In an effort to determine whether very young children really know who their best friends are, 16 preschool children were observed during classroom and playground activities. If a preschooler played with a child at least half the time, that child was considered the preschooler's best friend. Observations and teachers' selections of best friend pairs were used to confirm children's verbal interview selections. Children's interviews focused on naming the best friend, the friend's physical characteristics, and the functions of friends. Findings showed that: (1) teacher reports and classroom and playground observations confirmed that children as young as preschoolers know who their best friends are; (2) more children correctly remembered whom they played with in the classroom than whom they played with on the playground; (3) children's ability to correctly remember their best friend's hair color, relative height, and age increased with age; and (4) children were consistent in their reasons for having friends. The most common reasons involved play and the fact that they liked their friends. (RH)
How well preschool children know their friends

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Abstract

To determine whether very young children really know who their best friends are, 16 preschoolers were observed during classroom and playground play. The child they played with at least 50% of the time was considered their best friend. These observations and the teachers' selections of best friend pairs were used to confirm the children's verbal interview selections. The children's interviews focused on naming the best friend, the friend's physical characteristics and the functions of friends. The best friend choice of 81% of the children was confirmed by at least one other source (teacher, classroom or playground observation). Children were also accurate about several of their best friends' characteristics including their hair color, relative age and height. The children's most common reasons for having friends were "for play" and because they "liked" their friends.
How well preschool children know their friends

Children’s friendships are important for several aspects of development including social, emotional and cognitive development (Foot, Chapman & Smith, 1980; Hartup, 1978). Although most research on children’s friendships is focused on grade school children and adolescents, some studies suggest that friendship formation occurs even earlier, at the preschool stage. Most studies on preschool friendships have focused on those behaviors that occur more often during play with friends versus acquaintances (Goldstein, Field & Healy, 1989; Roopnarine & Field, 1983). Typically, those studies have identified friend dyads who spend most of their time playing together and then they have compared them with acquaintance pairs from the same classroom. The dyads were observed either during classroom or laboratory free play sessions. Generally these studies have suggested that friend pairs show more developed play patterns, are less stressed during their play together and show greater concordance in their behavior and physiology than acquaintance pairs.

Whether preschool children really know who their best friends are is not clear from these studies. Research focusing on children’s knowledge and conception of friends has been dependent on the interview method. Furman and Bierman (1983), for example, used an open interview technique asking 4 to 7-year-
olds "What is a friend?" and "What are the things people should do to be good friends?" Not surprisingly, the older children focused on more sophisticated characteristics such as support (sharing/helping) and affection (overt liking) versus simple physical characteristics. The problem is that the younger children, who are by definition less developed verbally, were probably disadvantaged by lack of a reference to the child's specific friend. Being asked to think of friends in the abstract or describe a hypothetical relationship would be more difficult than to comment on or describe one's specific best friend. In addition, in this hypothetical relationship procedure, one could not verify that a child actually possessed a close friendship on which to base any comments. Observations would be required to confirm the accuracy of the child's report.

An improvement on this procedure was that used by Hayes and his colleagues (Hayes, Gershman & Bolin, 1980) who asked preschoolers (M age=47 mos.) "Who is your best friend?", "Who do you like more than anyone else?", "Why is ______ your best friend?" and "Why do you like ______ more than anyone else in school?". Twenty-two of 24 children named each other as best friends and eight of these 11 pairs were same sex dyads. In a similar study Hayes (1978) reported that all 40 of the preschool children in his sample confided at least one reason for liking his or her best friend. The most common reasons given were that they played together, shared activities/objects or just liked each other. However, according to Hayes many of the subjects did
not or could not describe their best friend in more detail than by specifying another child's first name. But, again, the open-endedness and generality of the questions used may have contributed to this problem. Preschool age children may need to be given specific questions about characteristics of their best friends to adequately determine whether they do not know these qualities or simply do not verbally volunteer this information when not asked directly.

The purpose of this study was to determine: a) whether preschool children know who their best friends are or accurately report their best friends; b) if they know their best friends' physical characteristics; and c) what they view as the function of friends. For the purposes of this study an interview was designed to include very specific questions about friends and their characteristics. In addition, teachers' reports and classroom as well as playground freeplay observations were included to provide confirmatory evidence for the accuracy of the children's reports.

METHOD

Sample

The sample consisted of 16 preschoolers (10 girls, 6 boys) who attended an all-day university laboratory nursery school. The children came from different ethnic groups and their parents were middle-SES faculty and staff of the university's medical school. The children ranged in age from 2 yrs., 3 mos. to 5 yrs., 2 mos. (M age = 3 yrs. 9 mos.).
The classroom (30 by 40 ft.) in which the children played is separated into different sections by child-height walls. Each section features a different activity including a reading area, a kitchen, an art/siences area, a block area and an area that changes from month to month (for example, a doctor’s office, a hairdresser’s shop, a library). The children typically spend three-quarters of their day in this classroom. The other quarter of their day is spent outside on the playground which has been designed as a miniature city including roadways, filling station, miniature Burger King restaurant, a theater, a miniature house, a miniature store, a sailboat, a large climbing structure and large sand play areas. Three female teachers supervise this classroom of 24 children. Approximately one-third of the preschoolers were not included in this study because they were either on vacation during various parts of the study or they were new to the classroom and were not expected to have close friends as of yet.

Procedures

The procedures included: a) classroom and playground freeplay sociogram observations; b) the teacher’s selection of best friend pairs; and c) development and use of the children’s interview on who their friends are, their friend’s physical characteristics and the functions of friends.

Classroom and playground observations. Classroom and playground free play observations were conducted to confirm the accuracy of the children’s selections of their best friend. The seating arrangements during "show and tell" circle time and
during lunch time and the sleeping mat arrangement during nap time were also recorded. However, these arrangements were apparently more teacher- than child-directed, so this source of information was excluded. The morning playground freeplay followed by classroom freeplay sessions were observed. The sociogram method was used for the freeplay observations. For each of the 30-minute playground and classroom freeplay observations two coders marked on a classroom/playground spaces grid at 5-minute intervals the names of the children playing in close proximity (within three feet) of the target child. To be designated as a friend dyad in this situation the two children had to be in close proximity for at least 50% of the coding intervals for the playground (3 intervals) and classroom observations (3 intervals). Interobserver reliability was determined by the number of agreements divided by the number of agreements plus disagreements. Intercoder reliability was higher for the classroom than the playground observations (.92 versus .87), possibly because the playground play spaces were less precisely delineated.

Teachers' best friend-pair selections. Two of the three preschool teachers were asked to provide a list of the children with their best friends' names alongside. The third teacher was relatively new to the classroom and thus less familiar with the children, so she was not included. Inter-teacher agreement was assessed using the same procedures that were used for interobserver reliability and averaged .84.
Children’s interview on best friends, their characteristics and functions of friends. This 20-question interview was designed to be as open-ended, yet as specific as possible. The question of the child’s best friend was addressed first so that the child could use that as a reference throughout the specific questions on the friends’ physical characteristics and the functions of friends. The first five questions pertained to the child’s memory of who he had played with the most, sat and slept next to on that day. The next 12 questions were addressed at identifying the child’s best friend, specific physical characteristics of the friend such as hair color, eye color, height, etc., and reasons why that child was selected as best friend. The final three questions related to the functions of friends. See Appendix A for a copy of the interview. All of the questions were read to the children, and standard probes were used when responses were delayed. The interview was conducted at the end of the afternoon of the same day as the classroom and playground observations. The written responses were then checked for accuracy. For example, the child’s verbal report of best friend was checked against the teacher’s report and the sociograms. Finally, the coders observed each child to determine the accuracy of physical characteristics that had been attributed to the child such as eye color, hair color and relative height.

RESULTS

Because the classroom and playground observation data were summarized in percentage form and because the interview data was
similarly recorded for percent correct responses, all data were submitted to chi square tests.

**Accuracy of best friend choice**

The best friend choice of 81% of the children was confirmed by at least one other source (teacher, playground observation or classroom observation). Seventy-five percent of the 16 children’s choices were confirmed by the teacher, 75% were confirmed by classroom play observations, 50% were confirmed by playground observations, 44% by both the classroom and playground observations and 31% could be confirmed by all three (teacher, classroom and playground observations). See Figure 1 for these data. On the interview the children selected one best friend in 69% of the cases and 2 - 4 best friends in 31% of the cases. The teachers assigned one best friend to children in slightly more cases (78%) and 2 - 3 friends in 22% of the cases. During the play observations the children were actually in close proximity to two other children (17%), three other children (61%) or four children (22%). With respect to the gender of friends selected, the children verbally selected same sex friends in 89% of cases and opposite sex friends in 11% of the cases during their interviews. However, when actual play partners were observed during sociograms, same sex children were observed to play with each other in 68% of cases and opposite sex friends in 32% of cases. Finally, with respect to friend selection, 8 out of 12 pairs of children selected each other, suggesting that friendship selection was predominantly reciprocal. See Figures 2 and 3.
Memory for actual playmate

When asked who the children played with the most on the playground, 38% remembered accurately, 25% forgot and 37% were incorrect (see Figure 4). When asked who they played with most in the classroom 50% correctly remembered, 25% forgot and 25% were incorrect. The number of children who correctly remembered their friends was significantly greater when they were asked to remember their play during classroom freeplay versus playground freeplay.

Memory for best friend characteristics

When the children were asked what their best friend’s last name was, they were significantly more forgetful (said "I forgot") than they were correct (87% versus 13%) (see Figure 5). When asked about their best friend’s hair color, significantly more were accurate than forgot (88% versus 22%). When asked about their best friend’s eye color, significantly more forgot (49%) or were inaccurate (13%) than were correct (38%). When asked if their friend was younger or older than they were significantly more were correct (56%) and approximately
equivalent numbers forgot (25%) or were incorrect (19%). (See Figure 6). When asked if their friend was shorter or taller than they were, a significantly greater number of children were correct (69%) than forgot (13%) or were incorrect (18%). Thus, it appears that the children accurately remembered their best friend's hair color and whether their best friend was younger or older and shorter or taller than them. In contrast, they were most forgetful about their best friend's last name and about their friend's eye color.

Insert Figures 5 & 6 about here

When the total number of accurate responses per child was submitted to a repeated measures analysis by age, a linear increase in accuracy by age was noted. As can be seen in Figure 7, the youngest child gave only two correct answers, while the oldest child gave six correct answers. The one child who gave seven correct answers was only 3.5 years of age but was the most sociable and the most nurturant child in that class.

Insert Figure 7 about here

Consistency of reasons for liking and having best friends. The children's reasons for why they liked and needed their best friends were very consistent. For example, in the question "Why is ______ your best friend?", 33% said they liked/loved them,
and 33% said they played with them, with the remainder giving miscellaneous responses (see Figure 8). When the children were asked "What is a friend?", 66% said someone who plays with you and 25% said someone who you like or likes you (see Figure 9). When asked "Why do people need friends?" 50% said "to play with", 20% said "to like" and 30% gave the slightly redundant response that "they wanted or needed friends" (see Figure 10). The children who gave the "wanted or needed friends" answer were the younger children. When asked the question "Tell me what you do with friends", 75% said "play with them". All of the children said that their friends play with the same things as they do.

Insert Figures 8-10 about here

DISCUSSION

These data suggest that even children as young as preschoolers know who their best friends are. Their self-report is accurate based on teacher's report and independent play time observations. This is perhaps not surprising inasmuch as these children had attended nursery school since they were infants and had known each other since that time. Although infants and toddlers, of course, cannot verbalize their feelings, we discovered in another study that the stress associated with graduating from an infant to a toddler nursery was significantly lessened (buffered) by being transferred with a "close friend" infant/toddler peer (Field, Vega-Lahr & Jagadish, 1984). This
suggests that peer bonding occurs very early in situations with close, continuous exposure.

It is interesting that several children reported having more than one best friend. On average, the children reported having more than one friend more frequently than the teacher’s report reflected. Children may be more expansive, or less selective, for empathy reasons. Also, their actual play observations suggested that typically at least three other children were in close proximity, although usually only one of the three children were reported by both the child and the teacher as being a close friend. In a similar vein, children more typically reported having a same-sex friend during the interview, but in the actual play situations at least 32% of the children were observed playing with opposite sex children.

Even though children’s selections were generally consistent with teacher’s report as well as the freeplay observations, the children were not very accurate in reporting who they had played with that day in the classroom (50% correct) or on the playground (38% correct). The fact that they accurately reported their best friend’s name, yet could not remember playing with their friend that day, suggests some stability in their friendship selection that does not depend on remembering who they played with recently. Their more accurate memory of their classroom versus playground playmates may relate to their more consistent play with their friends in the classroom. Recall that the classroom observations confirmed 75% of the self-reports while the
playground observations confirmed only 50% of the self-reports. Children may be more expansive in their playmate choices on the playground, possibly because it is a less structured/defined play environment than the classroom. In a related fashion, it is also possible that their memory of their playground playmates is less accurate because they engage in more fantasy play and in more group play on the playground versus the classroom (Segal et al., 1987).

Unlike the findings of Hayes (1978) who reported that preschool children could not give more detail about their friends than their first names, preschoolers in this study were surprisingly accurate about several details including their friend’s hair color and their relative age and height, although they often ‘forgot’ their friend’s eye color and last name. Age they know because of birthday parties and height is probably experienced in most parallel play situations. Their forgetfulness about eye color is somewhat surprising given the extensive literature suggesting that even close preschool friends engage in considerable eye contact (Goldstein et al., 1989; Roopnarine & Field, 1983). However, the failure to remember last names was not unexpected, particularly since most of the names were not easy American last names.

As was mentioned earlier, the better memory for details of friends’ characteristics in this study probably relates to the children being asked specific questions about a specific friend, rather than waiting for them to volunteer information about a
hypothetical friend as had been done in previous studies (e.g. Furman & Bierman, 1983). It is also interesting that they seem to be more accurate when the descriptor is one of relative difference, for example, "younger/older or shorter/taller than you" versus providing a novel last name and eye color. Irrespective of more adequately tapping their memory by more specific questions, the children did seem to improve in their accuracy on friend characteristic details with development (the older children had more correct responses).

Consistent with the data of Hayes et al (1980) these preschoolers cited "playing with each other" and "liking each other" most frequently and consistently as reasons for "why they liked their best friend", for "what is a friend", for "why people need friends" and for "what do you do with friends". Playing with the same things also received a 100% positive response. The Hayes et al (1980) data are very similar, with general play (50%), liking the person (41%), and common activity/playthings (36%) predominating as selection criteria.

In summary, these data lead to the following conclusions: a) children as young as preschoolers know who their best friends are. Teacher's report and classroom/playground observations confirm that most preschool children accurately report their best friends; b) more children correctly remembered who they played with in the classroom versus the playground; c) more children correctly remembered their best friend's hair color and relative height (shorter/taller) as well as age (younger/older) and eye color.
color or last name. The accuracy of these responses increased with the child’s age; and d) The children were consistent in their reasons for why they had friends. The most common reasons were for play and because they liked their friends.

Hopefully these data will help preschool teachers realize the importance of letting children make selections about who they sit next to during circle time and lunch time and who they sleep next to during naptime. Knowing that children know who their best friends are and that they experience greater comfort and less stress in their presence should encourage teachers to reinforce early friendship selection and maintenance.
References


CONFIRMATION OF CHILDREN’S SELECTIONS FRIENDS

P = PLAYGROUND OBSERV.
T = TEACHER
NUMBER OF FRIENDS SELECTED BY CHILD, TEACHER AND IN PLAY

PERCENTAGE

1 2 4
CHILD

1 2 3
TEACHER

2 3 4
ACTUAL PLAY
SEX OF FRIENDS SELECTED

INTERVIEW

PLAY

SAME

PERCENTAGE

OPPONIT
CHILDREN'S ACCURACY IN REMEMBERING OFF PLAYMATES OF PLAYGROUND AND CLASSROOM PLAY
CHILDREN'S ACCURACY IN REMEMBERING FRIENDS CHARACTERISTICS

PERCENTAGE

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CHILDREN'S ACCURACY IN REMEMBERING FRIENDS' CHARACTERISTICS

C = CORRECT
F = FORGOT
I = INCORRECT

PERCENTAGE

AGE
(YOUNGER/OLDER)

HEIGHT
(SHORTER/TALLER)
WHY IS _____ YOUR BEST FRIEND?

PLAY TOGETHER

LIKE/LOVE

DON'T KNOW

33%

9%

25%

33%
WHAT IS A FRIEND?

Plays

66%

Likes

25%

Other

9%
WHY DO PEOPLE NEED FRIENDS?

- **Play**: 50%
- **Want/Need**: 30%
- **Like/Love**: 20%
APPENDIX A

Name_________________________ Date_____________________

FRIENDSHIP STUDY QUESTIONNAIRE

1. Who did you play with the most today?
2. Who did you play with the most on the playground?
3. Who did you play with the most in freeplay in the classroom?
4. Who did you sit next to at circle time?
5. Who did you sleep next to during naptime?
6. Who is your best friend at school?
7. Who do you like the best? (more than anyone else)
8. What is _________ last name?
9. What color hair does he/she have?
10. What color eyes does he/she have?
11. How old is he or she?
12. Is he/she older or younger than you?
13. Is your friend stronger or weaker or the same as you?
14. Is your friend taller or shorter or the same as you?
15. Where do you play with your best friend the most?
16. Why is _________ your best friend? Why do you like _________ more than anyone else?
17. Does he/she like to play the same things that you do?
18. What is a friend? A friend is someone who . . . .
19. Why do people need to have friends?
20. Tell me what you do with friends?