that were reported to support the formation and maintenance of friendships included when two children were considered to be quiet, shy, demanding, troublemakers (Buysse, 1993), or easygoing (Hollingsworth & Buysse, 2009). A peer's ability to make adjustments for the child with a disability was also mentioned as a characteristic that helped solidify the friendships between children with and without disabilities (Buysse, 1993). Interestingly, parents and teachers of children with disabilities reported that the characteristics of the child's friends were some of the most important factors that contributed to the formation of that friendship.

While limited in number, parents of children with disabilities did mention some of their own children's characteristics as relevant to the formation of friendships. Examples of the characteristics mentioned by parents included their children's level of openness, independence, friendliness, and outgoing personality (Buysse, 1993). Other characteristics of relative importance included the etiology and severity of a child's disability and the role these characteristics played in the formation of friendships for children with disabilities. For example, Buysse (1993) found that children with intellectual disabilities were more likely to be identified as having no friends or only unilateral friendships (i.e., the child with a disability likes a peer, but the peer does not reciprocate interest in the child). In addition, Buysse found that a child's level of development tended to influence whether or not the child had an identified mutual friend. She found that children with disabilities whose development was closest to their actual chronological age were involved in the most mutual friendships. She also found that children identified as having mutual friendships received higher scores, as measured by the *Battelle Developmental Inventory* (Newborg, Stock, Wnek, Guidubaldi, & Svinicki, 1988), in the areas of activity level, reactivity, goal-directedness, frustration, attention span, and responsiveness to adults.

Similarly, Strain (1984) found that among children with disabilities, those who had higher IQ scores were most often selected as friends by typically developing peers. On a related note, while not specifically addressing friendships of young children with disabilities, Odom et al. (2006) discovered that children whose disabilities effected their prosocial behaviors (e.g., Autism Spectrum Disorders, Emotional Behavioral Disorders, and Intellectual Disability/Developmental Delay) were more often rejected by classroom peers when compared with children whose disability did not significantly influence their social development (e.g., Speech-Language Impairment, Physical Impairment). Furthermore, in reference to the case studies completed for each child in Odom and his colleagues' study, the majority of children who were accepted among classroom peers used appropriate social behaviors, had at least one mutual friendship, or engaged in sustained interactions with peers. Together, these findings suggest that severity and type of disability influence the formation of friendships for young children with disabilities. Contrary to these findings, Buysse et al. (2002) reported that the severity of disability was not related to the number of friends for children with disabilities. This remained true regardless of whether a child with a disability was placed in an early care or

education environment with predominately typically developing peers or children with disabilities. Irrespective of the characteristics of children with and without disabilities, three research teams (Buysse, 1993; Buysse et al., 2003; Hollingsworth & Buysse, 2009) provided details about how parents and teachers supported the development and maintenance of friendships for young children with disabilities.

Strategies to support friendship development and maintenance. Buysse et al. (2003) used the *Playmates and Friends Questionnaire for Teachers* (Goldman et al., 1997) to identify the instructional strategies most often used by teachers to facilitate friendship development between children. This questionnaire includes 11 strategies that were identified and supported in prior research; teachers were provided space to list other instructional strategies that they used; however, the participants did not identify any other strategies. The 11 strategies were categorized as "passive" or "active." The 4 passive strategies included (a) allowing friends to exclude others from their play, (b) providing enough free choice time for the friends to play together, (c) letting children form friendships on their own, and (d) allowing friends to play together on their own. The 7 active strategies included (a) commenting on friends' play, (b) inviting two children to play together, (c) arranging for two children to play together outside of class, (d) providing special materials or activities, (e) arranging for a child to be close to a friend, (f) speaking or interpreting for a child, and (g) providing suggestions to solve problems or resolve conflicts. Findings revealed that teachers reported using passive strategies most often as ways to support friendship development (Buysse et al., 2003).

More specifically, teachers frequently used two passive strategies: (a) letting children choose their own friends and (b) providing time for free play. While Hollingsworth and Buysse (2009) did not provide exact frequencies, they found that several teachers reported using these same two passive strategies. While teacher participants commonly mentioned using passive strategies to support children's friendships, they also reported that they used active strategies. In fact, teachers were more likely to use active strategies to support friendship development when there was at least one child with a disability involved in the friendship (Buysse et al., 2003).

One active strategy frequently mentioned by teachers was their involvement and facilitation of a dyad's interactions or play (Hollingsworth & Buysse, 2009). Commenting on children's play was another active strategy commonly used by teachers (Buysse et al., 2003). Teachers also reported that they would often discuss with children what it meant to be friends (Hollingsworth & Buysse, 2009) and they would sometimes model for the children how to communicate and develop friendships with peers (Buysse, 1993). In addition, teachers mentioned that they would teach social skills strategies to children such as how to share, and they would emphasize the equal treatment of everyone in the classroom (Buysse, 1993; Hollingsworth & Buysse, 2009). Furthermore, teachers frequently mentioned that they would let children choose where they wanted to sit during various class activities because it gave children the opportunity to be near a preferred friend (Buysse, 1993). In brief, across the eight studies, there were numerous examples of how teachers supported the friendship development of children with disabilities. However, some instructional strategies were rarely mentioned.

One instructional strategy rarely mentioned was planning a friendship dyad's favorite activities to support their interactions (Hollingsworth & Buysse, 2009). This finding was surprising given that prior research has shown that more than half of early childhood teachers acknowledge that classroom materials and activities contribute to the formation of children's friendships (Buysse, 1993). Another strategy that was infrequently mentioned was making contact with a child's family to help arrange out-of-school experiences with peers (Buysse et al., 2003). In fact, Hollingsworth and Buysse (2009) reported that only one teacher mentioned sharing information with parents so that they could arrange a play date for their children outside of school. While these researchers focused on the roles that parents and teachers assumed to help children form friendships, other researchers investigated whether early care and education settings themselves influence the formation of friendships (Buysse, 1993; Buysse et al., 2002, 2003; Guralnick et al., 1995).

Setting effects on the formation of friendships. Of the four reviewed studies that investigated setting effects on the formation of friendships, one study (Buysse, 1993) solely investigated the impact of an inclusive, community-based child care center that served mainly typically developing children. Two studies (Buysse et al., 2002, 2003) investigated inclusive child care centers and contrasted the friendships identified for children in those settings with identified friendships in programs that contained mostly children with disabilities. A fourth study (Guralnick et al., 1995) contrasted "integrated" settings that mostly served typically developing children with "specialized" programs that only served children with disabilities. These four studies investigated the impact that early care and education environments had on the friendships of children with disabilities.

Overall, parents of children with disabilities felt that the respective setting in which their children were enrolled (i.e., integrated or specialized) sufficiently met their children's social needs (Guralnick et al., 1995). Researchers found that young children with disabilities formed friendships in both types of settings (Buysse et al., 2002; Guralnick et al., 1995); however, there were significant benefits for children

enrolled in inclusive programs. Children with disabilities enrolled in inclusive programs were 1.73 times more likely than children with disabilities in specialized programs (i.e., programs where most, but not all, of the children had disabilities) to have at least one friend (Buysse et al., 2002). This statistic held even when Buysse et al. (2002) controlled for the severity of children's disabilities across the two programs. This being said, children with disabilities in specialized settings were more likely to form friendships with other children with disabilities (Buysse et al., 2002), while the majority of children with disabilities in inclusive child care programs were likely to form friendships with typically developing peers (Buysse, 1993; Buysse et al., 2002). Equally important, there were no significant differences in the number of friendships identified for children with and without disabilities within inclusive programs. Still, across both inclusive and specialized programs, children with disabilities were less likely to have identified friendships when compared with their typically developing peers (Buysse et al., 2002). The comments parents of children with disabilities made concerning friendship formation may be reflective of this finding.

Fifty percent of parents whose children with disabilities attended inclusive settings felt that their children did not have enough friends, and 40% of the same parental group was concerned that peers would reject their children (Guralnick et al., 1995). Likewise, when parents of children with disabilities who attended specialized settings were given a scenario about their children being educated in an inclusive environment, 51% of those parents were concerned that classmates would reject their children. The main cause for their worry was that peers' attitudes toward their children with a disability would lead to rejection. These findings provide insights into the importance that parents place on social development and friendships for their children with disabilities.

The importance of friendships for young children with disabilities. Parents of young children enrolled in both inclusive and specialized programs spoke of the importance of their children's social development (Guralnick et al., 1995). Researchers found that many of the friendships that included children with disabilities were reported to have started in early care and education settings, and for many, the friendships continued to exist outside of child care or school settings (Buysse, 1993; Guralnick et al., 1995). In addition, the opportunity for children to spend time together and learn about peer relationships was highlighted as a benefit for children with and without disabilities, for many parents reported that their children lacked opportunities to engage with same-age peers outside of school (Hollingsworth & Buysse, 2009).

Additional collective and individual benefits of having friendships were identified in the reviewed studies. Collective benefits of school-formed friendships that were identified included the opportunity to develop a relationship with a same-age peer, experience companionship, and receive mutual support and affection (Dietrich, 2005). Individual benefits of friendships for children with and without disabilities included an appreciation and awareness of differences and opportunities to (a) express individual personalities, (b) give and receive affection, (c) feel accepted, and (d) learn, practice, and enhance social skills (Dietrich, 2005). Being a role model for one's peers was also mentioned as an individual benefit (Dietrich, 2005).

Parents of children with disabilities value the role that typically developing peers have in the development of their children's skills. Guralnick et al. (1995) found that more than half of the parents with children in inclusive settings mentioned that the inclusive program provided their children with experiences to observe and learn from typically developing peer role models. In addition, parents of children with disabilities in specialized programs, when provided with a hypothetical situation (i.e., imagine your child in an inclusive setting), thought that typically developing children could facilitate their children's development of social skills (Guralnick et al., 1995). In spite of the numerous benefits perceived to be present when children with and without disabilities are friends, many teachers report that such friendships are more important for children with compared to their typically developing peers (Hollingsworth & Buysse, 2009).

Discussion

Limitations of This Review

One major limitation must be discussed in regard to this literature review. The emphasis of this search was for articles published in peer-reviewed journals. Reference lists were also searched, but for inclusion in this review, any identified article needed to be published in a peer-reviewed journal. This inclusion criterion limited the extent that gray literature could be identified and included (e.g., technical reports from agencies or centers that investigate the social-emotional development of young children with and without disabilities such as the Center on the Social Emotional Foundations for Early Learning [CSEFEL] or the Technical Assistance Center on Social Emotional Intervention for Young Children [TACSEI]). This criterion also disregarded the inclusion of evidence published solely in book chapters. Despite this limitation, the findings from this literature review provide a clearer understanding of gaps in our knowledge related to the friendships of children with disabilities, thereby providing directions for future research.

Gaps in the Literature and Ideas for Future Research

To begin, all eight studies examined the friendships of young children with disabilities prior to their enrollment in

elementary school. No research was found that explicitly examined the presence of friendships for children with disabilities in kindergarten. This information could be extremely beneficial considering that young students with disabilities (i.e., ages 6–11 years old) are more likely than older students with disabilities to be educated for the majority of the school day in regular classroom settings (U.S. Department of Education, 2006). This fact suggests that children with disabilities may have more opportunities to develop friendships, especially friendships with typically developing peers, during their earliest years of schooling when they spend a majority of their school day in general education classrooms. However, this area of research has yet to be explored.

A second gap in the literature is a lack of information about the impact of instructional practices and interventions on the friendships of young children with disabilities. Most of the reviewed studies were descriptive in nature, focusing on the characteristics of friendships for young children with disabilities (Buysse, 1993; Buysse et al., 2003; Dietrich, 2005; Guralnick et al., 1995; Hollingsworth & Buysse, 2009; Strain, 1984). While Buysse et al. (2003) and Hollingsworth and Buysse (2009) investigated instructional practices related to the friendships of children with disabilities, these investigations were not causal in nature and did not investigate the impact various strategies had on the formation or maintenance of children's friendships. Buysse et al.'s (2002) study was the only quasi-experimental study designed to examine the influences of early childhood settings on the formation of friendships for children with disabilities. This study extended the literature on how the social ecology of early care and education environments can impact the formation of friendships for children with disabilities. Nonetheless, while there is a significant amount of research that has documented how to increase the frequency of social interactions between children with and without disabilities (see Brown, Odom, McConnell, & Rathel, 2008), these studies have not specifically measured whether increasing children's social interactions leads to the development of friendships. This being said, more research is needed to identify which instructional practices, including peer interaction interventions, might positively influence friendship formation for children with disabilities.

A third gap in the literature is the lack of self-report data acquired from children with disabilities. There was one study that used child-report (Strain, 1984); however, this study did not include the perspective of children with disabilities. It is important that we include all children's voices in the process of identifying reciprocal friendships. When investigating the friendships of children with disabilities, researchers should follow the trend Corsaro noted (as cited in Mouzourou, 2009) of moving away from "research *on* to research *with* or *for* children" (p. 12, italics added). It should be noted that while Dietrich (2005) did not ask children with disabilities to identify their friendships, she did attempt to include their voices by interviewing them about what they liked to do with their friend and why they thought that a peer was their friend. In regard to this gap in the literature, future research should address how friendship nomination methods could be designed to gather the perspectives from all children in a classroom, regardless of ability level.

A fourth gap in the literature focuses on the extent to which friendships might mediate the acceptance of a child with a disability among classroom peers. As Odom and his colleagues (2006) stated, there has been very little research regarding the acceptance of young children with disabilities among their classroom peers. Results from their study showed that only 22 preschool children with disabilities (i.e., 28% of their sample) were accepted among classroom peers; however, children who were accepted tended to have stronger social skills and most of the children who were accepted had at least one close friendship. Conversely, rejected children tended to have difficulty communicating their ideas, thoughts, or social goals to their peers. These findings led the researchers to suggest that the presence of friendships could mediate a child's acceptance among classroom peers. None of the other reviewed studies included measures of peer acceptance *and* classroom friendships of children with disabilities. Research designs that include both measures could extend the literature regarding the relationship between friendships and peer acceptance.

The last gap in the literature concerns the use of more than one method to assess the presence of children's friendships. While the most commonly used methods to assess the presence of friendships for young children were parent- and teacher-report (Buysse, 1993; Hollingsworth & Buysse, 2009; Odom et al., 2006), there was not strong agreement between the two types of reporters. Nevertheless, teachers have been found to be very reliable raters of friendships within classroom settings. Landau, Milich, and Whitten found that the peer nominations made by elementary teachers and students in their respective classrooms were moderately correlated (as cited in Bierman, 2004). Future studies should include teacher- and child-reported friendship nominations to assess the relationship between teacher and children's identification of classroom friendships. Such information might be especially "telling" in an educational era that demands more of teacher's time and attention to academic skills (e.g., reading, math) over children's social skill development and play (Miller & Almon, 2009). In addition, it would be interesting to learn about the accuracy of teacher-reports regarding the close friendships for their students with disabilities versus their typically developing students.

Implications for Practice

The earliest years of children's education is a critical period. During this time, parents and teachers help create an important foundation for children's future social and academic

development (Pianta & Kraft-Sayre, 2003). Previous literature examining the friendships of young children with disabilities has found that many children do form friendships during the early years. However, there is great disparity in the presence of friendships among children with disabilities. It has been noted that children with developmental delays or certain disabilities such as intellectual disabilities, autism, communication disorders, challenging behaviors, and hearing impairments interact with peers less often and tend to have a lower social status, which can influence whether friendships will develop (Antia, Eldredge, & Kreimeyer, 1993; Brown, Odom, & Conroy, 2001; Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996).

Based on the findings of this review, two important implications for practice are evident. First, it is important for adults to recognize the signs that two children are interested in being friends or have actually formed friendships. Some of these signs include two children who appear to mutually like each other, share common interests, enjoy being in close proximity to each other, and engage in shared activities (Buysse et al., 2008). Having a common understanding of what friendships are will help adults support children who struggle to make friends and to identify peers who might potentially become good friends.

The second implication for practice is for adults to use a variety of methods when assessing the presence of friendships among children with and without disabilities. By using several methods to assess the presence of friendships (e.g., observing children, asking knowledgeable adults, and talking with children), adults can develop a better understanding of which children have developed friendships and which children might be in need of more intentional instructional support to interact with peers and hopefully form friendships (Danko & Buysse, 2002).

In conclusion, friendships serve an important function within young children's development. Friendships, in the early years, provide a context for young children to practice social-emotional skills and, later on, they provide children with protective features that help guide their skills related to school-readiness (Child Mental Health Foundations and Agencies Network [FAN], 2000). Indeed, there is more to learn about measuring and supporting the development of friendships for young children with disabilities, and with additional research, we will hopefully realize the vision of friendships for *all* children (Division for Early Childhood/National Association for the Education of Young Children [DEC/NAEYC], 2009).

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