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Effect of Video Modeling and Teacher Praise on Turn-taking Behavior of Preschoolers in an Inclusive Setting

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EFFECT OF VIDEO MODELING AND TEACHER PRAISE ON TURN-TAKING BEHAVIOR OF PRESCHOOLERS IN AN INCLUSIVE SETTING

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in the
College of Education
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By

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ABSTRACT OF THESIS

EFFECT OF VIDEO MODELING AND TEACHER PRAISE ON TURN-TAKING BEHAVIOR OF PRESCHOOLERS IN AN INCLUSIVE SETTING

This study investigates the efficacy of video modeling combined with teacher praise in fostering turn-taking skills among preschoolers in inclusive settings. Employing a multiple probe across participants design, three preschoolers will undergo baseline, intervention, and maintenance phases. Video modeling sessions, featuring peers engaging in turn-taking activities, will be alternated with teacher praise. Data collected through event recording and analyzed via Microsoft Excel will determine the intervention's impact on turn-taking behavior. Results aim to contribute to literature on effective interventions for preschoolers, offering insights into employing video modeling and teacher praise in inclusive educational environments.

Keywords: turn-taking, preschoolers, video modeling, teacher praise, inclusive settings, and social skills

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With utmost gratitude to the Almighty God, I dedicate this thesis to the cherished memory of my late father, Mr. Tunde Ogunsanya, and my late grandmother, Mrs Justina Ihekweme. Their enduring sacrifices and boundless love have been guiding lights throughout my academic pursuit. May their legacy inspire and propel my journey forward.

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Research Question

This study aims to determine the effect of video modeling and teacher praise on the turn-taking behavior of preschoolers in an inclusive setting. The research question is, "Is there a functional relation between video modeling plus teacher praise on increased turn-taking behavior amongst preschool children?" This study is critical because, despite the plethora of research in favor of video modeling as an evidence-based intervention, there is a lack of studies that support the use of video modeling and teacher praise in teaching turn-taking skills in preschool settings. Most studies on video modeling have been conducted with children with autism (Blythe & Abdullah, 2005; Ayres & Langone, 2007; Wilson, 2013). This research could contribute to the existing literature on the effectiveness of video modeling and teacher praise as an evidence-based intervention.

Method

Participants

A total of three participants will be recruited for this study. To be eligible for this study, each participant must be: a) enrolled at the early childhood laboratory preschool, b) between the ages of 3-5 years old, c) attend to a video on an iPad for at least two minutes, d) have generalized imitation e) follow simple multi-step directions, f) have parental consent to participate in the study g) have an Assessment, Evaluation, and Programming System (AEPS-3) social-emotional score that falls below cut off. To be excluded from this study, a child must be a) diagnosed with severe developmental disorders such as autism or exhibit extreme disruptive behaviors that may interfere with the intervention, b) have severe verbal communication delay, and c) have school attendance below 80% per week.

To determine if a child meets the criteria, the researcher will conduct an indirect assessment of the participants through teacher interviews and direct classroom observation.

Setting and Materials

All sessions in this study will be conducted in an inclusive, full-day, university-based preschool program accredited by the National Association for Education of Young Children (NAEYC). All three participants attend for the whole day from 8:00 am to 5:30 pm five times a week and are all in the same classroom. The classroom is comprised of 15 children between 3-5 years old. Among these students, two children are English language learners; one has an autism diagnosis, and one is at risk for speech delay but has not been officially diagnosed. The number of adults in the classroom ranges from 2-4, including a lead teacher, graduate assistant, and student workers. Video modeling sessions will be viewed in the preschool classroom during free-choice time. Materials needed for this study include an iPad, video model, writing materials, data

sheets, and novel cooperative games such as rainbowfish share and sparkle game, dinosaur rescue, First Orchard, and Feed the Woozle. These games possess the same characteristics and will be alternated to keep the students motivated and prevent satiation.

Dependent Variable

The primary dependent variable for this study is turn-taking behavior. This is operationally defined as when participating in a cooperative game involving turn-taking, the target child will independently allow a peer to take turns by relinquishing an item (for example, a dice, depending on the game) to a peer after playing by extending their arm toward a peer or placing the dice in front of or near the peer or verbally indicating that a peer could have a turn by saying (e.g., “your turn”). Non-examples of turn-taking behavior include (a) refusal to allow a peer to take a turn by verbally saying, "No," (b) saying, "It is my turn" when it is another peer's turn, (c) nonverbal refusal to relinquish dice (for example shaking head is disagreement) (d) forcefully grabbing dice from a peer to prevent turn-taking. An opportunity to take a turn begins when the target participant independently offers the peer to his left the item used in the game (e.g., dice), indicating that it is the peer's turn to play, and ends when the peer participates in the game and hands it to the next participant to his left. Every time the dice moves from one player to another, it represents an opportunity to turn-take until the dice moves around all players and returns to the target child.

Independent Variable

The primary independent variable in this study is implementing video modeling to teach three participants turn-taking skills. The video model involves a target child watching a video of the author and two other peers engaging in turn-taking behavior while playing a cooperative game and immediately imitating the behavior when paired with three other peers in the classroom to play a similar cooperative game with the same characteristics. In addition to the

video model, teacher praise will be provided for each participant at the end of each intervention session as positive reinforcement to strengthen turn-taking behavior.

Data Collection

The researcher will directly observe participants and collect data on the percentage of correct turn-taking opportunities using event recording during baseline, intervention, and maintenance sessions. Turn-taking behaviors will be recorded as occurring based on the above operational definition. Turn-taking behavior will be measured in real-time by observing the target child's actions and recording responses as they occur (Cooper et al., 2014). Successful turn-taking will be recorded as (+), and unsuccessful turn-taking will be recorded as (-) using a data sheet. Refer to Appendix A for the data collection sheet.

The percentage of turn-taking will be calculated by dividing the total number of successful turn-taking opportunities by the total number of opportunities to take turns and multiplying by 100. Data will be visually analyzed to determine if there is a functional relationship between the intervention and the dependent variable. This data collection system allows the researcher to collect data on the percentage of successful turn-taking behaviors in a controlled and systematic manner. It enables real-time data collection, thereby minimizing recall bias as well as reducing the probability of subjective interpretation.

Experimental Design

The experimental design used for this study is the multiple probe across participants design (Gast & Ledford, 2014). This design was selected to allow for controlled comparisons of interventions across individuals. The staggered nature of this design also controls for threats to internal validity by ensuring that any effect observed across participants is due to the intervention only and not any other extraneous factors. To control for covariation, intervention sessions will be conducted in a secluded area in the classroom to ensure that other participants are not exposed to the intervention before they enter into intervention. The author will ensure that other

participants are busy at other centers when implementing the intervention for a particular participant.

The research will involve three participants and will be conducted in three phases: baseline, intervention, and maintenance. However, to control for attrition, four participants will be used, but three participants will be recorded. Initial probe data will be collected from all three participants. For the first participant, continuous probe data will be collected for 5 sessions until data are stable before introducing the intervention. Probe data on turn-taking behavior will also be collected for the second and third participants once a week. When the first participant reaches a mastery criterion of 80% of turn-taking behavior, intervention will be introduced to the second tier. However, prior to the introduction of intervention to second tier, continuous baseline data will be collected for 3 sessions. Once the second participant reaches a mastery criterion of 80%, continuous baseline data will be collected for the third participant for 3 sessions before finally introducing the intervention to the third participant. Maintenance data collection for all three participants will begin upon each participant reaching a criterion of 80%.

Procedure

Baseline Condition

Based on the nature of the experimental design, the researcher will conduct baseline sessions for the first participant for 3 sessions, with two sessions per day. This will be conducted in a secluded area in the classroom during free play time. The researcher will introduce one of the games (e.g., rainbow fish share and sparkle game) to the first participant and one other peer on a table by saying, “Hello friends, I have an interesting game I would like to teach us to play. It is called the Rainbow Fish Share and Sparkle game. Now, these are the rules of the game. Each person will roll the dice and select the color of scale matching the color on the face of the dice and place it on their rainbow fish and then pass the dice to the next person by saying, “Your turn” or handing the dice to the next person.

The next player takes a turn and passes the dice back to the first player. The first person to complete filling all the fins on their rainbow fish wins the game. Now it is time to play the game. Our friend (mentions target child's name) will go first". No further instruction will be given during baseline condition. The researcher will step aside and directly observe them and collect data on the percentage of correct turn-taking behavior. A session will last as long as the children are still interested in playing the game. A session ends when a peer loses interest in the game by saying, "I am done," or walking away. A successful session must have at least ten opportunities for turn-taking to be valid. To keep children motivated, the author will alternate the games using different games with the same characteristics.

Intervention Condition

The intervention package will be comprised of video modeling and adult praise. The author will introduce the first participant to the intervention after 5 sessions of probe data collection, and the data are stable. Before the intervention, the author will train the peer model to be used in the video by introducing the game's rules and explaining what turn-taking means and the importance of turn-taking. The target child will be shown a two-minute video model in which the author and one other peer will demonstrate turn-taking skills using the rainbow fish share and sparkle game. The game will be alternated subsequently with other games with the same characteristics (e.g., dinosaur rescue, first orchard, and feed the woozle) during intervention. The rationale for choosing these games is that they are novel games the children are not used to. This will prevent satiation as a result of multiple exposures. These games also teach turn-taking, which is the dependent variable.

In the video, the author will be seated with one peer model at the table with the rainbow fish share and sparkle game displayed and ready to be played. She will introduce the game by saying, "Hello friend, today we will practice turn-taking by playing a game. Here are the rules for the game. Pointing to the peer model, you will go first. You are going to roll the dice, the

color on top is the color of the scale you will pick and place on your rainbowfish. After your turn, it will be my turn. You will hand the dice to me and say, "Your turn ."After my turn, it will be your turn again. "Now, let us play!

Author: You are going to go first

Peer model: Rolls the dice to reveal a color. Picks matching scale color and places on rainbowfish.

Peer model: Hands dice to author and says, “Your turn!”

Author: Takes a turn and places matching scale color on rainbowfish

Author: Hands dice to peer model and says, “Your turn!”

The video ends after the peer model gets a second turn.

To begin the intervention, the author will ensure the child is attending by calling the child's name and saying, "Hello, John; I have a cool video on my iPad that I would like to show you. Please come with me". The author will then take the target child to a secluded area in the classroom and play the video for the child on an iPad. After watching the video, the author will tell the target child, "Now it's time to practice turn-taking with a friend as you have seen in the video. She will guide the target child to the table where the game is set up and call the same peer used during baseline to play the game with the target child. The author will state that the target child starts first. The author will then step aside and collect turn-taking data through event recording. After the session, the author will tell the target child, "Thank you for taking turns while playing the game with your friend; I am so proud of you!". A session will last as long as the children are still interested in playing the game, and each intervention session will have at least ten opportunities for turn-taking to be valid.

Maintenance condition

Upon reaching a mastery criterion of 80% correct turn-taking behavior, maintenance data will be collected for two sessions in a week for each participant three days after the intervention session. These sessions will be identical to the baseline sessions.

Data Analysis Strategy

Turn-taking data from observations will be entered into Microsoft Excel sheets. Tables will be used to create graphs that will be visually analyzed for immediacy, variability, level, and trend. These will compared to baseline measures to determine if a functional relationship exists between the video modeling and turn-taking behavior.

Interrater Reliability

Interobserver agreement (IOA) data will be collected by the primary investigator and a colleague, a graduate assistant studying Interdisciplinary Early Childhood Education. The observer will be trained to collect data using datasheets until she meets 100% agreement before implementing the intervention. The data sheet for IOA can be found in Appendix B. IOA data will be collected for 25% of baseline and intervention sessions and 50% of maintenance sessions for each participant. The percentage of agreement on the occurrence of turn-taking behavior will be calculated using point-by-point agreement (Gast & Ledford, 2014). This will be calculated by dividing the number of agreements by the number of agreements + number of disagreements multiplied by 100. The acceptable level for the study to proceed is 80%. The observer will be retrained if an acceptable level of agreement is not reached.

Procedural Fidelity

Procedural fidelity and IOA data will be collected simultaneously by the same observer using a procedural fidelity checklist outlining the steps in each condition. Refer to Appendix C for the checklist for intervention conditions and Appendix D for baseline and maintenance conditions. This will be calculated by dividing the number of steps correctly performed by the total number

of steps outlined multiplied by 100. Procedural fidelity data will be collected for 25% of probe and intervention sessions and 50% of maintenance sessions. Acceptable levels for PF will be 80%.

APPENDICES

APPENDIX A: Data Collection Sheet

Condition (Circle One): Baseline Intervention Maintenance
Data Collector:

Name of Child:

Date:

Skill: Turn-taking

Definition: when participating in a cooperative game involving turn-taking, the target child will independently allow a peer to take turns by relinquishing an item (for example, a dice, depending on the game) to a peer after playing by extending their arm toward a peer or placing the dice in front of or near the peer or verbally indicating that a peer could have a turn by saying (e;g "your turn"). Non-examples of turn-taking behavior include (a) refusal to allow a peer to take a turn by verbally saying, "No," (b) saying, "It is my turn" when it is another peer's turn, (c) nonverbal refusal to relinquish dice (for example shaking head is disagreement) (d) forcefully grabbing dice from a peer to prevent turn-taking.

Turn-taking	**Turn Taking Opportunities**	**Correct Turn taking**	**Incorrect Turn taking**
Mastery Criteria 80%	**1**		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		
Total			
%age Turn Taking			

APPENDIX B: Interrater Agreement

Turn-taking Opportunities	1	2	3	4	5	6	7	8	9	10	Total (+)	%age
Observer 1												
Observer 2												

Occurrence (+) Non occurrence (-)

Observer 1 Date Signature

Observer 2 Date Signature

APPENDIX C: Procedural Fidelity

Intervention Condition

Child's Name: _____

No.	Steps/Activities	Yes	No	Note
1.	Have video ready on iPad			
2.	Have data sheet ready			
3.	Sets up game			
4.	Gets child's attention by calling name			
5.	Have child watch video			
6.	Tells child it is time to practice turn-taking			
7.	Guides child to table to play game			
8.	Invites peer to play game			
9.	Records turn-taking behavior on data sheet			
10.	Provides teacher praise			
Total Occurrence				
Percentage				

Observer Date Signature

APPENDIX D: Procedural Fidelity

CONDITION (Circle One): Baseline Maintenance

Child's Name: _____

No.	Steps/Activities	Yes	No	Note
1.	Sets up game on table			
2.	Introduces game to target child and peer			
3.	Instructs children to play game			
4.	Directly observes children play game			
5.	Collects data on turn-taking behavior			
Total Occurrence				
Percentage				

Observer Date Signature

References

Ayres, K. M., & Langone, J. (2007). A comparison of video modeling perspectives for students with autism. *Journal of Special Education Technology*, *22*(2), 15-30

Cooper, J.O., Heron, T.E., & Heward, W.L.(2014). Applied Behavior Analysis: Second Edition. Pearson. Edinburg: Pearson

Corbett, B. A., & Abdullah, M. (2005). Video modeling: Why does it work for children with autism?. Journal of Early and Intensive Behavior Intervention, 2(1), 2.

Gast, D. L., & Ledford, J. R. (2014). Applied research in education and behavioral sciences. In Single case research methodology (pp. 1-18). Routledge.

Wilson, K. P. (2013). Incorporating video modeling into a school-based intervention for students with autism spectrum disorders.

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