

Snack Talk: A Class Wide Intervention to Increase Peer Interactions of
Preschool Students at Mealtimes

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Learning to interact with peers is a foundational skill typically developing children begin acquiring during early childhood. Throughout the preschool years, children refine their social skills and begin making friends by having positive, reinforcing reciprocal peer interactions. These emerging social skills serve as a basis for learning more complex social, communicative, and academic skills in the preschool classroom as well as in the more academic settings of later grades (Brown, Conroy & Odom, 2001). From research on early social competence, Brown, et al., (2001) draw two conclusions: 1) Having positive social interactions is vital to a child's development, and 2) difficulties with social interactions is a predictor of future social difficulties.

Social interactions are a means by which children acquire diverse skills. Lacking social competence can lead to language and cognitive deficits as well as social isolation (Bijou, 1993; Vygotsky, 1978). Having peer-related social competencies and the pragmatic skills to communicate effectively with peers allows young children not only to initiate and respond to peers but also to engage fully with preschool environments (Chapman, Kaiser, Stanton-Chapman & Vijay, 2008). Possessing social skills is essential as children with disabilities can only integrate into a classroom when they are able to interact and participate with their typically developing peers (Cabello, Cavallaro & Haney, 1993).

Current research shows young children with disabilities are not able to interact fully with the social culture of a preschool classroom and are at risk for having poor peer interactions and relationships. Children with disabilities engage in less interactive play, have more difficulty initiating play, and are more likely to have their initiations rejected by peers than do typically developing children (Connor, Guralnick, Neville, & Hammond, 2006). Overall, children with disabilities interact with peers less frequently than do typically

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developing children (Brown, Odom, Li & Zercher, 1999). Without systematic programs to support interactions between children with and without disabilities, children who are socially competent prefer to play with other socially competent peers. In a preschool setting, typically developing children experience rejection approximately 10% of the time while children with disabilities experience rejection 30% of the time (Li, Marquat, Odom, Sandall & Wolfberg, 2002). This disparity is alarming. Without intervention children with disabilities are likely to struggle socially, leading to social rejection that can persist over time. This pattern of rejection can lead to social isolation and mental health challenges as children age (Connor et al., 2006). Given this information, it is imperative that teachers provide effective social skills intervention for children with or at risk for social competency deficiencies.

Children with disabilities often need support and special instruction in order to acquire social skills, to have positive peer interactions, and be able to access fully the social and academic culture of the preschool setting (Connor, Guralnick, Neville & Hammond, 2006; Brown et al., 2001). Given the critical nature of social competency acquisition, educators have advocated for the inclusion of young children with disabilities into early childhood programs with their socially competent peers. Organizations such as the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood of the Council for Exceptional Children (DEC) have included integration of children at risk for social competency deficits as a recommended practice (Brown et al., 2001). Researchers have been able to demonstrate the effectiveness of many interventions to promote positive social interactions amongst young children (Brown et al., 2001; Feurer, Smith, Warren & Yoder, 2004; Sainato, Spohn & Timko, 1999).

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Despite the fact that researchers have developed and demonstrated numerous ways to provide social skills intervention for young children, current research has found educators are using only one-third of the recommended practices for social skills intervention. More over, many children who have individual education program goals related to social competence were receiving no specific interventions (McConnell, Michnowicz, Odom & Peterson, 1995). Survey results show that teachers are more likely to use classroom-wide interventions as opposed to individual interventions (Brown et al., 2001). Goldstien and Ferrell (1987) demonstrated that by teaching and then utilizing the skills of socially competent peers, class-wide social skills interventions could be implemented and be highly effective.

Naturalistic interventions have been widely used in early childhood classroom to provide various types of intervention including social and communication interventions (Brown et al., 2001; Feurer, Smith, Warren & Yoder, 2004; Sainato, Spohn & Timko, 1999). Naturalistic interventions, or incidental teaching, are often child-initiated and directed, and they focus on the children's interests (Brown et al., 2001). These interventions are generally brief and occur during regularly scheduled but unstructured activities, such as on the playground or at mealtime. Mealtimes occur regularly as part of a preschool schedule and provide many opportunities for language learning. Mealtimes are also inherently social yet unstructured (Sainato et al., 1999).

Jewett and Clark (1979) demonstrated that preschool children were able to learn mealtime conversation skills that appeared to be naturally reinforced by increased levels of attention, interaction, and by having new topics to discuss. The effects of this

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intervention were generalized from school to home settings and were maintained even after the intervention in the school setting was removed.

Green, Greene, and Hardison (1984) successfully used interactive placemats to increase the positive interactions between family members at mealtimes. This study compared the effects of different types of placemats on social interactions and mealtime behavior. The researchers found that rates of positive interactions and mealtime engagement increased when each family member had a “traditional” placemat. However, engagement and positive interactions were highest when each family member had the same placemat on which colorful pictures and discussion questions were printed. Green et al., (1984) also noted that when given the choice, children chose brightly colored and humorous illustrations most often.

Sainato et al., (1999) demonstrated the effectiveness of using interactive placemats during regularly occurring mealtimes to increase the verbal and social interactions of preschool students. This intervention consisted of a talking game that was initially teacher-facilitated. Children used brightly colored “collage” placemats. Researchers reported that the rate of child-to-peer verbal interactions doubled while the rate of teacher-to-child interactions decreased dramatically. Children were able to generalize these new skills from one school mealtime to another, thus demonstrating that social interaction skills can be effectively taught during mealtime in a fun, engaging manner.

This research study incorporated previous research findings on providing class-wide social skills interventions, naturalistic teaching strategies for language and social skills intervention, and on providing effective intervention for children during mealtimes using interactive placemats. These interventions are most effective when teachers

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structure the environment to promote peer interactions and provide some instruction on how to interact (Sainato et al, 1999). The purpose of this research was to determine the effect of the availability of interactive, topical snack talk cards on the amount and topic of interactions of children with disabilities during a daily snack period in an integrated preschool classroom. This study proceeded asking the following questions: 1) Does the availability of snack talk increase the number of intervals in which children initiated and responded to others? 2) Does the availability of snack talk at mealtimes increase the likelihood that children will interact with their peers? 3) Does the availability of snack talk at mealtimes increase the likelihood that children will interact on topics other than snack related objects? Data were also collected to assess the social validity of this intervention.

Method

Participants

Three children enrolled in an integrated preschool program participated in this study as target children. All three target children were between the ages of 40 and 55 months of age. Inclusion criteria for participation included identified social and communication delays and individual education program goals in these areas.

At the beginning of this study, Sarah was fifty-two months old and has Down Syndrome. Using the AEPS, a curriculum-based assessment tool, she demonstrated mastery of 45% of the criteria on the social component. Her individual education plan (IEP) has annual language goals concerned with increasing her articulation and pragmatics of language. It also has goals written to increase the rate and fluency of her social interactions with peers. Sarah's teachers reported that she is highly motivated by food, and will often ignore peers and teachers while she is eating.

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At the start of this study, Tom was forty months old. He has identified developmental delays in the areas of social and communication. He received a 49% on the social component of the AEPS. Tom has annual IEP goals written to improve his social and communication skills. Tom's teachers reported that Tom occasionally engaged in inappropriate behavior to gain attention of teachers and peers during mealtimes.

At the start of this study, Sam was fifty-two months old and also had identified delays in the areas of social and communication. He scored 71% on the social component of the AEPS. While he scored higher than the other target children in this curriculum-based assessment, he teachers reported he primarily interacts with adults and lacked fluency of social interactions with peers. Sam has IEP goals written to increase both his articulation and social skills.

Setting

This study took place in an integrated preschool program in a large city in Washington State. The participants were enrolled in half-day, two hour and fifteen minute preschool programs. There were eight children with identified disabilities as well as eight typically developing children enrolled in this class. The intervention was conducted with the entire class, but data were collected only on the three participants described above.

The intervention took place in the classroom during the program's regularly scheduled snack time between 10:00 a.m. and 10:20 a.m. Children's seating arrangement changed throughout the year, and this was reflected in the study. Children were always seated at a table with five to six children and at least one typically developing peer model. Five to six classroom staff were present during each snack time. These staff include special education teachers, graduate students, related services personnel, including speech

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language pathologists and physical therapists, as well as classroom volunteers. Staffing during snack time ranged from zero to two staff per table.

Experimental Design and Procedures

A reversal design with systematic withdrawal of intervention was used to determine the effectiveness of this intervention. This study followed an ABAB design with “A” representing baseline and withdrawal conditions. “B” representing the introduction of close-ended snack talk cards.

Baseline and withdrawal conditions consisted of the classroom’s regular snack time routine. One to two teachers sat at a child-sized table with five to six children. Enough dishes and food were available for all the students. Adults including speech therapists, occupational therapists, and classroom teachers interacted with children in a typical manner. Teachers provided snack-and behavior-related prompts and praise and engaged in conversation with the children using no pictorial or other supports. Each phase of this study was conducted for three sessions before moving on to the subsequent phase.

During the initial intervention phase, teachers presented close-ended Snack Talk cards for the students to use. These snack talk cards were relevant to the children’s interests and daily lives and were within the scope of the children’s general knowledge and skill level as suggested by Cavallaro et al (1993). Snack talk cards were brightly colored with easily identifiable pictures. Six snack talk cards were made each asking a different close-ended prompt. A question such as, “What is your favorite color?” or “What do you like to play on playcourt?” were printed in large font at the top of the snack talk card. Below the question there were four to twelve pictures from which children were able to choose an answer.

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In an attempt to insure that the intervention was implemented with high fidelity, researchers provided teacher training to all staff members before the beginning of the initial intervention phase. At one of the classroom staff's weekly team meeting the researcher described in detail the intervention and the goals of the intervention. Examples of the snack talks were disseminated and the researcher instructed the staff members on the prompting procedures while using snack talk. Teachers were asked to use the snack talk cards only on data collection days during the intervention phases, and were encouraged to make no other changes to their mealtime routine during this study.

During the intervention, teachers modeled how to use the snack talk cards and provide assistance deciphering the relevant questions. Children had free access to the snack talk cards throughout snack time. While researchers set no limit to the number of snack talk cards made available to the children during each snack time, teachers generally provided 2-3 cards. Snack talk cards were rotated at random for each intervention phase.

Following three session of this intervention, the snack talk cards were withdrawn and conditions returned to baseline for three sessions. At this time researchers assessed experimental control as well as maintenance of any effects on the children's interaction levels. After three sessions at a return to baseline conditions, researchers repeated the intervention phase for three additional sessions.

Dependent Measures

A partial interval recording system was used to measure the percent of intervals in which the target children engaged in social behaviors with their peers and teachers. Each session was video recorded and later coded by a researcher to determine the types of

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interactions and number of intervals in which they occurred. As snack time sessions varied slightly in length, the researchers recorded each session for ten minutes.

Each ten minute snack session was then divided in to sixty, ten-second intervals. For each interval teachers marked the first instance of each distinct behavior. For each behavior researchers noted what type of interaction took place: Initiation, prompted initiation, a response, or a prompted response. Definitions of these behaviors are as follows:

Initiation – The target child uses a verbal, non-verbal, or gestural means to initiate an interaction with a peer or teacher.

Prompted initiation – A teacher or other adult prompts the child to begin a verbal, non-verbal, or gestural means to initiate an interaction with a peer or teacher. In order to be considered a prompted initiation, the target child must initiate an interaction within seven seconds of the prompt.

Response - The target child responds to an initiation with no words but using gestures or participates in a verbal exchange initiated by a peer or teacher.

Prompted response - A teacher or other adult prompts the child to respond to an initiation with no words but using gestures or a verbal exchange initiated by a peer or teacher. In order to be considered a prompted response, the target child must respond within seven seconds of the prompt.

Researchers were also concerned with the target of these initiations and responses. For each interaction, the target of an interaction could be a teacher, a peer, or to “other.” Researchers coded “P” if the interaction is with a peer or a “T” is the interaction is with a

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teacher. Researchers coded “O” for other in order to include initiations and responses made to the group as a whole rather to an individual.

Researchers were concerned with the topic of student interactions during meal times. Researchers coded whether the interactions centered around snack, the snack talk cards, or on unrelated topics. Definitions of these behaviors are as follows:

Snack - the target child initiates or responds on the topic of snack. This includes all food or snack related items present during the mealtime.

Snack talk - the target child initiates or responds to a topic on a Snack Talk card.

Other - the target child initiates or responds to a topic other than snack of a snack talk card.

A final section on the coding sheet allowed researchers to note any interval in which challenging behavior occurred. Challenging behavior was defined as: the target child breaks a classroom rule or demonstrates a behavior that is targeted by a classroom behavior plan. Also in this section was a place to mark a “no response.” No response was defined as: the target child makes no apparent verbal or gestural response to a peer or teacher’s initiations within seven seconds of the initiation.

Social Validity

Researchers were also concerned with the social validity of this intervention. The primary concern was determining classroom teachers’ (the primary consumers of this intervention), opinion on its efficacy and ease of implementation. Thirty-five classroom and pre-certificate teachers were shown clips of mealtimes with and without intervention. All of those surveyed were in attendance of a graduate level course and worked several hours a week in classrooms as practicum students.

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The participants watched ten, one-minute clips of children in a preschool classroom during mealtime. Prior to watching the videos, the participants were given a short description of the intervention and its primary use. Five clips showed children under baseline conditions, with no snack talk cards on the table, and five showed children under the intervention condition using snack talk cards. While showing the videos, researchers paused the video in order to inform participants whether they were watching baseline or intervention conditions.

Following the video, participants were given a five-question survey. All of the questions had two answer choices: with snack talk or without snack talk. The exception was the fifth question whose answer choices were yes or no. The questions are as follows: 1) Which type of snack time do you think had more child to child interactions? 2) Which type of snack time do you think was more fun for the children? 3) In which type of snack time did you see less challenging behavior? 4) In which snack session did children seem more engaged and appropriate? 5) Do you feel like this intervention would be easy to implement in you classroom or teaching environment?

Results

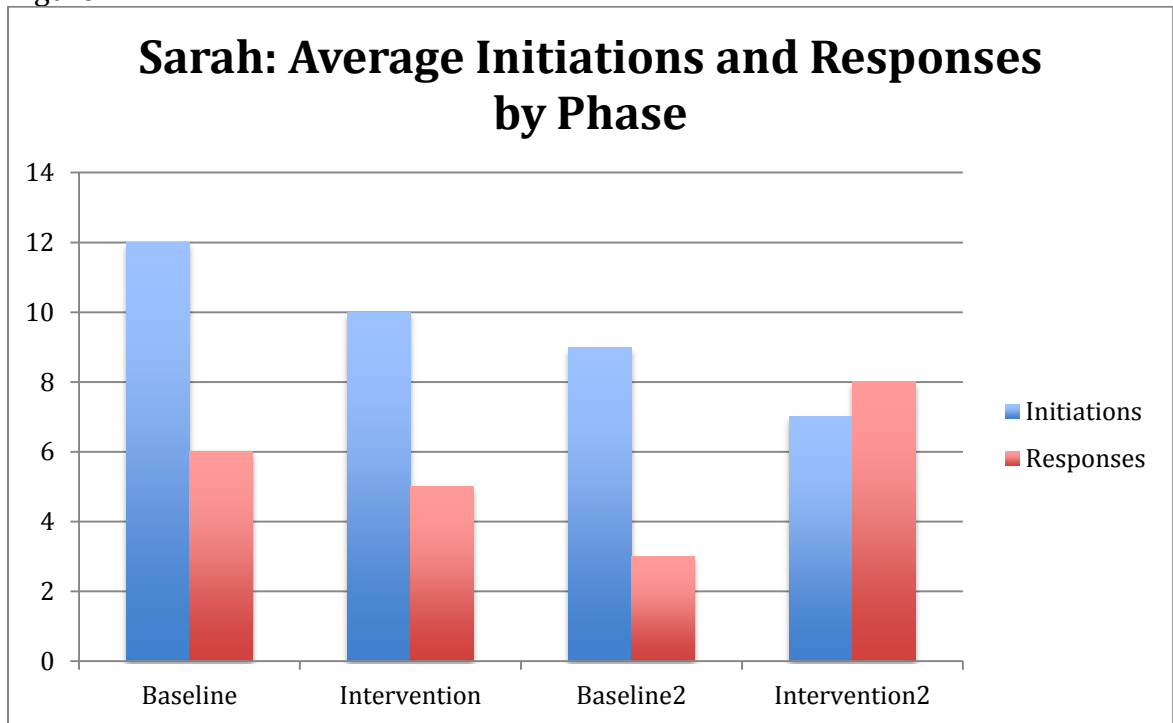
Data were analyzed to assess the effects of using snack talk cards during preschool mealtimes. Data were analyzed to determine the effects of snack talk on the percent of intervals in which students interacted with their teachers, peers, and the group; and to determine if the interactions were initiations or responses. Data were also analyzed to determine the effects of snack talk cards on the topics preschool students discussed during mealtimes. Data on social validity measures are also reported.

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Sarah:

Analysis of the data for Sarah shows the percent of intervals in which Sarah was interacting socially with people at her table during mealtime did not change drastically over the course of this study. The average percent of intervals in which she initiated to others fell slightly over the course of this study from a high of twelve percent of intervals on average during the first baseline phase, to a low of 7% of intervals on average during the second intervention phase. With her average percent of initiating intervals being 12%, 10%, 9%, and 7% percent for each of the four phases. Analysis of the data shows the percent of intervals in which Sarah responded to others fell for the first three phases of the intervention from 6% to 5% to a low of 3% of interval on average before increasing in the final phase to an average of 8% intervals per session.

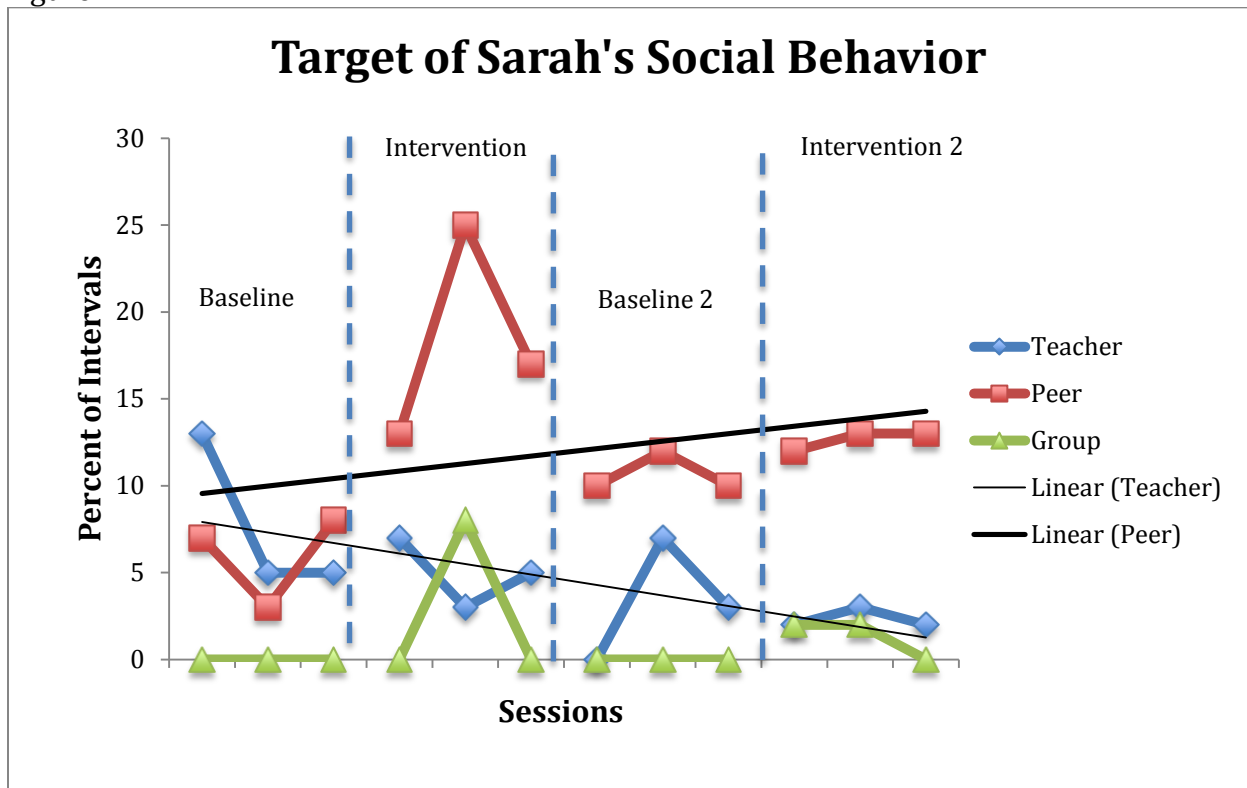
Figure 1



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While snack talk did not appear to influence the percentage of intervals in which Sarah interacted with others during mealtime, this intervention had a noticeable effect on the target of Sarah's interactions. During the initial baseline phase, Sarah interacted with teachers in an average of 8% of intervals and with peers and average of 6% of intervals. In the first phase of intervention, the percent of intervals in which Sarah interacted with a teacher dropped to an average of 5% while her interactions with peers rose to an average of 18%. During the withdrawal of the intervention, Sarah's average percent of intervals spent engaging with a teacher dropped further to an average of 3%. Her average percent of intervals spent interacting with peers fell to an average of 11% intervals and stayed higher than her initial baseline levels. In the final phase of intervention, Sarah's percent of intervals interacting with teachers continued to fall reaching an average of 2% of intervals. Her peer interactions rose again to an average of 13% of intervals. Data collected on the percent of intervals in which Sarah interacted with the group or more than one peer also rose during intervention phases. During baseline phases, Sarah had 0% of intervals of interaction with the group. However during intervention phases, she averaged 3% and 2% of intervals respectively.

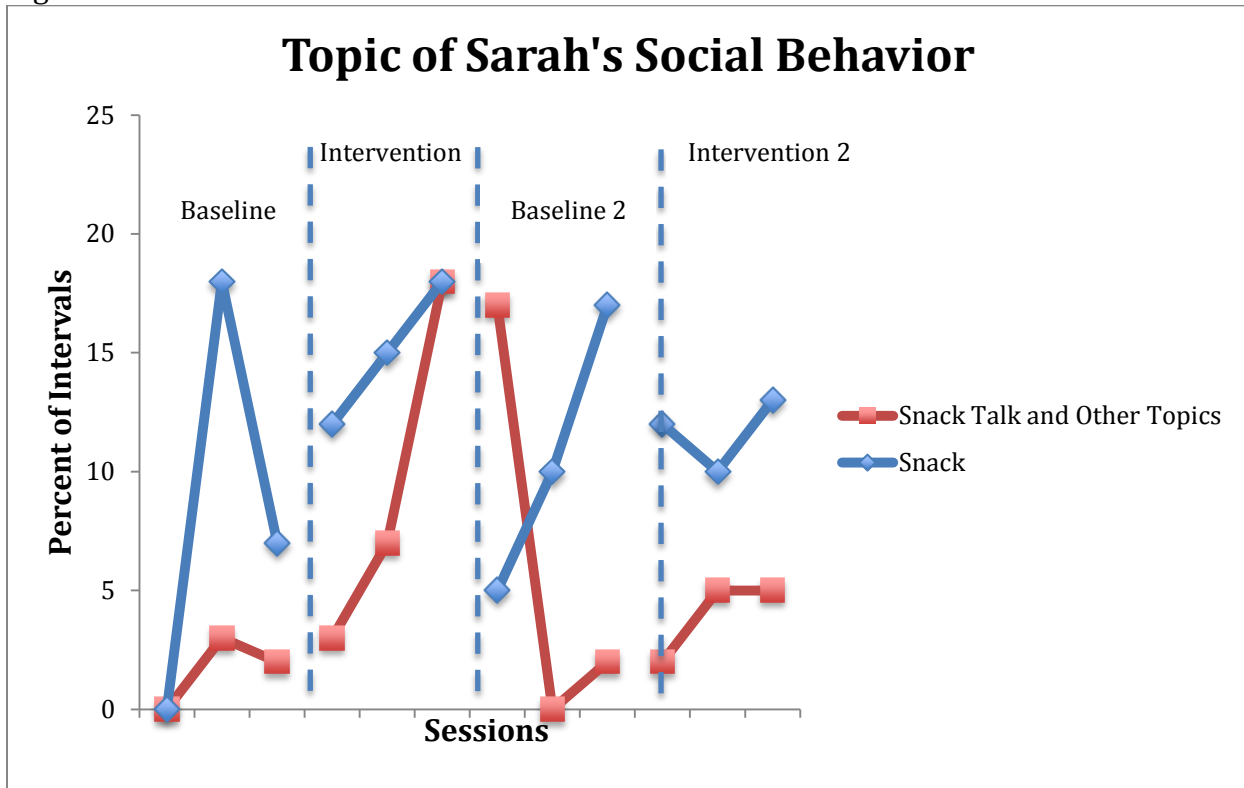
Figure 2



Analysis of Sarah’s data on the topic of her interactions is as follows. During the initial baseline condition, Sarah interacted on the topic of snack in an average of 12% of intervals. The average percent of intervals in which she engaged on other topics was 3%. During the initial intervention phase, Sarah interacted on the topic of snack in an average of 13% of intervals while increasing her interaction on other topics to an average of 14% of intervals. In the withdrawal phase, Sarah’s interactions on the topic of snack maintained at an average of 13% of intervals. Her interactions on other topics fell to average of 1% of intervals. In the final intervention phase, Sarah interacted on the topic of snack in an average of 12% of intervals while she interacted on other topics in an average of 4% of intervals.

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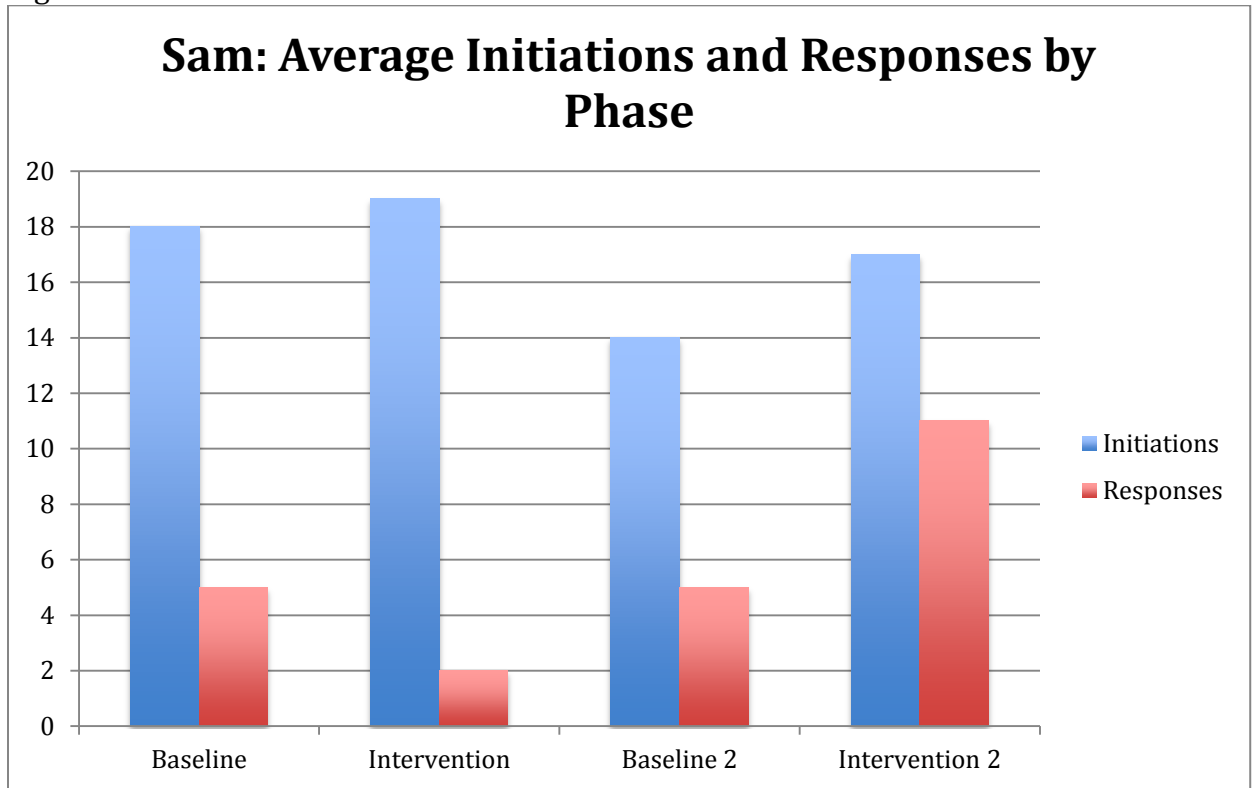
Figure 3



Sam:

Sam's average percent of initiating intervals by phase was not affected by the intervention with the by phase average at 18%, 19%, 14% and 17% respectively, The percent of intervals in which Sam responded to others was significantly lower than the percent of intervals he spent initiating. Sam responded to others in 5%, 2%, 2%, and 11% of intervals for each of the four phases.

Figure 4

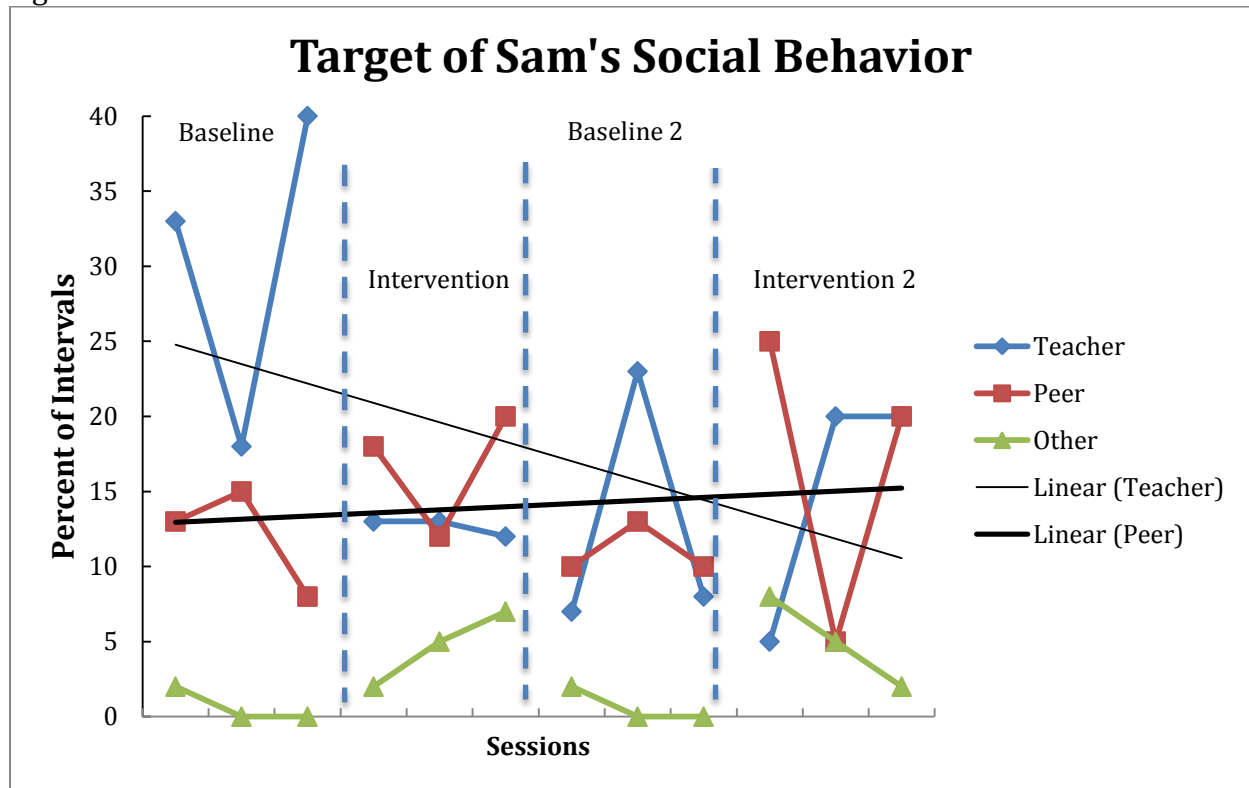


Analysis of Sam's data shows an increase in the percent of intervals in which he engaged with his peers and showed an overall decrease in the percent of intervals in which he engaged with a teacher. During the initial baseline condition, Sam interacted with teachers in an average of 30% of the intervals and with peers and others in only 12% and less than 1% of the intervals respectively. During the initial phase of intervention, Sam averaged 13% of the intervals interacting with teachers and increased his average percent of intervals interacting with peers to 17%. Additionally, Sam increased his interactions with the group or more than one peer to an average of 5% of the intervals. During the withdrawal of intervention, Sam's average number of intervals spent interacting with teachers remained at 13%. However, his interactions with peers dropped below his initial baseline average to 11% of the intervals. Again, Sam's average numbers of intervals spent

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engaging with the group fell to baseline levels of less than 1% of the intervals. During the second and final phases of intervention, Sam's average number of intervals interacting with teacher rose slightly to 15%. However his interactions with peers and with the group rose again to an average of 17% and 5% of intervals respectively, the same average as during the initial phase of intervention.

Figure 5

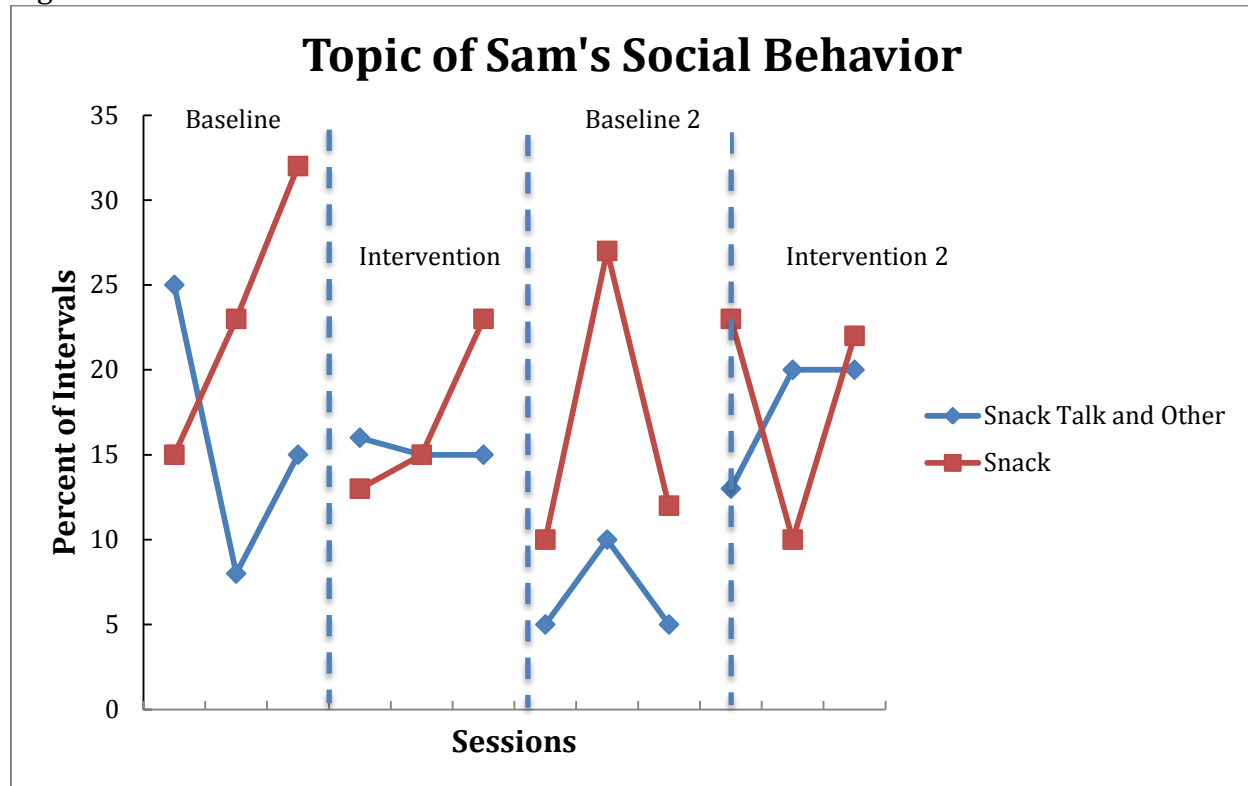


Minimal changes were observed for Sam's topics of interactions as a result of the intervention. During the initial baseline phase he interacted with others about snack related items in an average of 23% of intervals. During this phase his interactions with others on other topics was 16% of intervals on average. In the first phase on snack talk intervention, Sam's interactions on the topic of snack fell to an average of 17% of intervals. His interactions on other topics maintained at an average of 16% of intervals. During the

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withdrawal phases, Sam's interactions on snack related topics occurred in 16% of intervals while his interaction on other topics occurred in an average of 7% of intervals. In the final phase of intervention, Sam interacted on snack related topics in an average of 18% of intervals. He interacted on other topics in an average of 18% of intervals.

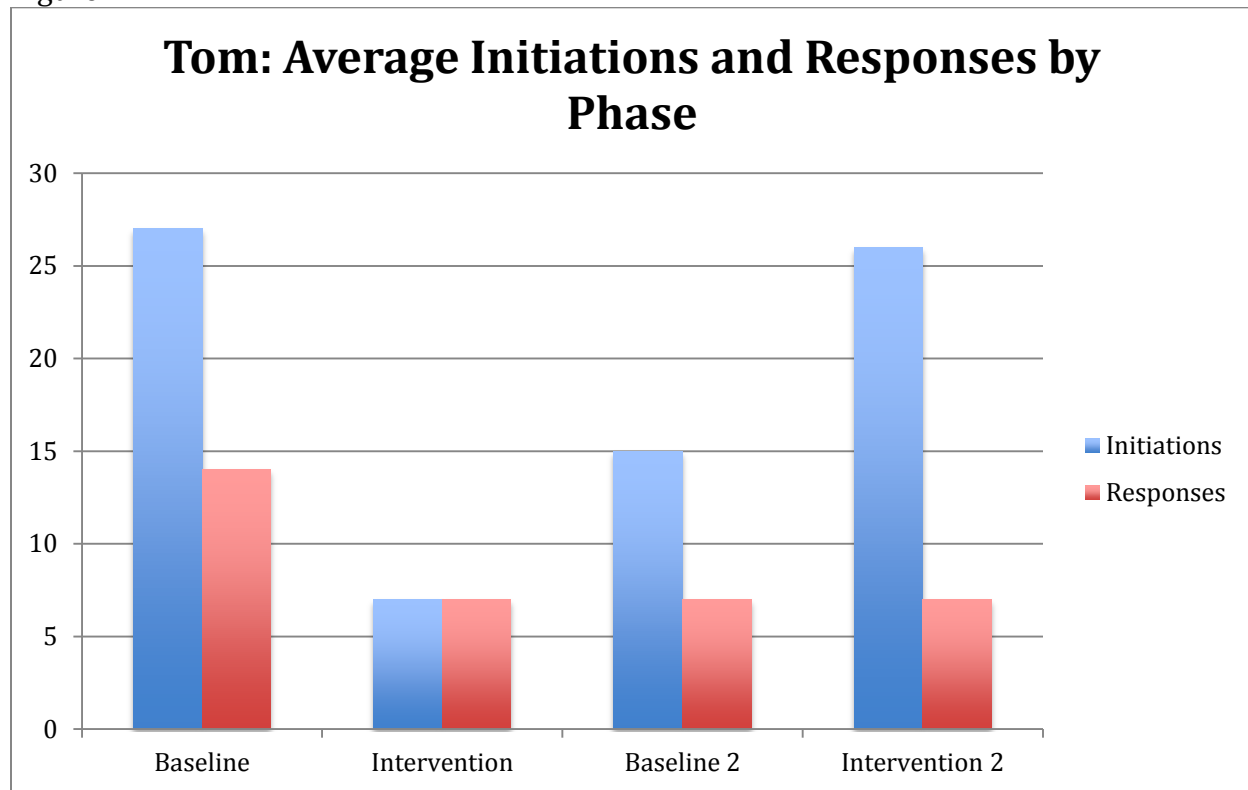
Figure 6



Tom:

The average percent of intervals in which Tom initiated to others was 27, 7, 15, and 26 for each of the four phases. He average percent of responding intervals was 14%, 7%, 7%, and 7% for each of the four phases. Tom's highest percentage of initiating intervals were in both baseline and intervention phases.

Figure 7

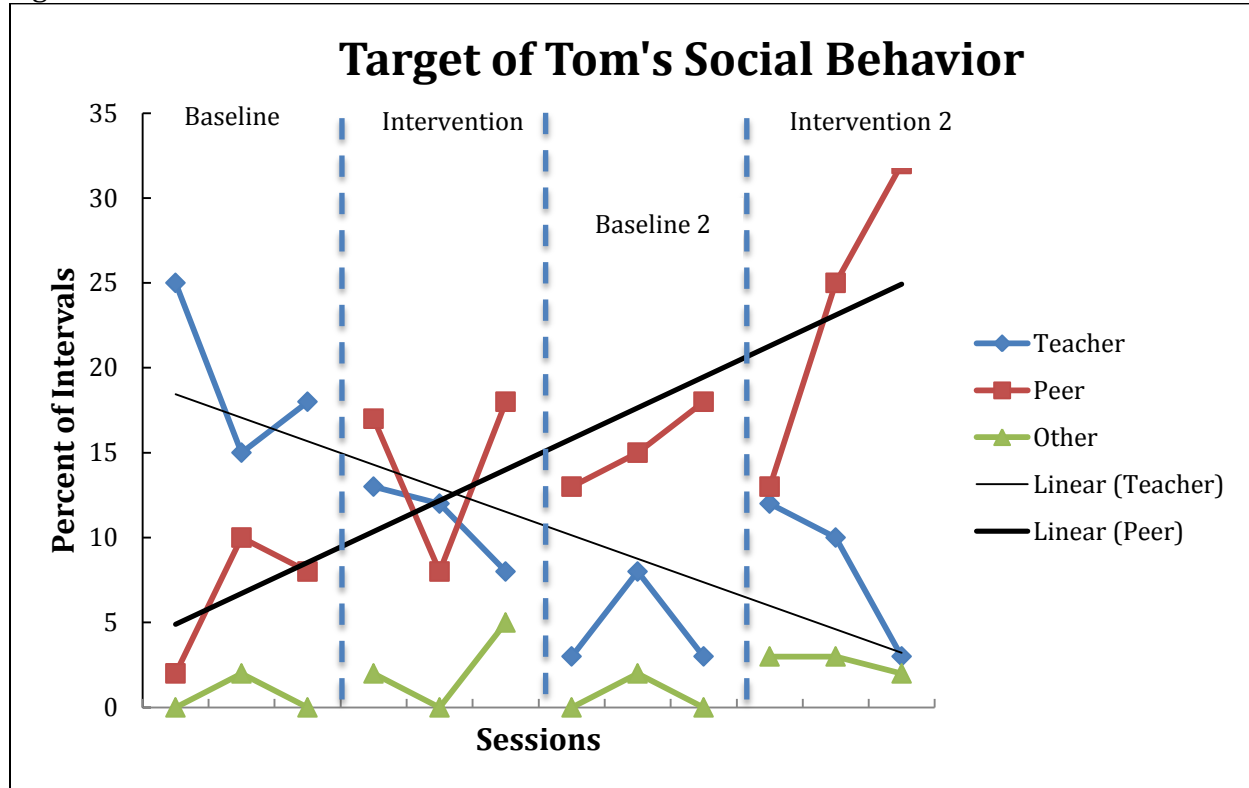


During the initial phase of baseline, Tom interacted with teachers in an average of 19% of intervals. During this same phase he averaged 7% of intervals spent interacting with peers and less than 1% of intervals interacting with the group. During the first intervention phase, Tom's average percent of intervals spent interacting with teachers dropped to 11% while his interactions with his peers rose to an average of 14%. During intervention, his interactions with the group also increase to an average of 2% of intervals. During the withdrawal phase of this study, Tom's interactions continued to fall to an average of 5% of intervals. His interactions with peers rose only one percentage point to an average of 15%. His interactions with the group fell to initial baseline levels of less than one percent of intervals. When intervention was again reintroduced, Tom's interactions with teachers rose slightly to an average of 8% of intervals. His interactions with peers rose to

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an average of 23% of intervals while his interactions with the group also rose to an average of 3% of intervals.

Figure 8

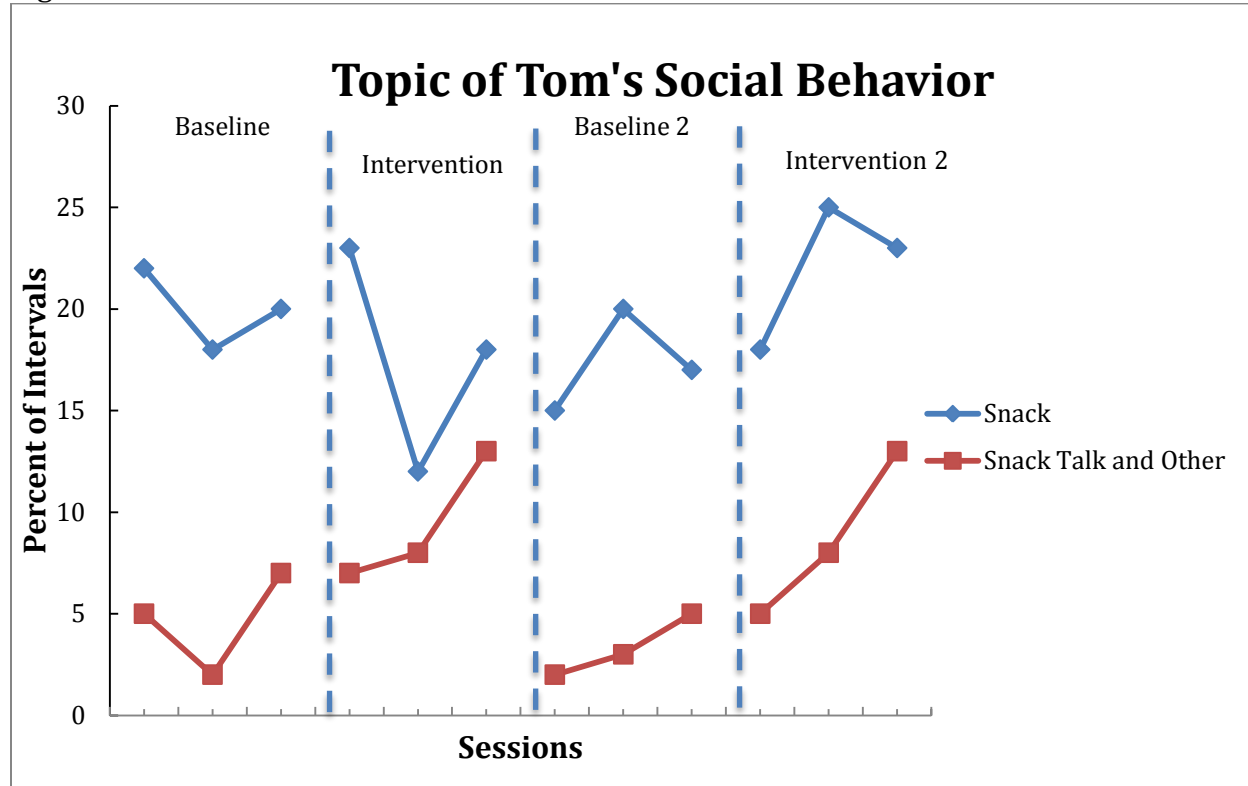


Data was analyzed to determine the effects of snack talk on the topics of students discussed during mealtimes. During the initial baseline phase, Tom interacted about snack related items in an average of 20% of intervals. His interactions about topics other than snack occurred in an average of 5% of intervals. During the initial phase of intervention, Toms' interactions about snack related items fell slightly to occurring in an average of 18% of intervals while his discussion about other topics occurred in 9% of interval on average. In the withdrawal phases, Tom's interactions about snack related items occurred in an average 17% of intervals. His interactions about other topics fell below baseline levels to an average of 3% of intervals. When intervention was reintroduced, Tom's interactions about

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snack rose to 22% of intervals on average. His interactions on other topics also rose to equal his average from the initial intervention phase to an average of 9% of intervals.

Figure 9



Interobserver agreement:

Reliability data was collected for each target student under each condition.

Agreement for Sarah's data was N=89% with a range of 72 – 100%. Agreement for Sam's data was N=92% with a range of 90 – 94%. Data for Tom's data was N=96% with a range of 93 – 100%.

Social Validity:

The results of the social validity survey demonstrate that this intervention has high social validity. One hundred percent of the respondents reported seeing more child-to-child interactions under the snack talk condition. Ninety-four percent of respondents

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reported that they thought the snack talk condition was more fun for the students. Eighty-two percent of those who responded said they saw less challenging behavior when the students had access to snack talk cards. One hundred percent of those surveyed felt that students were more engaged and had more appropriate behavior when snack talk was available. Finally, ninety four percent of those surveyed reported that snack talk was an intervention that could work in their current classrooms.

Figure 10

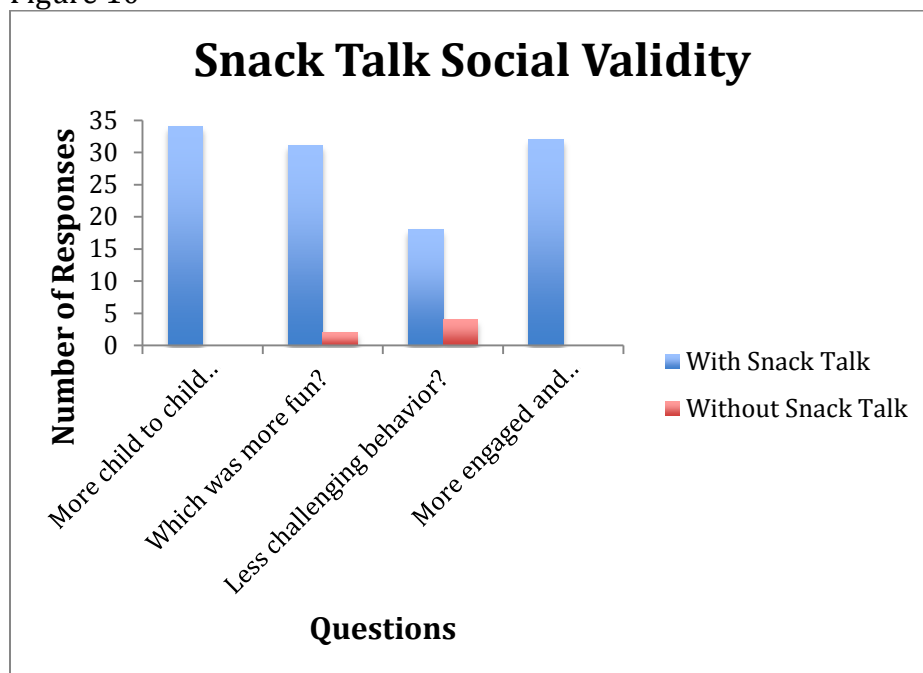
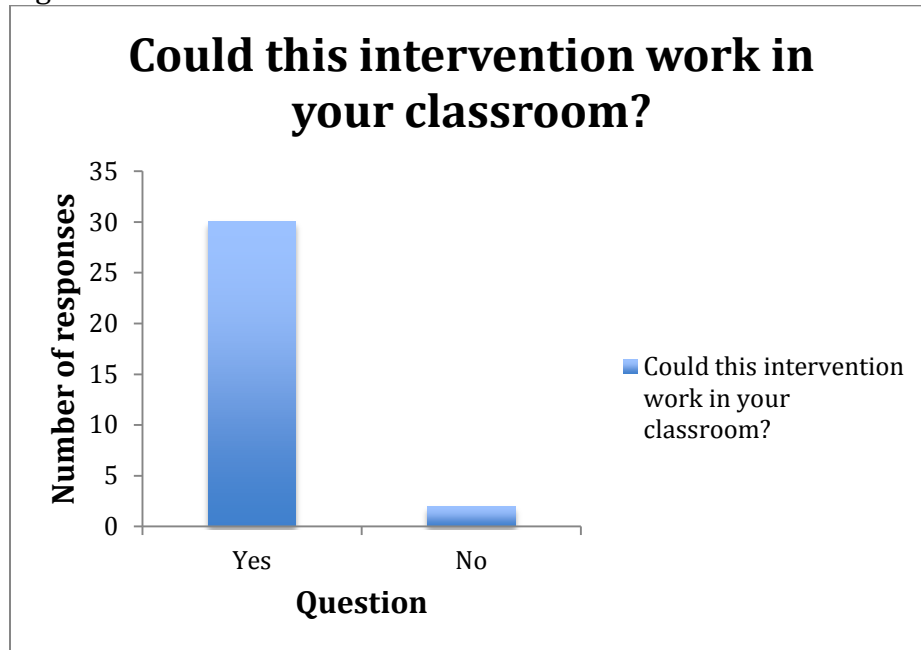


Figure 11



Additionally, respondents left comments indicating they saw students as more engaged with peers and teachers under the snack talk condition. Furthermore, they reported that teachers appeared more engaged with the activity and children in the intervention condition as opposed to baseline. They noted that while teachers appeared to be more engaged with the conversation and snack time in general, it also seemed like they were more likely to prompt students to talk to each other under the snack talk condition. Finally, respondents reported seeing more commenting under the snack talk condition as opposed to seeing primarily requesting in the baseline condition.

Discussion

The findings of this study indicate snack talk cards are a low-cost, easily implemented intervention that increases the percent of intervals children spend interacting with their peers. Furthermore the use of snack talk cards increases the

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likelihood that children will interact about topics other than food related items Snack talk cards have high social validity, which increases the likelihood that teachers and practitioners will use this intervention. These findings support and expand the findings of previous research related to the use of visual supports to increase peer interactions during mealtimes (Feurer, Smith, Warren & Yoder, 2004; Sainato, Spohn & Timko, 1999; Brown et al., 2001).

The results of this study indicate that the use of snack talk cards during preschool mealtimes was effective in increasing the percent of intervals students spent interacting with their peers. All three target children increased the percent of intervals spent interacting with peers. The data show that after the first implementation of snack talk cards, the percent of intervals spent interacting with peers increased and was maintained during the withdrawal phase of the study. This may indicate that snack talk cards have a teaching effect. It appears children learned that their peers were communicative partners available for interactions beyond requesting and responding to snack related to topics. When intervention was again reintroduced, the percent of intervals spent interacting with peers continued to increase. Snack talk cards not only served as an environmental modification to prompt children to interact with one another, but it appears they also taught the children potential means of interacting and with whom to interact. The findings of this study support the findings of Jewett and Clark (1979) who found that the effects of a similar intervention not only taught children mealtime conversations skills but that these skills were maintained and naturally reinforced even when the intervention was removed.

Furthermore, after the introduction of the interactive snack talk cards the students in this study showed a decrease in the percent of intervals in which they interacted with

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their teachers. While previous research does not specifically focus on teacher-child interactions versus child-child interactions, the findings of the current study are important. Snack talk cards do not appear to have an effect on the number of initiations and responses children make during snack time, however, it appears that students were more likely to interact with their peers and less likely to engage with teachers during snack after the introduction of this intervention. As the goal of this and previously studied interventions was to increase child-to-child interactions and promote the development of pivotal social skills, these results suggest that this type of simple, environmental arrangement may be a promising strategy to increase peer interaction across a variety of topics..

As part of the classroom routine, each child at the table is responsible for one snack-related item. Because of this, children must initiate and respond to their peers. This is reflected in the data from this study. As expected, the percent of intervals in which children are interacting on the topic of snack remained high and relatively stable throughout all phases of this study.

However, a significant finding of this study is that children were more likely to interact with others on topics other than snack when snack talk cards were being used. While each target child's baseline level of this variable differs slightly, over all, snack talk appears to increase the likelihood that children will interact by commenting and asking questions on a wider variety of subjects. Unlike the maintaining effect of snack talk cards on the target of children's initiations, the effects of intervention on the topic of interactions appears to fall back to near baseline levels when intervention is removed. Findings of this study are similar to those found by Sainato, Spohn and Timko (1999) in that they suggest children associate their newly learned conversation skills with the snack talk cards.

Limitations of this Research

Because of time constraints, researchers were unable to collect generalization and extended maintenance data. While researchers believe the upward trend in percent of intervals spent interacting with peers will continue no conclusions can be drawn at this time.

Furthermore, the scope of this study did not include data collection on the context of intervention. While the general setting of this study remained the same throughout its entirety, daily changes in staff and child absences most likely altered the effects of this intervention. For example, at least eleven different staff members worked with the children over the course of this study. While teacher training was conducted at the start of this study, the wide variety of staff and level of teacher training had by each most likely affected the integrity of this intervention.

Additionally, different staff members most likely elicited different types of interactions. For instance, a speech and language pathologist training in social communication intervention will be more likely to elicit conversations during mealtime than a physical therapist concerned with improving motor skills. However, no data was collected on this variable and thus no conclusion can be drawn at this time.

Implications for Practice

The results of the current study indicate that the use of snack talk cards may be an effective means of increasing peer interactions during a naturally occurring routine. The initial cost of creating and implementing this intervention was minimal. Teachers would be able to create snack talk cards in a matter of minutes making them easy to implement.

Some teacher training is necessary to ensure that all classroom staff using this intervention recognize its purpose: to increase communication between children. It is also imperative for classroom staff to understand that although they are facilitating the interactions between children, they should be participating as little as possible and encouraging peer interactions using least to most prompting.

Moreover, when implementing this intervention, teachers will need to provide some instruction to the children on how to use the snack talk cards. This instruction is minimal and appears to be effective when taught incidentally. Data from this research show that once children understand how to use this intervention, they are able to use it independently or with minimal teacher prompting.

Implications for Future Research

Further research is needed to fully understand the effects of context on the outcomes of this intervention. All of the children in this study had some ability to verbally communicate with others. Furthermore, the children in this study were already motivated to interact with others. Future research is needed to investigate the effects of this intervention on diverse populations of children with special needs. For instance, research on the effects of snack talk cards when used with children with autism, children with no functional verbal communication system, and children whose disability decreases their motivation to interact with their peers would be valuable. Additionally, research on the effects of snack talk cards for young children who are English language learners but have no diagnosed disability would be a beneficial addition to this body of knowledge.

Another area for future inquiry is research on the components and make up of snack talk cards. The snack talk cards used in this study were created using guidelines loosely outlined by Green, Greene and Hardison (1984). However, they admit them to be less than systematic. Their recommendations when creating this type of intervention are to choose interesting, colorful, engaging pictures. While their research did find basic “Table Talk” to be less engaging than the more colorful, interesting “Table Talk,” their guidelines are imprecise. Future research to determine how best to create snack talk cards would be valuable.

Additionally, research on the effects of visual supports to increase communication between children during other preschool activities such as small group and free choice would be valuable to this body of knowledge. Also, research on the generalizability of treatment effects to other settings would be useful to teachers and practitioners. Students in this study increased the percent of intervals in which they interacted with their peers at snack time. Future research might look at the effects of snack talk on social communication in activities directly following snack time.

Conclusion

Children with disabilities are at risk for poor social skills and social isolation that often lead to future social deficits and impeded learning. The use of snack talk cards appears to be an effective, class-wide intervention for increasing child-to-child interactions while simultaneously improving the quality of these interactions. The results of this study support the results of previous research on social communication interventions for young children. This routine-based intervention requires minimal time and resources to create,

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and can be modified to match the abilities and interests of the class. With minimal specialized training, teachers can use snack talk cards in a manner that promotes child-to-child interactions. After minimal instruction on how to use this intervention, it appears children are able to use snack talk cards to have successful interactions with their peers thus increasing their social fluency and strengthening their social relationships.

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