ANALYSIS OF COMMUNICATIVE BEHAVIORS OF SIBLING DYADS COMPOSED OF A CHILD WITH AUTISM AND A TYPICALLY DEVELOPING SIBLING

Abstract

The purpose of this study was to document the communicative behaviors exhibited by sibling dyads comprised of one typically developing child ("TDC") and a sibling diagnosed with autism spectrum disorder (ASD) ("SibA"). Six United States families (five Caucasian, one African American) allowed the researchers to engage in one 45-minute home observation, one semi-structured interview with the TDCs, and one semi-structured interview with the parents. Observational data were coded and analyzed to reveal the types of communicative behaviors that the TDCs and the SibAs produced.

Results

| Birth Order | Sibling Dyad1 | Sibling Dyad2 | Sibling Dyad3 | Sibling Dyad4 | Sibling Dyad5 | Sibling Dyad6 |
|-----------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Younger TDC | Female 4 yrs. | Female 12 yrs. | Male 11 yrs. | | | |
| Older SibA | Male 9 yrs. | Female 15 yrs. | Male 15 yrs. | | | |
| Older TDC | | | | Male 16 yrs. | Male 12 yrs. | Female 12 yrs. |
| Younger SibA | | | | Female 11 yrs. | Male 10 yrs. | Male 7 yrs. |

Characteristics of Sibling Dyads

The total frequency of occurrence of communicative behaviors exhibited by the TDCs together was 586. The grand total of frequency of occurrence of communicative behaviors exhibited by the SibAs together was 618.

| Categories of | Total Frequencies | Categories of | Total Frequencies |
|-------------------|-------------------|----------------------|-------------------|
| Communicative | of Occurrence and | Communicative | of Occurrence and |
| Behaviors of the | Percentages of | Behaviors of the | Percentages of |
| TDCs | Occurrence | SibAs | Occurrence |
| | Exhibited by the | | Exhibited by the |
| | TDCs | | SibAs |
| Commands | 130 | Positive response | 123 |
| | 22.18% | | 19.90% |
| Initiation using | 47 | Sounds with | 90 |
| motoric behavior | | motoric self- | |
| | 8.02% | stimulation | 14.56% |
| Questions | 44 | Does not respond | 51 |
| | | - | |
| | 7.51% | | 8.25% |
| Positive response | 42 | Random sounds not | 49 |
| | | directed to a person | |
| | 7.17% | | 7.93% |
| Eye contact | 37 | Vocal self- | 45 |
| | | stimulation | |
| | 6.31% | | 7.29% |
| | | | |
| Statement | 35 | Eye contact | 37 |
| | 6.0% | | 5.99% |
| | 0.070 | | 0.000 |
| Praise | 30 | Looking at sibling | 34 |
| | | | |
| | 5.12% | | 5.50% |
| | | | |
| Initiation using | 29 | Laughing | 27 |
| language | 4 95% | | 4 37% |
| | 1.2070 | | 1.5770 |

| Verbal model | 28 | Initiation using | 26 |
|---------------------|-------|------------------|-------|
| | 4.78% | language | 4.21% |
| Teaching moment | 25 | Smiling | 17 |
| | 4.27% | | 2.75% |
| Sensory input | 23 | Repeat verbatim | 17 |
| | 3.92% | | 2.75% |
| Does not respond | 21 | Initiation using | 16 |
| | 3.58% | | 2.59% |
| TDC copies motoric | 16 | Holding hands | 11 |
| beliavior of SIDA | 2.73% | | 1.78% |
| Encouragement | 15 | Perseveration | 11 |
| | 2.56% | | 1.78% |
| Hand-over-hand | 8 | Grabbing | 8 |
| prompt | 1.37% | | 1.29% |
| Repeat verbatim | 8 | Crying | 7 |
| | 1.37% | | 1.13% |
| Tease remark | 7 | Questions | 7 |
| | 1.19% | | 1.13% |
| Narrate | 7 | General signs of | 6 |
| | 1.19% | unaccounted for | 0.97% |
| Take desired object | 5 | Hitting | 6 |
| | 0.85% | | 0.97% |

| Motoric model | 5 | Looking at sibling's | 6 |
|------------------|-------|----------------------|-------|
| | 0.85% | play material | 0.97% |
| Giving | 5 | Statement | 4 |
| | 0.85% | | 0.65% |
| Laughing | 4 | Initiation using | 3 |
| | 0.68% | gesture | 0.49% |
| Give a desired | 4 | Directing sounds to | 3 |
| 005000 | 0.68% | an object | 0.49% |
| Hugging | 2 | SibA copies | 3 |
| | 0.34% | TDC | 0.49% |
| High-five | 2 | High-five | 2 |
| | 0.34% | | 0.32% |
| Pointing | 1 | Head-butting | 2 |
| | 0.17% | | 0.32% |
| Holding hands | 1 | Mad face | 2 |
| | 0.17% | | 0.32% |
| Comforting | 1 | Pointing | 1 |
| | 0.17% | | 0.16% |
| Patting | 1 | Hugging | 1 |
| | 0.17% | | 0.16% |
| Initiation using | 1 | Take desired object | 1 |
| gesture | 0.17% | | 0.16% |

| Taking turns | 1 | Taking turns | 1 |
|---------------|-------|---------------|-------|
| | 0.17% | | 0.16% |
| Parallel play | 1 | Parallel play | 1 |
| | 0.17% | | 0.16% |

Semi-Structured Interviews With TDCs

Of note are the common trends provided by the TDCs. Four of the TDCs shared that their SibAs knew how to play physical activities. Three shared that their SibAs knew how to play sit-down activities. Two explained that their SibAs played pretend play with them. Five explained that their SibAs could not play complex games with many rules. Three described verbally inviting their SibAs to play. Three described inviting their SibAs to play via motion or gesture. Three described not playing with their SibAs often. Four described that their SibAs play with them for less than an hour (approximately 10-30 minutes). One described that his SibA3 played with him for a few minutes. Two described that their SibAs always played with the TDCs' friends. Two described that their SibAs played a little or not very often with the TDCs' friends. Two described that their SibAs never played with the TDCs' friends. Four reported that they enjoyed playing with their SibAs. One reported that he enjoyed playing with his SibA sometimes. Two explained that ASD affected verbal language where their SibAs could not talk. Two explained that ASD affected the brain. Two explained that ASD caused slower development and fewer capabilities.

Parents' Responses to Semi-Structured Interviews

The parents' semi-structured interview responses were to the following questions: What have you told your TDC about autism?

When did you talk to your TDC about autism?

Do you think your TDC understood your explanation about autism?

Where did you get your information about autism?

How do your children typically play?

Do your TDC and child with autism participate in activities together? What kinds?

How do your TDC(s) and child with autism get along?

Did I observe a typical social interaction? Explain why or why not.

Parents explained their TDCs' understanding of ASD, and described their children's relationships. Some of the parents conveyed their emotions, displayed body language, and exhibited vocal intonation that suggested feelings of peace, love, guilt, and hope.